

LG POLYMERS: HISTORY OF BHOPAL RECALLED*SOUMADIP KUNDU¹**Introduction**

Union Carbide Ltd. gas leak tragedy cannot be forgotten as its impact is still being continued at Bhopal, Madhya Pradesh. The ghost of December 1984, between 2nd and 3rd December night, haunted several generations of Bhopal inhabitants. Over the next twenty five years no official death were undertaken, estimates indicate that the number of fatalities rose to a whopping 20,000 while 6,00,000 people suffered irreparable physical injury². Many who were not even born at the time of disaster but were still in the womb of their mothers endured its catastrophic consequence³. Even today, residents of Bhopal suffer from genetic defects such as damaged reproductive system, lung problems and vision impairments due to the gas leak that occurred almost three decades ago⁴. At the time of the disaster UCIL's (Union Carbide Ltd.) ownership structure was such that UCC (Union Carbide Corporation) owned 51% of the company, Life insurance corporation of India/ Unit trust of India owned 22% and the Indian public owned 27%⁵. In 1934, Union Carbide Ltd. was incorporated in India to manufacture batteries, chemicals, pesticides, and other Industrial products. The American enterprise, Union Carbide Corporation owned a majority stake in UCIL. In 1970, UCIL erected a pesticide plant in a densely populated area of Bhopal, Madhya Pradesh⁶. The Bhopal gas leak took place due to MIC (Methyl Isocyanate) and as many as 2600 people died in the immediate wake of the leak, the death reached 8000 within a fortnight⁷.

On the 7th May, 2020, morning, the resident of Visakhapatnam in Andhrapradesh, woke up to their worst nightmare. A gas leak near the city's Venkatapuram area has left 11 dead⁸ even we have seen in the electronic and print media that children also died due to this

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² Randeep Ramesh, 'Bhopal marks 25th anniversary of Union Carbide gas disaster', *The Guardian*, 3 December 2009, <http://www.guardian.co.uk/world/2009/dec/03/bhopal-anniversary-union-carbide-gas> (accessed 20th January 2013)

³ Zia Mody, '10 Judgments That Changed India', p-96 (Penguin Publication, New Delhi, 1st Edition)

⁴ Sukanya Pillay, 'Absence of Justice: Lessons from the Bhopal Union Carbide Disaster for Latin America', *Michigan State Journal of International Law*, vol.14 (2006):p.479

⁵ Zia Mody, '10 Judgments That Changed India', p-98 (Penguin Publication, New Delhi, 1st Edition)

⁶ Ibid, p-95

⁷ Ingrid Eckerman, 'Bhopal Gas Catastrophe 1984: Causes and Consequences' in *Encyclopedia of Environmental Health*, vol.1, ed. Jerome Nriag (Burlington Elsevier, 2011), pp.302-16

⁸ V.K.L Gayatri, 'LG gas leak kills 11 in AP', *DECCAN Chronicle*, 8th May, 2020, <https://www.deccanchronicle.com/nation/in-other-news/080520,p-01>

unfortunate gas leak. The dawn of Venkatapuram became venomous due to styrene gas leaked out on account of negligence done by L.G Polymer. The company released the statement that the gas leak happened due to lockdown of the factory because of Covid-19 pandemic⁹.

The company is owned by LG Chem Ltd. Of South Korea. LG Polymers India earlier known as Hindusthan Polymers, was established on 1961 and started manufacturing polystyrene and plastic products in the costal city of Andhrapradesh. It was merged with Mcdowell & Co.Ltd. Of the United Breweries Group in 1978¹⁰. In 1997, LG Chem (South Korea) took over Hindustan Polymers and renamed it LG Polymers. LG Polymers India Pvt Ltd. Has been operating the ill fated plant in Visakhapatnam without mandatory environment Clearance certificate for at least 13 years, making violation of a statutory environmental rules of the land¹¹.

