



# TRAILS LEADING TO A DISASTER LESSON NOT LEARNED

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# Marriage woes of 'Bhopal Brides'

Gas tragedy leaves legacy of sickness 25 years on

**BHOPAL:** Jyoti is one of many Indian women whose dreams of a glittering wedding were shattered after the Bhopal gas disaster killed thousands 25 years ago this week and left many more ill from exposure.

Having endured the lethal billow of methyl isocyanate gas which seeped from the Union Carbide plant on Dec 3, 1984, Jyoti and her contemporaries then suffered the stigma of being survivors.

"No one would marry her," said her mother Sheela. "They looked at her health and saw how sick she was, and that she was always going for treatment for her kidney and respiratory problems."

At just 39, Jyoti is practically a spinster by Indian standards, where despite increased educational and career opportunities, women are still pressured to marry young and reproduce soon after.

But the chances of a childless marriage or spending a fortune treating children with birth defects

turned many Bhopal women into pariahs.

Research conducted by the State-run Indian Council of Medical Research (ICMR) until 1994 showed that 25,000 people had died from the consequences of gas exposure — in addition to the 8,000 to 10,000 people who were killed within the first three days.

Government statistics compiled after 1994 concluded that at least 100,000 people living near the factory in central Madhya Pradesh State were chronically sick, with more than 30,000 residing in areas with contaminated water.

According to the ICMR, the number of still births and miscarriages increased immediately after the disaster, and activists say more than 350 tonnes of toxic waste strewn around the site still pollute soil and groundwater in the area, leading to hormonal and fertility disorders and other illnesses.

"My daughter has been married for more than five years and she still

has no children," lamented 60-year-old Savra Bi, who lives in a crude row of shacks close to the plant, in the old part of Bhopal which was worst hit.

"After 1984, for 10 years, no girl had a good marriage," agreed Champa Devi Shukla, a managing trustee with the Chingari Trust, which provides medical care to children with gas-related congenital deformities.

"Men thought they might miscarry. Even men in the new part of the city refused to marry them. So many just ended up marrying late," she said.

Some so-called "Bhopal brides" found that men from outside Bhopal took a keen interest in them only for the compensation cheques handed out after a 1989 settlement between Union Carbide and the Indian government.

As a survivor, Jyoti received a meagre pay-out of 400 rupees (RM27) a month and then a lump sum of 7,000 rupees. — AFP



**PRACTICALLY A SPINSTER:** Jyoti, one of the many Indian women whose dreams of a glittering wedding were shattered after the Bhopal gas disaster, in her home — AFPpic

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# TRAILS: BOPAL DECEMBER 1984

1. 1976, two local trade unions complained of pollution within the plant.
2. 1981, a worker was accidentally splashed with phosgene as he was carrying out a maintenance job of the plant's pipes. In a panic, he removed his gas mask and inhaled a large amount of toxic phosgene gas, leading to his death just 72 hours later.
3. January 1982, a phosgene leak exposed 24 workers, all of whom were admitted to a hospital. None of the workers had been ordered to wear protective masks.
4. February 1982, an MIC leak affected 18 workers.
5. August 1982, a chemical engineer came into contact with liquid MIC, resulting in burns over 30 percent of his body.
6. October 1982, there was another MIC leak. In attempting to stop the leak, the MIC supervisor suffered severe chemical burns and two other workers were severely exposed to the gases.
7. 1983 and 1984, there were leaks of MIC, chlorine, monomethylamine, phosgene, and carbon tetrachloride, sometimes in combination.
8. December 1984, methyl isocyanate (MIC) gas leaked, 3787 fatality, 558125 injuries including 3900 severely and permanently disabling injuries, 8,000 died within two weeks and another 8,000 or more have since died from gas-related diseases





Empat mayat diletakkan di hadapan sebuah rumah sebelum dihantar ke hospital selepas dikeluarkan dari kawasan kilang mercurun yang meletup dan terbakar di Kampung Baru Sungai Buluh.



# CASE CLOSES AFTER 15 YEARS

The Star, Sunday, 06 Aug 2006

**PETALING JAYA:** Finally – 15 years later – made without admitting liability and as full there is closure for victims of the Bright and final payment for general and special Sparklers fireworks factory explosion in damages and interest. Sungei Buloh, Selangor.

