

## AFTERMATH OF THE BHOPAL GAS TRAGEDY: DEVELOPMENT OF ENVIRONMENTAL LEGISLATION IN INDIA

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### Abstract

*The explosion in the Union Carbide factory in Bhopal, on the fateful winter night of 1984, still remains the most horrific and the world's most lethal industrial disaster. It led to thousands of deaths and millions of people suffered from genetic mutations and diseases of the respiratory and neurological system. Studies and theories pointed out that this disaster was evitable and could have been prevented had precautionary measures been taken and a thorough environmental assessment been done by the authorities at the State and Central level. It was only after this catastrophe that the environmental legislations in India were seriously worked upon and various laws, which are now expedient to the functionaries, were brought into existence. The model of Environment Impact Assessment which was followed in India at that time was the Discretionary Model, which gave a lot of discretion to the Central Government to sanction projects without mandating environment assessment. This meant that the projects could be sanctioned without carrying out of any form of impact assessment, which led to this fatal accident. The Public Liability Insurance Act of 1991 was hurriedly brought into existence after this accident, to provide liability insurance to the public at large in case of any environmental disasters which were to take place in the future. The most important environment legislation in India today, the Environment Protection Act of 1984 was devised only after the Bhopal Gas Tragedy. It will not be entirely incorrect to say that environment legislation in India accelerated and developed only when a tragic accident which killed thousands of people took place. It was only then, that the legislators realized the expedient need of formulating laws, which should have been there before hand and which could have averted this industrial disaster and saved thousands of lives and the suffering which followed.*

**Keywords:** Public Liability Insurance, Bhopal Gas Leak, Environmental Legislation, Absolute Liability, Environment Impact Assessment

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## INTRODUCTION

December 2014 marked the thirtieth anniversary of the deadly disaster in Bhopal which left thousands of people dead and thousands others maimed for life. The lethal Methyl Isocyanate gas which leaked from the Union Carbide Factory on that fateful winter morning made it the worst industrial disaster India and the world had ever seen. In the 1970s, the Indian government initiated policies to encourage foreign companies to invest in local industry. Union Carbide Corporation (UCC) was asked to build a plant for the manufacture of Sevin, a pesticide commonly used throughout Asia. As part of the deal, India's government insisted that a significant percentage of the investment come from local shareholders. The government itself had a 22% stake in the company's subsidiary, Union Carbide India Limited (UCIL)<sup>1</sup>. The plant was established in Bhopal due to the central location of the city and easy availability of transport throughout the country. The specific site within the city was zoned for light industrial and commercial use, not for hazardous industry. The plant was initially approved only for formulation of pesticides from component chemicals. However, pressure from competition in the chemical industry led UCIL to implement "backward integration" – the manufacture of raw materials and intermediate products for formulation of the final product within one facility. This was inherently a more sophisticated and hazardous process.<sup>2</sup> At 11.00 PM on December 2 1984, while most of the one million residents of Bhopal slept, an operator at the plant noticed a small leak of methyl isocyanate (MIC) gas and increasing pressure inside a storage tank. The vent-gas scrubber, a safety device designed to neutralize toxic discharge from the MIC system, had been turned off three weeks prior. Apparently a faulty valve had allowed one ton of water for cleaning internal pipes to mix with forty tons of MIC. A 30 ton refrigeration unit that normally served as a safety component to cool the MIC storage tank had been drained of its coolant for use in another part of the plant. Pressure and heat from the vigorous exothermic reaction in the tank continued to build. The gas flare safety system was out of action and had been for three months. At around 1.00 AM, December 3, loud rumbling reverberated around the plant as a safety valve gave way sending a plume of MIC gas into the early morning air. Within hours, the streets of Bhopal were littered with human corpses and the carcasses of buffaloes, cows, dogs and birds. An estimated 3,800 people died immediately, mostly in the poor slum colony adjacent to the UCC plant. Local hospitals were soon overwhelmed with the injured, a crisis further

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<sup>1</sup> Fortun K: *Advocacy after Bhopal*. Chicago, University of Chicago Press;2001. P.259.