The ministry of environment, forest and climate change issued an Environment Impact Assessment Notification 2006 and mandated that the industrial units going for expansion should mandatorily obtain environmental Clearance certificate. LG Polymers went for expansion as per its own affidavit at least five times after 2006 but never obtained the Environmental Clearance¹². Sub Rule (3) of Rule 5 of the Environment (Protection) Rules, 1986, notified by Ministry of Environment and Forests, Point number 2 imposes certain restriction and prohibition on new projects or activities, or on the expansion or modernization of existing projects or activities based on their potential environmental impacts as indicated in the schedule to the notification, being undertaken in any part of India should mandatorily obtain the Environmental Clearance¹³. The gas leak, as per prima facie findings is a result of failure by the company to comply with the manufacture, storage and import of Hazardous rules 1989¹⁴ that requires the company to maintain on-site and off-site emergency plans to prevention of damage. National green tribunal, taking a suo-motu action of the fatal incident

⁹ ibid

¹⁰ Vizag gas leak: All you need to know about LG Polymers factory, The Indian EXPRESS, 7th May 2020 https://www.google.com/url?sa=t&source=web&rct=j&url=https://indianexpress.com/article/india/vizag-gas-leak-all-you-need-to-know-about-lg-polymers-factory/lite/&ved=2ahUKewjexrCO__bpAhVaOSsKHWmsD2EQFjACegQIChAO&usg=AOvVaw3mpoTXIXsM8BfzCKr1Pr5-&pcf=1

¹¹ V.K.L Gayatri, ' LG gas leak kills 11 in AP', DECCAN Chronicle, 8th May, 2020, <https://www.deccanchronicle.com/nation/in-other-news/080520,p-01>

¹² ibid

¹³ EIA Notification 2006, [www.environment.gov.in/pdf/EIA Notification](http://www.environment.gov.in/pdf/EIA%20Notification)

¹⁴ Soundaram Ramanathan, Nivit Kumar Yadav, Digvijay Singh Bisht, Down to Earth, 'Vizag gas leak: Who is liable?', last updated 07th May 2020

on 8th May, constituted a five members committee to inspect the site and submit a report within 10 days. Vide this interim order the NGT also directed the company to forthwith deposit a sum of rupees 50 crore to the district magistrate, Visakhapatnam¹⁵. The National Green Tribunal applies 'Polluter Pays' principle.

The polluter pays principle was firstly applied and defined in the case of Indian Council for *Enviro Legal Action v Union of India*¹⁶, in this case, five Chemical industries in Rajasthan were producing H. Acid. An azo dye and toxic sludge were discharged into the opened compound which in due course of time, flowed through a canal across the entire area and the rain water wreaked the sludge deep into the bowels of the earth. It caused pollution of river water and underground water and left the fields nearby infertile, as a result of which residents had to migrate out from the village. The Supreme Court imposed the polluter pays principle in this case and held liable the five chemical industries due to negligent done.

In *Vellore citizen welfare Forum versus Union of India case*¹⁷, the massive discharge of untreated effluents caused pollution in water, resultantly drinking water was ceased to residents. Polluter Pays principle was also applied again by Supreme Court. Since its introduction in 1972, the pollute pays principle has been giving a much broader sense. Therefore, not only does it cover pollution prevention and control measures, it also covers liability such as cost for the clean up of damage to the environment.

Strict Liability vis-a-vis Absolute liability

In December 1985, just one year after Bhopal Gas leak, an another incident broke out, which is famously known as Shriram Food Fertilizre case. This case also took place on a densely populated area such as LG Polymer as well as Bhopal Catastrophe. But considerably the affect of Bhopal was not seen in Shreeram Food Fertilizre case. M.C Mehta the famous advocate in this case filed public interest litigation. Perusing and considering all the facts and recalling the effects of Bhopal case, Supreme Court applied absolute liability principle instead of Strict Liability.

¹⁵ 'National Green Tribunal sets up committee to probe Vizag gas leak' DECCAN Chronicle, 8th May, 2020, <https://www.deccanchronicle.com/nation/in-other-news/080520/national-green-tribunal-sets-up-committee-to-probe-vizag-gas-leak.html>

¹⁶ Indian Council For *Enviro Legal Action v Union of India*, AIR 1446, 1996 SCC (3) 212 <https://indiankanoon.org/doc/1818014>

¹⁷ *Vellore citizen welfare Forum versus Union of India & others* WP 914/1991 (1996.04.26), <https://indiankanoon.org/doc/1934103>

The Supreme Court evolved a new rule, creating absolute liability for harm caused by a dangerous substance. The following statement of Justice Bhagwati made a new rule regarding Hazardous substances carrying industry. “We are of the view that an enterprise which is engaged in hazardous or or inherently dangerous industry which poses a potential threat to the health and safety of the persons working in the factory and in the surrounding areas owes an absolute and non delegate duty to the community to ensure that no harm results to anyone on account of hazardous or inherently dangerous activity.

