RUDN Journal of Studies in Literature and Journalism. **2022 Vol. 27 No. 2 436–446**
ISSN 2312-9220 (print), ISSN 2312-9247 (online)
http://journals.rudn.ru/
Вестник РУДН. Серия: Литературоведение. Журналистика literary-criticism

РЕКЛАМА И СВЯЗИ С ОБЩЕСТВЕННОСТЬЮ

ADVERTISING AND PUBLIC RELATIONS

DOI: 10.22363/2312-9220-2022-27-2-436-446
UDC 659.4

Research article / Научная статья

America's Union Carbide Corporation and Bhopal Disaster: Study in the Light of Public Relations Before and After the Incidence

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Abstract. This study tries to understand the Bhopal disaster (aka Bhopal Gas Tragedy) in the light of public relation and the role played by Union Carbide Corporation in the Bhopal disaster which resulted in the death of over 3 000 people and 15 000 were injured during the disaster. This case shocked the entire nation and nobody had ever imagined that an industrial accident could be that deadly and venomous. The researcher is trying to understand the incidence from the perspective of public relations and how Union Carbide played its role in the light of public relations. This study is trying to understand that how Union Carbide would have made a difference to its image if they would have responsibly used public relations for its better international image and social responsibility in India. Bhopal Gas Tragedy was an important case for understanding crisis and this case also highlighted that how PR could have been used for handling the situation and for managing relations with people. This case was the talk of the town as thousands were affected and it was a national casualty. This case raised many issues pertaining to Management and people and it also underlined that improved management could have led to better treatment of the case.

Keywords: public relations, social responsibility, crisis communication, Bhopal Disaster, Union Carbide Corporation

Conflicts of interest. The authors declare that there is no conflict of interest.

Article history: submitted: September 24, 2021; revised: January 19, 2022; accepted: March 21, 2022

For citation: Patel, K., & Binjola, H. (2022). America's Union Carbide Corporation and Bhopal Disaster: Study in the light of public relations before and after the incidence. *RUDN Journal of Studies in Literature and Journalism*, *27*(2), 436–446. https://doi.org/10.22363/2312-9220-2022-27-2-436-446

Американская корпорация Union Carbide и катастрофа в Бхопале: PR до и после инцидента

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Аннотация. Сделана попытка понять катастрофу в Бхопале (также известную как Бхопальская газовая трагедия) в контексте связей с общественностью, выявить роль, которую корпорация Union Carbide Corporation сыграла в событиях, когда погибло более 3000 человек, а 15 000 индийцев получили смертельные увечья. Этот случай потряс всю страну, раньше никто представить себе не мог, что промышленная авария может иметь такие последствия, привести к отравлению тысяч людей. Авторы анализируют инцидент с точки зрения антикризисного PR, выявляют действия Union Carbide в период до и после событий. Авторы пытаются ответить на вопрос о том, каким образом корпорация Union Carbide смогла бы сохранить и улучшить международный имидж, ответственно используя технологии связей с общественностью в Индии, следуя политике социальной ответственности. Бхопальская газовая трагедия стала важным событием для понимания кризисных ситуаций и изучения возможностей PR в управлении коммуникациями. Этот случай стал своего рода притчей во языцех: национальная трагедия спровоцировала обсуждение проблемной ситуации в отношениях руководителей и подчиненных, когда оптимизация взаимодействия была необходима, но не задействована.

Ключевые слова: связи с общественностью, социальная ответственность, кризисные коммуникации, Бхопальская катастрофа, Union Carbide Corporation

Заявление о конфликте интересов. Авторы заявляют об отсутствии конфликта интересов.

История статьи: поступила в редакцию — 24 сентября 2021 г.; откорректирована — 19 января 2022 г.; принята к публикации — 21 марта 2022 г.

Для цитирования: *Patel K., Binjola H.* (2022). America's Union Carbide Corporation and Bhopal Disaster: Study in the light of public relations before and after the incidence // Вестник Российского университета дружбы народов. Серия: Литературоведение. Журналистика. 2022. Т. 27. № 2. С. 436–446. https://doi.org/10.22363/2312-9220-2022-27-2-436-446

Introduction

A statement that describes public relations to conclude with an ethical decree says that public relations is all about doing ninety per cent good and communicating ten per cent about it. Public Relations is not responsible for glossing over the bad deeds of the organization and should not cover up for the bad deeds of the organization, but it can professionally help the organization to highlight the good deeds done by it.