<sup>2</sup> Shrivastava P: *Managing Industrial Crisis*. New Delhi , Vision Books; 1987. P.196.

compounded by a lack of knowledge of exactly what gas was involved and what its effects were.<sup>3</sup> The exact figures of the number of people that died on the first day and over the next one week cannot be estimated, as there is no definite figure of the same.

Immediately after the accident, the UCC decided to withdraw its liability from the disaster denying responsibility. Its principal strategy was to shift culpability to the Indian subsidiary running the plant by stating that the running and upkeep of the plant was the responsibility of the UCIL (Union Carbide India Ltd). The UCC tried to bring into ambit, the possibility of sabotage by the Sikh employees of the Indian subsidiary as a deliberate attempt to take revenge of the 1984 Sikh riots in the country. The city was still reeling under the post-effects of the city turning into a ghetto, when on December 7<sup>th</sup> 1984; the first multi-billion dollar lawsuit was filed by an American attorney in a U.S. court. This was the beginning of years of legal machinations in which the ethical implications of the tragedy and its effect on Bhopal's people were largely ignored. In March 1985, the Indian government enacted the Bhopal Gas Leak Disaster Act as a way of ensuring that claims arising from the accident would be dealt with speedily and equitably. The Act made the government the sole representative of the victims in legal proceedings both within and outside India. Eventually all cases were taken out of the U.S. legal system under the ruling of the presiding American judge and placed entirely under Indian jurisdiction much to the detriment of the injured parties. In the end, the Union Carbide Corporation agreed to take responsibility and claim up to \$470 million which it agreed to pay to the Indian government as full and final settlement. The figure was partly based on the disputed claim that only 3000 people died and 102,000 suffered permanent disabilities. The compensation which was given was negligible and nothing compared to the one given in the lawsuit concerning the mining of asbestos in 1984. The supporters of the claims of the victims of the gas disaster long argued and blamed the administration and the government for the non-availability of apt laws regarding the safety of environment and the settlement of claims through establishment of liability. Had such laws been in place, the victims and the people who suffered the gas tragedy would have been able to get better compensation and the Union Carbide Corporation would not have easily gotten off the radar of being guilty. The U.C.C., throughout the lawsuit and later, did not give correct information about the reason and the cause of the accident. It only shifted its responsibility and tried to put the blame entirely on to the Indian subsidiary. As further insult, UCC discontinued

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<sup>3</sup> The Bhopal disaster and its aftermath: a review; Edward Broughton. *Environ Health*. 2005. Published online May 10, 2005 (accessed on 9.1.15)

operation at its Bhopal plant following the disaster but failed to clean up the industrial site completely. The plant continues to leak several toxic chemicals and heavy metals that have found their way into local aquifers. Dangerously contaminated water has now been added to the legacy left by the company for the people of Bhopal<sup>4</sup>.