The enterprise must be held to be under an obligation to provide that the hazardous or inherently dangerous activity in which it is engaged must be conducted with the highest standards of safety and if any harm results on account of such activity the enterprise must be absolutely liable to compensate for such harm and it should be no answer to enterprise to say that it has taken all reasonable care and that harm occurred without any negligence on its part”¹⁸.

In *Raylands versus Fletcher*¹⁹, the House of Lords, applied the strict liability principle. John Reylands, a textile entrepreneur was looking to supply water for his mill located in England Coal-rich Lankashire area. For this, he hired independent contractors to build a reservoir on his land in 1860, and himself played no role in constructions. During constructions engineer discovered loosely filled shafts of an abandoned coal mine, but did not block them. The shafts and underground passage ways were connected to a neighbouring mine, owned by Thomas Fletcher. In December 1860, the reservoir busted, soon after, it was filled and the water flooded Fletcher’s mine causing him damage worth 937 pounds. When Fletcher first filed a case against Reylands for negligence, a trial court delivered its verdict in Relyand’s favour. After the lower court order, Fletcher appealed to the Court of Enchequer Chamber, where a six Judge bench overturned the previous decision, applying what came to be known as the strict liability.

¹⁸ Vakasha Sachdev, Vizag Gas Leak: LG Polymers Has ‘Absolute Liability’ Under Law, ‘the quint’, <https://www.thequint.com/amp/story/news%2Fvz-ag-gas-leak-legal-responsibility-lg-polymers-absolute-liability-supreme-court-oleum-bhopal-gas-cases>

¹⁹ *Rylands v Fletcher* (1868) LR 3 HL 330, <https://www.lawteacher.net/cases/rylands-v-fletcher.php>

Justice Blackburn, one of the judges among six, defined the Strict Liability principle as follows: “ the person who for purposes of his own, brings on his land and collects and keeps their anything likely to do mischief if it escapes must keep it in at his own peril and if he does not do so, he is prima facie answerable for all the damage which is the natural consequence of its escape”. when Reylands appealed to the House of Lords in 1868, a two judge bench agreed with Blackburns view, but added a requirement that the use of land should also be non natural, unusual or inappropriate²⁰.

Since it first evolved in the 19th century, several countries further developed this doctrine. Many jurists criticized the wide variety of exceptions threat allowed defendants to escape imposing strict liability’s defenses. Those are - consent, common benefit, an act of a stranger, an act of god and contributory negligence.

The National Green Tribunal slapped an interim penalty of Rs. 50 crore on LG Polymers India and sought response from the center and others for the “damage to life, public health and environment”²¹. the National Green Tribunal order said “ leakage of gas at a such a scale adversely affecting public health and environment, clearly attracts the principle of ‘strict liability’ against the enterprise engaged in hazardous or inherently dangerous industry”²².

Bhopal case a deceive Jurisprudence

After Bhopal gas leak disaster the Government of India promulgated the Bhopal Gas Leak Disaster (processing of claims) ordinances, 1985, which was replaced by Bhopal gas leak Disaster (Processing and Claims) Act, 1985, came into effect on 29th March 1985²³. the Bhopal Act gave the Central Government to represent the interests of those affected by the gas leak as ‘Parens Patriae’- this tool, which originated in the United Kingdom and evolved

²⁰ ibid

²¹ ‘Explained: Strict liability rule that NGT wants to apply in Vizag gas leak case’, The Indian EXPRESS,updated 12 th May 2020,<https://indianexpress.com/article/explained/strict-liability-rule-that-ngt-wants-to-apply-in-vizag-gas-leak-case-6404442/>

²² ibid

²³ Zia Mody, ‘10 Judgments That Changed India’,p-98(Penguin Publication, New Delhi, 1st Edition)

in the United States of America²⁴, allows the state to protect the well being of its citizen in a representative capacity.