After the partition, the Independence of India in 1947 and Pakistan brought a new dynamic for free India. There was a complete change in the environment and there were many challenges lined up for new India. The biggest challenge was the resettlement of the migrants and to install confidence in the riot turn country. It was after Independence that based on adult franchise India espoused a socialistic autonomous pattern. Industrial Development Act and Industrial Policy Resolution were brought into accomplishment in free India. These acts deliberated government and business organizations to adopt a conscious policy of public relations and this is how the PR profession took roots in India.

Several multinational companies started exploring their practices in public relations and used these practices for mounting in Independent India. In the '50s and '60s, companies such as Union Carbide, Indian Oxygen, Caltex, IBM, Philips, ITC, Dunlop India, Hindustan Lever departments also began to set up their public relation departments in India.

If we look at the broader picture with the independent structure of India, economic opportunities grew in terms of market, Industries, consumers and choices. Public relation rose in the area of Information Management as the corporates which were untouched with Public Relations realized the importance of perception and image in the eyes of consumers. This gave new prospect for Public Relations in India and these new liberal concepts of Economy gave new openings to the corporates.

Now for understanding Union Carbide and Bhopal disaster, we need to look at the wider picture wherewith a free and liberal economy we had seen that companies were investing in India but challenges and complexities were also waiting for us because of a free market economy.

Importance of PR in Crisis

Possibly no organization in the World have remain untouched from facing a crisis. The decree of crisis may differ from organization to organization, it may differ from a storm in a cup of tea to a tempest in the Pacific Ocean, but no

company can deny crisis (Sachdeva, 2009). Crisis leads to the desolation of the company's corporate image and smashes the well-earned corporate image. The crisis is the acid test of PR where PR has to save the image and standing of the company in every hour of distress. Sometimes company or organization doesn't realize that the crisis which seems to be very small can lead to dangerous consequences and can have an implausible cataclysm.

In this uncertain world, there are times when you have no control over events or happenings and you succumb to the circumstances. It is impossible to predict the unforeseen, and the unexpected can occur at any time.

The Bhopal Gas Tragedy, the largest chemical disaster of its time, was one of the disasters that shook the nation. This disaster claimed thousands of lives as a result of poor communication both before and after the disaster. It was the worst industrial disaster in history, and Union Carbide's public relations were a complete failure. The organization's communication operations were ineffective. As per the American University's Trade Environmental Database Case Studies 1997 (Sachdeva, 2009) the local occupants were not able to comprehend warning messages from the Union Carbide Plant. Operating manuals were printed only in English which was the prime example of mismanagement but suggestive of orderly barriers to information dissemination. Bhopal Gas tragedy elucidates the difficulty in dependably applying management standards to multi-national operations and the blame-shifting that often results from the lack of a clear management plan (Abraham, 1984).

Union Carbide and Bhopal Disaster

Rashida Bee, a survivor of Bhopal Gas Tragedy who lost six family members in the disaster made a very strong remark and communicated her feelings by saying**,**

"We are not flowers offered at the altar of profit and power. We are dancing flames committed to conquering darkness and to challenging those who threaten the planet and the magic and mystery of life" (Lewis, 2007).

Rashida Bee's statement expresses the pain that Bhopal endured, and while this is a statement made by Rashida Bee, her voice represents every individual who witnessed the Bhopal disaster with their own eyes.

In 1957, the Indian company reorganized and renamed itself Union Carbide India Limited (UCIL). Union Carbide Corporation (UCC) was actively involved in pesticide production and was constantly expanding its pesticide manufacturing capabilities, with production taking place in West Virginia (Tombs, 2011). It was manufacturing sevin (carbaryl) and temik (aldicarb) (ICJB, n.d.). UCC thought India was possibly a strong market for them.

UCC initially advertised itself in National Geographic magazine with a full-page advertisement stating "Science Helps to Build a New India" and also highlighted "Union Carbide Working with Indian Engineers and Technicians" (Tombs, 2011). Union Carbide Corporation for expanding itself opened its new

three large companies, Union Carbide Europe, Union Carbide America and Union Carbide Eastern (Tombs, 2011). UCIL applied for a license in Bhopal for producing sevin pesticide and after one year the permission was granted and site construction started in Bhopal. In 1970 the population of Bhopal was approximately 300,000 (Tombs, 2011). UCIL again applied for new license and this time UCIL wanted license for MIC-based process. After several discussions and dialogues UCIL got the approval from Indian agencies and production of MIC and Sevin started in the plant in 1981 (Tombs, 2011).