## **DEVELOPMENT OF ENVIRONMENT LEGISLATION IN INDIA**

In the wake of the Bhopal Gas Tragedy, the government of India passed and enacted the Environment Protection Act (E.P.A.) of 1986 under Article 253 of the Constitution of India. The purpose of the Act is to implement the decisions of the United Nations Conference on the Human Environment of 1972 (The Stockholm Convention), in so far as they relate to the protection and improvement of the human environment and prevention of hazards to human beings, other living creatures, plants and property. The EPA is an umbrella legislation designed to provide a framework for the Central Government coordination of the activities of various central and state authorities established under previous laws such as the Water (Prevention and Control of Pollution) Act of 1974 and the Air (Prevention and Control of Pollution) Act of 1981. The primary legislative responses to the Bhopal Gas Leak Tragedy were the Bhopal Act of 1985 and the E.P.A. Consequently, the E.P.A. bears the stamp of the legislature's immediate concern to strengthen the regulatory framework for hazardous industries and pollution control. It is only after the enactment of the Environment Protection Act of 1986 that the evolution of environment legislation started in India. It gave a lot of power to the Central Government, especially through the Section 3(1) of the Act which empowers the Centre 'to take all such measures as it deems necessary or expedient for the purpose of protecting and improving the quality of the environment and preventing, controlling and abating environmental pollution'. It was only under this Act that the first draft notification of the Environmental Impact Assessment was passed which was later converted into the E.I.A. notification of 1994 which laid the foundation for a more 'Mandatory' form of E.I.A. in India. It has been noted by an eminent Professor of Law, P. Leelakrishnan in his book titled 'Environment Legislation in India', about the faulty assessment done by the Central as well as State authorities in granting permission to the MIC producing plant in Bhopal. Firstly, the plant which would be producing chemical fertilizer and be discharging toxic waste in form of effluent and gaseous pollutant, was allowed to be setup in a partially

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<sup>4</sup> Chander J. Water contamination: A Legacy Of The Union Carbide Disaster In Bhopal, India. *Int J Occup Environ Health*. 2001;7:72-73

residential area. There was a township near the location of the plant and there was a slum in very near proximity of the Plant. Secondly, a plant of the identical design as of the UCC plant in Bhopal was rejected for being faulty in Canada and Australia. But that plant design was passed without doing a background check by the Bhopal Municipality authorities. It evidently shows that the State and Central authorities had not paid heed to the environmental aspect of setting up the plant, but were only desirous of making profits which would arise in the future. The UCC took advantage of the same fact and there was multi-dimensional corruption and malpractice. The disaster demonstrated that seemingly local problems of industrial hazards and toxic contamination are often tied to global market dynamics. UCC's Sevin production plant was built in Madhya Pradesh not to avoid environmental regulations in the U.S. but to exploit the large and growing Indian pesticide market<sup>5</sup>.

It is astonishing to note that in and before 1984, India did not have any concrete legislation to deal with or regulate environmental pollution or degradation. Except for The Water (Prevention and Control of Pollution) Act of 1974 and The Air (Prevention and Control of Pollution) Act of 1981. The 42<sup>nd</sup> Amendment to the Constitution of India made the Indian Constitution the first of its kind in the world to have specific provisions relating to the protection and improvement of the environment but the Indian Parliament still had not enacted any law for the same. *The Environment Protection Act, 1986* was the first umbrella legislation which was passed by the Central Parliament in the wake of the Gas Leak in Bhopal. This statute today is the only statute in India which regulates and brings into the ambit of it, all forms of activities which are of detriment to the environment. It is the source of the power of the Executive wing to legislate in form of notifications and orders which become guidelines for the administrative agencies. The Environment (Protection) Rules, 1986 was brought into effect in pursuance of Section 25 of the Environment Protection Act, 1986 which gave the Central Government the power to make rules for the protection of environment. It has seven schedules which specifically lay down rules regarding standards for emission or discharge of environmental pollutants from industries, prescribing standards for ambient air quality, standards for emission of smoke, vapor etc. from vehicles, providing a list of authorities or agencies to be intimated in case of discharge of any pollutant in excess of prescribed standards and the prescription of general standards for discharge of environmental pollutants. Another major set of Rules, which were passed under provision of Section 25 of the Environment Protection Act, 1986 was the *Hazardous Waste (Management*

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<sup>5</sup> Shrivastava P. Bhopal: Anatomy of a Crisis. Cambridge, MA , Ballinger Publishing; 1987. p. 184.