By invoking *Parens Patriae*, the Government began to represent the victims who could not have initiated action against it. The constitutional validity of the Bhopal Act was also challenged before the Supreme Court. Justifying the application of the *Parens Patriae* principle, the Court held, the government is within its duty to protect and to control persons under disability. Conceptually the *Parens Patriae* doctrine is the obligation of the state to protect and take into custody the rights and privileges of its citizens for discharging its obligations. Our constitution makes it imperative for the state to secure to all its citizens the rights guaranteed by the constitution and where they are not in a position to assert and secure their rights, the state must come into picture and protect and fight for the rights of the citizens.

In September 1986, the Union of India instituted proceedings against Union Carbide Corporations in a district court at Bhopal, which ordered UCC to deposit an interim compensation of 350 crore rupees. On appeal, the Madhya Pradesh High Court reduced the figure to 250 crore rupees. UCC appealed to the Supreme Court of India against the High Court's decision. Although under Indian law, a judgment debtor is supposed to deposit the contested amount before moving on appellate court, UCC did not do so²⁵.

Aiming to dispense speedy justice to the victims, the Court ordered UCC to pay 750 crore in full settlement of all claims, rights and liabilities related and arising out of the Bhopal Gas leak disaster²⁶. In terms of the settlement all civil proceedings were concluded and criminal proceedings quashed in relation to the Bhopal gas leak. If we take a conservative estimate that 1,70,000 people got affected or died in this disaster, each victim/kin would get less than 50,000 rupees as a compensation²⁷.

A few years after its 1989 settlement order, the Supreme Court several petitions filed against the order and formed a five judge bench to hear the arguments challenging the basis of the settlement. According to Article 137 of the Constitution the Supreme Court has power to review its own judgment. However, before the judgment could be pronounced, the then

²⁴ Lisa Moscati Hawkes, 'Parens Patriae and the Union Carbide Case: The disaster at Bhopal Continues', *Cornell International Law Journal*, vol. 21 (1998): p.181

²⁵ Pillay, 'Absence of Justice: Lessons from the Bhopal Union Carbide Disaster' p.479

²⁶ *Union Carbide Corporation v. Union of India and Others* (1989) 1 SCC 674

²⁷ Zia Mody, '10 Judgments That Changed India', p-104 (Penguin Publication, New Delhi, 1st Edition)

Chief Justice of India, Justice Sabyasachi Mukherjee, passed away. On 3rd October, 1991, the Court finally recognized the legal sanctity of the order recording the settlement between UCC and Union of India²⁸. It wasted the opportunity of revising the 750 crore compensation to a more realistic figure. The Court also emphasized the need to grant speedy justice to the victims by its own order, the full adjudication of the suits relating to the Bhopal disaster would have taken till 2010²⁹.

The criminal proceedings against the directors and officers of UCC and UCIL recommended, many criminal cases did the rounds in Court across India. Initially charges were framed against the accused under Sec 304 of the Indian Penal Code for culpable homicide not amounting to murder- an offence punishable by imprisonment for a maximum ten years³⁰. Responding to an appeal, the Supreme Court diluted the charge to 'causing death by negligence' under Sec304A of the IPC (which provided for punishment by imprisonment up to two years only) on the ground that the evidence was not sufficient to charge the accused with culpable homicide not amounting to murder³¹. Warren Anderson, the Chairman of UCC was declared as an absconder. Though the Court slapped the maximum punishment it could, it was sharply criticized for treating the disaster like a ' minor traffic accident'³².

In 2010, the Union Cabinet cleared an aid package with 1265 crore rupee which might be called on of the step to right direction³³. The curative petition moved by the Central Government before the Supreme Court, seeking an additional compensation of 7844 core rupees but still this petition is pending before the paramount of Justice. A five judge bench adjourned the hearing of a curative petition filed by the Government for enhanced compensation to Bhopal Gas leak tragedy victims after one of the judges withdrew from this case. Justice S. Ravindra Bhatt has been withdrawn from the case as he had appeared for the Government in past³⁴.

²⁸ Ibid, p.105

²⁹ Union Carbide Corporation v. Union of India and Others (1989) 1 SCC 674

³⁰ Indian Penal Code 1860, Sec 304

³¹ Keshub Mahindra v. State of M.P (1996) 6 SCC 129

³² 'Bhopal disaster and the BP oil spill', *The Hindu*, 4th August 2010, <http://www.thehindu.com/opinion/op-ed/bhopal-disaster-and-the-bp-oil-spill/article550062.ece>.