Many would have forgotten the tragic event by now and even the judge who chaired the Royal Commission of Inquiry into the blast that flattened the factory and killed 22 people and injured 103 on May 7, 1991, has passed on.

Finally, the Government has made a payout of **RM954,685.**

The 118 people, who sued the Government after they lost their loved ones, suffered injuries and damage to their property in the incident, received a lump sum of RM30,000 from Chin Kong Hin, who was a director of Bright Sparklers Sdn Bhd, which went out of business soon after the tragedy.

The global payment by the Director of Selangor Lands and Mines Department, the Petaling District Council and the Government of Malaysia – the second, third and fourth defendants, respectively – was

The first settlement, involving one plaintiff represented by S. Kanagasabapathi, was recorded before Shah Alam High Court Justice Suriyadi Halim Omar on April 13. Two other settlements were recorded on May 22 and the remaining three on June 22; Jessica Binwani represented the plaintiffs in these suits.

The payments were in respect of claims for dependency, personal injury and property damage.

In confirming the settlements, Binwani, counsel for 117, said there had been no settlement as yet from Chung Kin Chuan, the other Bright Sparklers director named in suits, or from the company itself.

Asked whether the suits against Chung and the company would proceed, Binwani said the company was no longer in business but Chung, who had been declared bankrupt, had since been discharged.

The suits were filed after a Royal Commission of Inquiry was held before a three-man panel chaired by President of the Court of Appeal Justice Tan Sri Wan Adnan Ismail (who was a High Court judge then).

The inquiry findings were: “Bright Sparklers Sdn Bhd is responsible. **Its management knew they were carrying on a dangerous operation.**”

“They had violated so many laws for which they and their executives must not escape prosecution.”

However, no one was ever prosecuted in relation to the personal injuries/ property damage suffered or the loss of lives of the factory workers, neighbouring residents, passers-by, family and friends who had rushed to the site to help after they heard the first blast and saw the billowing smoke.



# TRAILS: BRIGHT SPARKLERS

## MAY 1991

1. Dec 1978, fire and explosion incident, 1 fatality
2. Nov 1980, fire incident, 1 fatality
3. May 1984, fire incident, 1 fatality, 2 building damage
4. August 1987, fire incident, 1 fatality
5. July 1989, fire incident, 1 fatality
6. May 1991, fire and explosion, 23 fatality, 103 injured, factory destroyed



# RESPONSIBLE CARE

## WHAT

Responsible Care is an initiative of the chemical industry and adopted by chemical companies to improve continuously safety, health and environmental performance of their operations and products in manner responsible to the concerns of the public.

## WHY

Responsible Care was implemented to respond to public concerns about manufacture, transport, use and disposal of chemicals.

Community awareness and involvement are also key features of the initiative.



# RESPONSIBLE CARE

## AIM

Responsible Care is aimed to improve the chemical industry's performance in safety, health and environment and also public perception of the chemical industry.

It means that taking extra care of our operations, so that they do not have a bad impact on the safety and health of employees and the public; and also to protect the environment.

It also means being alert to new ways of operating that will improve the industry's performance in safety, health and environment and also being prepared to respond to public concerns about your operations with prompt action.



# RESPONSIBLE CARE

## - GUIDING PRINCIPLES



1. To **recognise** and **respond** to community concerns about chemicals and our operations
2. To develop and produce chemicals that can be manufactured, transported, used and disposed of safely
3. To make health, safety and environmental considerations a priority in our planning for all existing and new products and processes
4. To **report promptly** to officials, employees, customers and the public, information on chemical related health or environmental hazards and to recommend protective measures
5. To counsel customers on the safe use, transportation and disposal of chemical products
6. To **operate** our plants and facilities in a manner that **protects the environment and the health and safety** of our employees and the public
7. To extend knowledge by conducting or supporting research on the health, safety and environmental effects of our products, processes and waste materials
8. To work with others to resolve problems created by past handling and disposal of hazardous substances
9. To participate with Government and others in creating responsible laws, regulations and standards to safeguard the community, workplace and environment
10. To promote the principles and practices of Responsible Care by sharing experiences and offering assistance to others who produce, handle, use, transport or dispose of chemicals



# OSHA 1994



## **PART IV - GENERAL DUTIES OF EMPLOYERS AND SELF-EMPLOYED PERSONS**

Section 15. General duties of employers and self-employed persons to their employees.

Section 16. Duty to formulate safety and health policy.