*and Handling) Rules, 1989*. These set of rules apply to the management and handling of 18 categories of wastes like Cyanide Waste, Metal Finishing Waste, Waste containing water soluble compounds of lead, copper, zinc, chromium etc. Basically including all the toxic chemicals which could be stored in factories engaging in business of production or handling of such chemicals and substances. This notification directs the occupier generating hazardous wastes to take all practical steps to ensure that such wastes are properly handled and disposed of without any adverse effects. The occupier shall also be responsible for proper collection, reception, treatment, storage and disposal of these wastes either himself or through the operator of facility.<sup>6</sup> *The Environment Impact Assessment Notification of 1994* was a benchmark for environmentalists whose major concern has been the destruction of the environment in the garb of development. Through this tool of E.I.A., the form of impact assessment became mandatory and the Central Government was mandated to carry out an extensive form of environment impact assessment before passing of any project which was listed in the category A and B of the notification. It included a 'Public Hearing' and through that, a Right to Know was established wherein the general public who would be affected, were given a chance to speak out and made aware of the proposed project. A lot of transparency was introduced in the administration entrusted to pass and give validation to developmental projects which included setting up of industries, factories, production houses and also start mining projects, irrigation projects, dams and also townships and infrastructure projects. The schedule of the 1994 notification included almost all kinds of projects and activities which could affect the environment in the least. One year and one day later from the Bhopal Gas Leak, another minor gas leak accident took place in New Delhi, in the Sriram Fertilizer Factory. A public spirited individual who also is an eminent environmental lawyer practicing in the Supreme Court, Mr. M.C. Mehta, took up this case and filed a Public Interest Litigation, **M. C. Mehta v. Union of India**<sup>7</sup>. Some amount of Oleum Gas leaked from this plant situated in Delhi and it resulted in one fatality and a many injuries. It was contended by the petitioners that this factory was setup in a locality which was densely populated and any such mishap in the future could lead to another Gas Leak catastrophe which recently occurred in Bhopal. Considering that Shriram Food and Fertilizers was in the business of manufacture and handling to hazardous substances, injurious to public health the onus of prevention and caution should have been entirely upon them. The court decided apt to use the concept absolute liability against Shriram Food and Fertilizers. Citing the case of

<sup>6</sup> S. ShanthaKumar; Introduction to Environmental Law; 2<sup>nd</sup> Edn. LexisNexis, p. 157-158

<sup>7</sup> (1986) 2 SCC 176

Rylands Vs. Fletcher<sup>8</sup> “a person whom for his own purpose brings onto his land, collects or keeps anything likely to do mischief must keep at his peril and if he fails to do so is prima facie liable for the damages which is the natural consequences for its escape.”<sup>9</sup> It held Shriram responsible for all the damages and liable for paying compensation for its reversal. The only exception for this case was that of a natural calamity or an act of a third party. The court determined that the” leakage was caused by a series of mechanical and human errors. This leakage resulted from the bursting of the tank containing oleum gas as a result of the collapse of the structure on which it was mounted” and not by an act of sabotage by a third party and hence the concept of absolute liability was applicable. After this judgment, a significant principle was evolved by the Supreme Court, that of ‘Absolute Liability’. It did not exist in black and white in the enviro-legal sphere of the Indian Legal System and this principle, today, is of utmost importance.

What happened in Bhopal was an unprecedented tragedy which was the outcome of legislative and administrative incompetence in India. The lack of adequate legal and legislative framework was the reason for the loss of thousands of lives and the cause of the sufferings which continue to haunt the citizens of Bhopal. It would not be completely wrong to state that environmental legislations started evolving only after this huge disaster. The Indian Government and authorities realized the dearth of missing administrative framework only on the eleventh hour when the tragedy had already struck. Had the laws been in place and the legislature been competent, this accident could have been averted or the sufferings of the people could have been lessened. The main accused of the Union Carbide Corporation, C.E.O. Warren Anderson has died and the lawsuit against him has been shut down forever. But the pain and suffering of the survivors continue till today.

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<sup>8</sup> (1868) LR 3 HL 330

<sup>9</sup> Public Interest Litigations, <http://cpcbenvvis.nic.in/newsletter/legislation/ch18dec02a.htm>, (accessed on 7.1.15)