³³ Zia Mody, '10 Judgments That Changed India', p-113 (Penguin Publication, New Delhi, 1st Edition)

³⁴ 'Bhopal gas tragedy: Justice S Ravindra Bhat recuses from hearing Centre's plea for additional fund', *The Economic Times*, last updated Jan 28, 2020, <https://economictimes.indiatimes.com/news/politics-and-nation/bhopal-gas-tragedy-justice-s-ravindra-bhat-recuses-from-hearing-centres-plea-for-additional-fund/articleshow/73688699.cms?from=mdr>

LG Polymer case: Cry for Justice

³⁵In LG Polymer case, the National Disaster Management Authority under the Union Home Ministry said that the manufacturing unit which will restart after the Covid-19 lockdown ends, should consider the first week as the trial period “Due to several weeks lockdown and the closure of industrial units during the lockdown period, it is possible that some of the operators might not have followed the established SOP.As a result, some of the manufacturing facilities, pipelines, valves etc., many have residual chemicals, Which may pose risk”³⁶ the NDMA said in a letter to state. “While restarting the unit, consider the first week as the trial or test run period; ensure all safety protocols; and not try to achieve high production targets”³⁷, it added.

The LG Polymer management have been directed by the State Government of Andhra Pradesh from South Korea along with a team of experts, and told them to cooperate with the inquiry to the mishap. The LG Polymers have been also directed to take back styryne monomer and other raw materials, the company stocked at the Visakhapatnam port and the Factory. The tank from where the gas leaked was brought down to 80 degree Celsius whereas the styreyne monomer should be 20 degree Celsius as per the norms³⁸. Though the 80 degree Celsius temperature is much high in respect of 20 degree; the formal temperature as per the norms stated.

“An online transfer of Rs 10000 each has been made as financial assistance to 19,893 people who were affected by the styrene gas leak from the LG Polymers plant at RR Venkatapuram in Visakhapatnam on May 7 as a first time compensation.Over Rs 33 crore was released towards payment of compensation and when the accident happened around 3am, the administration acted with alacrity and deployed 110 ambulances to shift victims to hospitals. The Government immediate priority was then to restore normalcy and provide help to victims. Not only that as a first time Rs. 1 crore and job to be given one member of each 11

³⁵ Radhika Roy, *Live Law.in*, Vizag Gas Leak : SC Refuses To Issue Notice On LG Polymer's Challenge Against NGT Constituting Committee, <https://www.livelaw.in/environment/vizag-gas-leak-sc-refuses-relief-to-lg-polymers-over-ngt-direction-to-deposit-rs-50-crores-157005>

³⁶ *ibid*

³⁷ *ibid*

³⁸ S Vishwanath, *The News Indian Express*, ‘Vizag Gas Leak: Andhra Pradesh government summons officials of LG Polymers from Korea <https://www.newindianexpress.com/states/andhra-pradesh/2020/may/10/vizag-gas-leak-andhra-pradesh-government-summons-officials-of-lg-polymers-from-korea-2141481.html>’

families, whose member died due to the leak³⁹” declared by Chief Minister of Andhra Pradesh.

Gopalpatnam police of Visakhapatnam have booked a criminal case against LG Polymers India management. The police have charged them under section 278 (Making atmosphere noxious to health) 284 (negligent conduct with respect to poisonous substance) 285 (negligent conduct with respect to fire or combustible matter) 337 (whoever causes hurt to any person by doing any act so harshly or negligently as to endanger human life) 388 (extortion by threat of accusation of an offence punishable with death or imprisonment for life) of Indian Penal Code⁴⁰.

Aftermath of Bhopal Gas Tragedy

In the aftermath of the Bhopal gas leak, various legislation dealing with industrial accidents were passed – for example, the Environment Protection Act 1986; the Hazardous Waste (Management and Handling) Rules for Management; Storage and Import of Hazardous Chemicals in 1985, and the Factory Act, 1948 was amended in 1987. But big gaps still remain.