Bhopal's total population was estimated to be 800,000 in 1984, with 200,000 people living near the UCIL chemical factory, particularly near the railway terminal and bus station (Eckerman, 2004).

On the morning of December 3, 1984, people of Bhopal had no idea what calamity was about to strike them and change their lives forever. People living near the factory must have only heard a faint siren, and the rest of the city was completely unaware of the deadly disaster. The siren was insignificant and had little bearing on preventing the city from being swamped in the mouth of a deadly disaster (Tombs, 2011).

The locals never knew that if any gas leak happened in the city what will be the evacuation plan as the city had no idea about the evacuation plan. The locals were never trained or primed for retorting to any gas leak as they were never told about the venomousness of the elements used by UCIL (Eckerman, 2004).

After the gas started leaking from the chemical plant, the extremely strenuous gases begin to blanket the area under the shield of white cloud (Tombs, 2011). Immediately after leakage of the gas, people began found difficulty in breathing, started dying on their beds because of respiratory paralysis.

Issues such as burning and watering eyes were also seen among the people (Eckerman, 2004). Everybody was seen coughing, collapsing and vomiting on the streets of Bhopal. People were seen running, lifting their children and running on the streets. People were continuously running in any direction of Bhopal just to run away from the catch hold of the poisonous gas (Agarwal, 2019). A resident Ganga Bai of 28 years of age started running with her 2-year-old daughter in her arms only in this hope that her daughter could survive but after covering a long patch of land Ganga Bai found that her daughter was no more and she falls prey to the venom of UCIL's chemical factory (Narain & Bhushan, 2014). The ones who were left behind were dead or permanently disabled.

The most difficult problem was that hospitals had no knowledge of the gas's composition. Hospitals did not have any information about the antidote or how to treat the gas properly. They were simply trying to treat people as best they could, and whatever treatments they thought could help people revive were being tried on the patients, but those combinations were not working on them. Death reports were reflecting that people were dying because of circulatory collapse, choking and pulmonary oedema.

The medical officer of UCIL was apprehended by Hamidia hospital, one of the largest hospitals in Bhopal, but he also misled the medical staff, claiming that

MIC leakage (methyl isocyanate) was not a poisonous gas but rather an irritant (Tombs, 2011). The medical officer also said that there was no specific antidote for MIC and people should just wash their eyes with water and water will remove the hazardous effects of the gas (Tombs, 2011). The picture was clear that the medical officer was also concealing facts, whether knowingly or unknowingly, and was simply confusing the hospital staff. In addition to MIC, the industrial plant emitted poisonous ammonia, hydrogen cyanide, mono-methylamine, carbon monoxide, phosgene, and nitrous oxide (Edwards, 2014).

There is also a possibility that the medical officer was ignorant of MIC but being part of the chemical plant, he was supposed to have complete information regarding the MIC and other gases leakage and as a responsibility, he must have also educated the locals and the employees regarding the same.

UCC and the Disaster

Union Carbide Corporation never imagined that an unprecedented and unanticipated disaster would occur in the Bhopal chemical plant and as a company, they were never prepared for any such crisis, so no evacuation plan or safety plan was ever developed to deal with any such crisis.

According to UCC, they were following the same safety procedure standards in every unit whether it was American operations, overseas operations, Brazilian operations or Indian operations. UCC claimed that they were using the best standard operating procedures and were handling Indian plant with the same measures as they were operating in Virginia (Tombs, 2011).

UCC was very assertive and wanted to exhibit that UCIL was the one accountable for all the problems. If there were management, maintenance and poor planning procedures and inadequate enforcement of safety regulations it was because of the cultural backwardness of India. UCC wanted to show that they were remote of all the problems, and that UCIL was the one that created problems in the Indian plant. UCC tried to shift all the accountabilities to Indians and India in specific. The accident was due to the sabotage by an Indian national, UCC said (Tombs, 2011).

UCIL in the year 1974 applied for a new license to produce 5,250 tons of sevin in Bhopal annually (Tombs, 2011). After certain negotiations with the Indian government permission was granted to UCIL for the same. UCIL had to increase its land area from 5 acres to more than 80 acres and earlier in 1967 the population of Bhopal was 300,000 which increased to 500,000 in 1975 (Tombs, 2011). UCIL knew that expansion of the land will challenge the Bhopal Development Plan of 1975 which clearly stated that “obnoxious industries” should be away from the city Centre, approximately 25 km away (Tombs, 2011).