Section 17. General duties of employers and self-employed persons to persons other than their employees.

Section 18. Duties of an occupier of a place of work to persons other than his employees.

Section 19. Penalty for an offence under section 15, 16, 17 or 18.

## **PART VIII - NOTIFICATION OF ACCIDENTS, DANGEROUS OCCURRENCE, OCCUPATIONAL POISONING AND OCCUPATIONAL DISEASES, AND INQUIRY**

Section 32. Notification of accidents, dangerous occurrence occupational poisoning and occupational diseases, and inquiry.

Section 33. Director General may direct inquiry to be held.

Section 34. Power of occupational safety and health officer at inquiry.

## **PART V - GENERAL DUTIES OF DESIGNERS, MANUFACTURERS AND SUPPLIERS**

Section 20. General duties of manufacturers, etc. as regards plant for use at work.

Section 21. General duties of manufacturers, etc. as regards substances for use at work.

Section 22. Explanations to sections 20 and 21.

Section 23. Penalty for an offence under section 20 or 21.

## **PART VI - GENERAL DUTIES OF EMPLOYEES**

Section 24. General duties of employees at work.

Section 25. Duty not to interfere with or misuse things provided pursuant to certain provisions.

Section 26. Duty not to charge employees for things done or provided.

Section 27. Discrimination against employee, etc.

# DEATH SENTENCES IN CHINESE MILK CASE

THE NEW YORK TIMES, 22 JANUARY 2009

BEIJING — Chinese courts sentenced two men to death on Thursday for endangering public safety in a tainted-milk scandal that killed at least six children, according to state-run news media.

Three other defendants, including a top dairy company executive, were sentenced to life in prison. Another defendant received a suspended death sentence, and 15 others were given prison terms from 2 to 15 years.

The sentences were the first to be handed down in one of the worst food safety scandals in China in decades. The scandals erupted in September, prompting a global recall of Chinese-made dairy products, shaking consumer confidence and devastating the nation's dairy industry.

Some lawyers and victims have accused Beijing of failing to regulate the nation's dairy industry properly. Some critics believe that the government covered up the scandal until after the Olympic Games in Beijing in August.

The Intermediate People's Court in Shijiazhuang, in the northern province of Hebei, said the defendants had intentionally produced or sold dairy products laced with a toxic

chemical called melamine, which was used to create the illusion of a higher protein count, but which caused kidney stones and other ailments in about 300,000 children last year.

Zhang Yujun, whom the government called one of the "principal criminals" in the scandal, was sentenced to death. He was convicted of selling 600 tons of melamine-tainted "protein powder" to dairy companies.

Another dairy producer, Geng Jinpin, also received the death penalty. A third man, Gao Junjie, received the death penalty with a two-year reprieve, meaning he could be spared execution.

Tian Wenhua, 66, the former chairwoman of the Sanlu Group, one of China's largest dairy companies, was sentenced to life in prison for her failure to stop producing and selling the tainted goods even after her company learned they were flawed.

Ms. Tian is the highest-ranking corporate executive to have been brought to trial in the scandal. She pleaded guilty in December and was also finned about \$3 million. All the deaths in the scandal so far have been linked to Sanlu, which was found to have sold the milk products

with the highest melamine concentrations.

"The sentence against Tian Wenhua is too harsh," Liu Xinwei, Ms. Tian's defense lawyer, said after the verdict, adding, "I don't agree her criminal circumstances were that grave and serious involving this case."

Three other former executives at Sanlu were sentenced to 5 to 15 years in prison. One of them, Wang Yuliang, appeared in court in December in a wheelchair after what the Chinese state-run news media said was a failed suicide attempt. He received a 15-year sentence. Two other men who sold tainted protein powder, Zhang Yanzhang and Xue Jianzhong, were sentenced to prison for life, the state-run news agency, Xinhua, reported.

Parents of some victims protested outside the courthouse in Shijiazhuang, where Sanlu is based, saying they were dissatisfied with the verdicts. "I feel sorry for them, but they are just scapegoats," said Liu Donglin, 28, who said his 21-month-old son had kidney stones after drinking tainted milk formula. "The ones who should take the responsibility are the government."



# CONCLUSION

Responsibility and accountability  
to our products and services  
begins before start & has no ending.



NEAR MISS IS NOT LUCK

IT'S A WARNING FROM GOD



BROTHERHOOD OF THE ROPES