The Public Liability Insurance Act, 1991 (PLI Act) was brought about to ensure that the victims of such accidents are adequately compensated – and immediately. In fact, in the Bhopal tragedy, the Union of India (UoI) took over the litigation from the individual victims, and also enacted the Bhopal Gas Leak Disaster (Processing of Claims) Act, 1985. The dispute was eventually settled with the Union Carbide being ordered to pay \$470 million. This settlement, without consulting the victims, was challenged by a Public Interest Litigation (PIL) in the case of Charan Lal Sahu. But the court rejected the PIL, and proceeded on to uphold the compensation under the Claims Act, 1985. The settlement money being inadequate, and inconsistencies in the number of victims of the tragedy, the compensation amount is under debate even now, some 36 years after the incident. A curative petition is pending before the Supreme Court (SC).

³⁹ Andhra government 10K each to 19, 893 people affected by LG Polymers gas leak’, *The News Indian Express*, published on-18th May 2020, <https://www.newindianexpress.com/states/andhra-pradesh/2020/may/18/andhra-govt-transfers-rs-10k-each-to-19893-people-affected-by-lg-polymers-gas-leak-2144902.html>

⁴⁰ ‘Vizag gas leak : criminal case against LG Polymers India’, *News meter*, <https://newsmeter.in/vizag-gas-leak-criminal-case-against-lg-polymers-india>

The inadequacy of the compensation under the PLI Act, which is the only legislation we have for compensating victims of tragedies such as Bhopal and Vizag, is best highlighted by the amount offered. In case of death or permanent disability, the compensation offered is Rs 25,000— along with a maximum of Rs 12,500 towards medical expenses, and, Rs 6000 in case of property damage. In case of loss of wages, the victim gets Rs 1,000 per month for three months. To meet such liabilities, factory owners must take an insurance cover, but it is capped at Rs 50 crore, irrespective of the size of the unit. These limits were set in 1992. Three decades later, the compensation amount remains the same. In the common law of torts (developed through judgments in England, and followed in India in the absence of any statutory law), there are two general principles of liability.⁴¹

One, strict liability, which makes the owner of the industry dealing with hazardous substances accountable for any injury to the full extent, subject to certain exceptions like an act of god. Two, absolute liability, which recognizes no exceptions and, irrespective of faults, makes the owner liable for any injury to the full extent. The principle of absolute liability was adopted by the SC in the MC Mehta case in 1987.

By prescribing a limit on liability and curtailing the extent of the general legal principle of damage quantification under absolute liability, the PLI Act acts as a statutory regime that helps industry owners rather than victims. In 1992, an Environment Relief Fund was established by amending the PLI Act. However, the notification of the fund, and framing of its rules, took 16 years. So far, the government has not announced any steps to utilise the fund. Victims can also approach the National Green Tribunal (NGT) for compensation and under Section 15 of the NGT Act, 2010, it can award compensation in addition to PLI Act.⁴²

India with economy boosting industrialization and a growing number of industries using hazardous substances, our legislative framework has not been able to keep pace with the changing times. It is also mired in the old-fashioned, one-dimensional outlook that

⁴¹ See also, Debadityo Sinha, *Tracking Funds to Provide Relief to Victims of Industrial Disasters: Report on the Management of the Environment Relief Fund*, Vidhi Aid, available at: <https://vidhilegalpolicy.in/2020/03/11/report-environment-relief-fund> (Visited on 10th July, 2020).

⁴² Vikram Ragavan, *Public Insurance Liability Act: Breaking New Grounds*, JILI, 114-115, 1997. Available at: [http://14.139.60.114:8080/jspui/bitstream/123456789/17692/1/012_Public%20Liability%20Insurance%20Act_Breaking%20New%20Ground%20for%20Indian%20Environmental%20Law%20\(96-115\).pdf](http://14.139.60.114:8080/jspui/bitstream/123456789/17692/1/012_Public%20Liability%20Insurance%20Act_Breaking%20New%20Ground%20for%20Indian%20Environmental%20Law%20(96-115).pdf) (Visited on 10th July, 2020.)

considers compensation only in monetary terms, disregarding all other facets like mental and physical well-being and rehabilitation of victims, their medical care, and suitable employment. But with a meagre compensation and inadequate insurance provisions, the system fails even in its monetary aspects. The Union Government should come up with amendment immediately as soon as possible in PLI Act as it is one of the core compensatory legislation in India for Industrial Hazards.