UCIL was aware that any expansion of the land will challenge the orders of the commissioner and director of the town and country planning, which were crystal clear that industries should be kept away from the vicinity of the main city (Tombs, 2011). UCIL successfully lobbied Federal authorities and Madhya Pradesh

to override the Municipality, as UCIL was classified as "general industry" rather than "hazardous industry" in a 1976 review. With this permission, UCIL was allowed to have the new construction as well as the ongoing UCIL deeds (Fortun, 2001).

The moment the decision was taken in 1977/1978 UCC agreed that its equity will decrease from 60% to 50.9% (Tombs, 2011).

The new shares of UCIL were unconfined for acquisitions by investors who already had the shares with them, be the ones who were individuals or Indian Institutions. The construction of the plant took one year and after the completion of the plant MIC and pesticide, sevin was produced by the plant. This new expansion of the plant was a big decision. 50.9% of equity was still controlled by UCC in 1984 (Banerjee, 1986).

Since the Bhopal plant got permission for the production of MIC and Sevin, plant workers and Union of workers were concerned for the protection of the employees and health risks at the plant. Between 1981 and 1982, three serious leaks from the plant and the killing of one employee were registered in the record of the factory.

In 1982, the safety team of UCC went through the safety of the plant and monitored 61 hazards, out of sixty-one hazards, eleven hazards were in the MIC/phosgene unit (Bowonder, 1987). The safety team submitted the report and gave the recommendations for considering the plant but those recommendations were not implemented. Production in the plant continued without considering the safety measures.

In 1970 the Indian pesticide market was seen as very competitive and it was a cut-throat competition among companies. At the beginning of 1980, pesticide demand collapsed in India. In 1982 and 1983 due to the weather conditions, many farmers were forced to abandon the provisional usage of pesticide. There were many problems addressed by the plant where two units of Bhopal were forced to sign "Memorandum of Understanding" with UCIL where reductions were seen in the plant in terms of staffing, safety measures, under-qualified staff was kept and the ones who were less skilled for the operations of the plant. There was regular reduction in the staff and UCIL was continuously cutting on its expense. There were many problems in the working of the plant but they were overlooked by the organization. There were many defective parts in the plant which required serious maintenance and repair but all these aspects were not considered under the safety measure of the plant.

After the new structure was designed in the Bhopal unit, production of the MIC increased. The new structure had got the approval of two tanks and each tank had the capacity of keeping 1500 gallon and both these tanks were interconnected with each other. As per the safety procedure manual of the plant, these tanks were advised to be kept half full and for the security of the plant, these tanks were supposed to be kept with very less amount of MIC. Another major concern was that plant was keeping less staff and had reduced staff from 13 to 6. It was mentioned in the manual that the temperature of the tank was

supposed to be kept below 15 degrees Celsius and preferably at zero degrees (Tombs, 2011).

On the 2nd and 3rd of December 1984, there were inconsistencies in the plant. The plant's operation and condition were not in accordance with the plant's safety procedure manual and standard operating procedures. The first tank, E-610, was not half empty, but was full with 42 tons of MIC, the second tank, E-611, held 20 tons of MIC, and the third tank, E-619, held one tons of MIC. The three tanks and transfer systems were all compromised, with extensive rust and deterioration.

Transferring from Tank E-60's was difficult because it was done externally with low nitrogen pressure and the tank had a faulty valve. Because the process in the tank was done externally, impurities could easily enter the tank and there was room for hazardous exothermic chemical reactions.

The tank had content in it since October 26th, which was the date of the last batch of MIC. According to the operators, the MIC tank gauge was faulty for about a week (Tombs, 2011). There was a huge default in the meters as they were not working properly and it was strongly mentioned in the operating procedure manual that the reading of the tank temperature had to be taken every two hours but with time the observations had been changed from every two hours to every eight hours.

The tank's temperature was not being cooled, and the internal temperature was 20 degrees Celsius. It was discovered that the amount of MIC kept in the tank violated all safety standards and violated all of the plant's safety norms. The reason for the plant's high temperature was that the last batch of MIC had been produced and stored in the plant since October 26th. The factory's safety system was turned off on the orders of the Works Manager, as the factory was no longer in operation. He claimed that no accident could ever happen in the factory, which was no longer operational (Diamond, 1985). The refrigeration of the MIC tanks was also shut down to save the cost of the plant (Chatterjee, 2012).

"There were total negligence and lack of safety consciousness among workers and managers. The moral of the employees was low because the plant was losing money and being considered for divestment" (Broughton, 2005).

On the night of December 2, 1984, between 7–8 p.m., a relatively new and under-trained worker was assigned an additional task that day that was usually seen by the maintenance department; previously, this man was in charge of removing MIC from the tanks and shifting MIC to the carbaryl reactor. He was in charge of removing chemicals from the pipes using water, but there was still one tank of MIC attached to the pipe. He omitted one critical step before watering the pipes, which was to seal all of the pipes with metal pipes to prevent water from mixing with MIC. The supervisor and the operator left, the moment the night team arrived.

The night team was also unable to remove water from the tank, and people were unaware that water was entering the MIC through unobstructed slips. Water had been running continuously for more than four hours. Because the valves were

already faulty and water entered the pipes, exothermic reactions began in the tank, resulting in the release of the gas. UCC investigates the incident and concludes that water was deliberately added to the MIC tank. Workers reported a strong odor but were unable to pinpoint the source (Tombs, 2011). As the alarms of the factory had not worked for 4 years so the locals had no information of the incident happening in the factory. It was clear that lack of spare parts, inadequate SOP's, badly designed and maintained equipment and untrained staff all contributed to the incident (Bhopal, industrial genocide… 1985).

Two major factors that contributed to the incident was first the jumper line through which water entered inside the MIC tank and ad hoc modifications to the plant design. The biggest problem was the unpreparedness or lack of preparedness for such a massive disaster. UCC claimed that this disaster happened because of UCIL as it was UCIL's deficiencies for the faulty working of the factory and the discrepancies of the factory, the Indian government, its workers and the saboteur (Banerjee, 1986).

Discussion

An important question that fondled regarding UCC was that was MIC/Sevin was more safely produced in MIC/Sevin plant at Institute, West Virginia or Bhopal Plant, India. As per the comparison that took place in West Virginia and Bhopal plant, plant design and safety measures were way stronger in the West Virginia plant rather than the Bhopal plant. So, it could be said that the safety of Indian and Indian was taken into less consideration in comparison with America and Americans. "*Planning and controlling of factory operations, fixing of working hours and laying down of the working programme, promotion of personnel, selection, transfer, distribution, placement, expansion of production facilities, the introduction of new or improved production methods, evaluation and classification of jobs and establishment of production standards, maintenance of discipline in the factory in the factory ¼ are exclusive rights and responsibilities of the Management"* (SAM & APPEN, 1986).

Sabotage Theory of UCC

UCC used sabotage theory for its Defence and elucidated that the employee which was deputed for checking the temperature of the plant and responsible for cleaning the pipe purposely allowed the water to get into the tank by not following the safety procedures and his intentions was to spoil the batch of the chemicals (Edwards, 2014).

The employee had no idea regarding this step of his which ultimately resulted in the disaster. UCC for justifying itself was coming up with a different set of theories. In the first explanation, it said that the careless attitude of the employees and workers was a major reason behind the incidence (Bergman, 1988).

Then UCC gave the sabotage theory for defending itself. Warren Anderson of UCC had to take back the sabotage theory in the congressional hearings as UCC was unable to prove their theory with proves (Edwards, 2014).

Conclusions

After several studies on the Bhopal plant, it was also clear that even if the plant would have been in better working conditions production of MIC would have been extremely hazardous. In December 1986, UCC sold its worldwide Agricultural Products business to the French chemical and pharmaceuticals company, Rhone Poulenc, for $585 million. Union Carbide became a wholly-owned subsidiary of The Dow Chemical Company (Banerjee, 1986).

In the entire scenario, there was no clear picture between UCC and UCIL, only a blame game was happening between both the companies. If we look at the sociological factors then we can clearly understand that UCC was responsible for the Bhopal disaster (Bergman, 1988).

UCC gave several theories but none was proved and UCC never came up with a strong PR campaign for fixing their international image. UCC was running from its responsibilities for the Bhopal disaster and was just advocating for being guiltless of the incident. There were a lot of factors that were responsible for the Bhopal disaster (Amnesty International, 2004).

UCC had a very strong slogan, “safety at any cost” which at all not matched the international image of UCC. Warren Anderson, CEO, UCC never attended any of the court trials in India and always remained absconded from the hearings, none of the American employees was involved in the Indian trials and the entire responsibility came on the UCIL employees and all the Indian staffers who were present in the factory were held responsible for the Bhopal disaster. After so many years of the incident still, the families who suffered the loss of lives and fall prey to the disaster are still running for their compensations and settlement. UCC paid 250 million for the compensation but only a part of it was paid to the victims. If UCC would have had better management and better PR campaign it would have certainly contributed in better international image and would have built the trust of the people. UCC would have managed this image and industrial crisis with better modus operandi.

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