Guidelines on storage of hazardous chemical in plants:

After the Bhopal disaster, many legislation were enacted starting from the Environment (Protection) Act 1986 to the Public Liability Insurance Act, 1991. According to Manufacture, Storage and Import of Hazardous Chemical Rules, 1989, styrene is classified as a hazardous and toxic chemical⁴³. The following chart reveals about the laws enacted after Bhopal case, which was required to be followed by L.G Polymer:⁴⁴

Environment (Protection) Act, 1986	Omnibus act, which gives sweeping powers to Central Government to take all measures to protect the environment.
Environment (Protection) Rules, 1986	Set discharge and product standards-source standards for restarting pollution; product standards for manufactured goods and ambient air and water standards- for regulating quality of life and environmental protection
Hazardous Waste(Management Handling and Trans boundary Movement) Rules, 1989	Industry required to identify major accident hazards, take preventive measures and submit a report to the designated authorities
Manufacture, Storage And Import of Hazardous Chemical Rules, 1989	Importer must furnish complete product safety information to the competent authority and must transport imported chemicals in

⁴³ Soundaram Ramanathan, Nivit Kumar Yadav, Digvijay Singh Bisht, Down to Earth, 'Vizag gas leak: Who is liable?', last updated 07th May 2020

⁴⁴ ibid

	accordance with the amended rules.
Chemical Accidents (Emergency, Planning, Preparedness and Response) Rules, 1996	Centre is required to constitute a central crisis group for management of chemical accidents; set up quick response mechanism termed as crisis alert system. Each state is required to set up a crisis group and report on its work.
Factories Amendment Act, 1987	Provision to regulate siting of hazardous units; safety of workers and nearby residents and mandates for on-site emergency plans and disaster control measures
Public Liability Insurance Act, 1991	Imposes a no-fault liability on the owner of hazardous substance and requires the owner to compensate victims of accident irrespective of any neglect or default. For this, the owner is required to take out an insurance policy covering potential liability from any accident.

Conclusion

Comparing the cases relating to hazardous gas using industry, we find that India law has gradually developed after Bhopal gas leak. Having read the paragraphs written above we can see that the LG Polymers violated the the Environment Impact Assessment Notification 2006, which mandated that the industrial units going for expansion should mandatorily obtain environmental clearance from Ministry of Environment and Forest⁴⁵. Whereas, the LG Polymers did not do so. LG Polymers went fort expansion as per its own affidavit at least five times after 2006 but never obtained the EC⁴⁶.

⁴⁵ V.K.L Gayatri, ' LG gas leak kills 11 in AP', DECCAN Chronicle, 8th May, 2020, <https://www.deccanchronicle.com/nation/in-other-news/080520,p-01>

⁴⁶ ibid

According to Manufacture, Storage and Import of Hazardous Chemical Rules, 1989, styrene is classified as a hazardous and toxic chemical. But as per the news it is shown that the normal temperature of this gas should be 20 degree Celsius whereas at the day of incident the temperature was 80 degree Celsius⁴⁷. It much more than its normal temperature which should be taken care by respective LG Polymers authority.

The State Government has taken it seriously as they already declared 1 crore to each death count and 33 crore as a compensation to the victims. But National Green Tribunal has imposed the strict liability principle upon LG Polymers, which itself has some defenses that can be taken by the accused industry in future. But Justice Bhagwati clearly said in Sreeram Food Fertilizre case, “the enterprise must be held to be under an obligation to provide that the hazardous or inherently dangerous activity in which it is engaged must be conducted with the highest standards of safety and if any harm results on account of such activity the enterprise must be absolutely liable to compensate for such harm and it should be no answer to enterprise to say that it has taken all reasonable care and that harm occurred without any negligence on its part”.

William E Gladstone, the former British Statesman and Prime Minister in the late 1800's, famously said “Justice delayed is Justice denied” that we have found in Bhopal case. We are expecting that the history of Bhopal would not come in future as the Indian law in this context has very much developed in present situation.

⁴⁷ S Vishwanath, *The News Indian Express*, ‘Vizag Gas Leak: Andhra Pradesh government summons officials of LG Polymers from Korea <https://www.newindianexpress.com/states/andhra-pradesh/2020/may/10/vizag-gas-leak-andhra-pradesh-government-summons-officials-of-lg-polymers-from-korea-2141481.html>’