because $500 is Plenty Good for an Indian ...
Union Carbide, Dow and Warren Anderson were and are fugitives from the lawful jurisdiction of the Bhopal District Court where criminal charges remain pending against them.

This is Fascism
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This is Fascism
Corporate Terrorism Around The World
presented by

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AN INTERNET MAGAZINE FOR THE 21ST CENTURY AND BEYOND

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It’s All Class Warfare ...
Most of you might have to use their money.
Don’t Drink Their Water.
Don’t Eat Their Food.
Don’t Buy Their Stuff.

(This is not an endorsement for canned food. The publisher doesn’t eat canned food and doesn’t recommend canned food, but he likes the Popeye cartoon.)

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The propaganda and indoctrination, or Indo, Indo and Indo, is “Think As Indo” ™©®©®, yada, yada, yada...

Remember Jethro Tull!
(Some small portions of this publication are a parody, a satire and just For Fun.)
YOU don’t know about BHOPAL

It occurred on the night of 2–3 December 1984 at the Union Carbide India Limited (UCIL) pesticide plant in Bhopal, Madhya Pradesh, India.

Over 500,000 people were exposed to methyl isocyanate gas and other chemicals.

The toxic substance made its way in and around the shantytowns located near the plant.

Estimates vary on the death toll.

**The official immediate death toll was 2,259**

The government of Madhya Pradesh confirmed a total of 3,787 deaths related to the gas release.

Others estimate 8,000 died within two weeks and another 8,000 or more have since died from gas-related diseases. A government affidavit in 2006 stated the leak caused

**558,125 injuries**

including 38,478 temporary partial injuries and approximately 3,900 severely and permanently disabling injuries.

Bhopal has been described as ‘The Hiroshima of the chemical industry’.

We ask, could this happen in the United States?

Probably Not

Could it happen anywhere else?

Union Carbide, Dow and Mr. Anderson were and are fugitives from the lawful jurisdiction of the Bhopal District Court where criminal charges remain pending against them. This is Fascism.
DISABLED children living near the site of the 1984 Bhopal gas disaster - many in wheelchairs, others crawling - staged a protest Olympics on Thursday (July 26) targeting London 2012 sponsor Dow Chemical.

About 100 children took part in the “Bhopal Special Olympics” at a muddy sports ground in the shadow of the Union Carbide factory responsible for the world’s worst industrial accident. The event, organised on the eve of Friday (July 27)’s Olympics opening ceremony, aimed to highlight the suffering of people in Bhopal and the links to Dow Chemical, which took over fellow US group Union Carbide in 2001.

“The children are born like this because of the gas,” said Kesar Bai, a 45-year-old mother from a slum near the plant who believes that the disaster and its lingering impact caused her son Pratap’s severe cerebral palsy. She broke down in tears at the sight of Pratap, strapped into his wheelchair, being pushed around the makeshift sports track along with the gaggle of disabled participants, mostly aged between eight and 16.

“I was thinking ‘if there hadn’t been this tragedy, then so many would not be born like this’,” she said, adding that in the area around her shack there were 10-12 disabled children. The disaster killed 8,000-10,000 people within the first three days, according to data from the state-run Indian Council of Medical Research (ICMR), but hundreds of thousands more suffer the consequences. Immediately after the 40 tonnes of methyl isocyanate gas leaked, survivors remember the slums surrounding the pesticide plant being littered with people, many unconscious, vomiting or frothing at the mouth.

“We woke up at 02:00 am in the night. Everyone was running. If you fell down, they ran over you,” Bai recalled. The old moth-balled factory still stands to this day, lightly guarded and open to children who are reported to play there. Thousands of tonnes of highly toxic waste remain in the area, slowly leeching into the groundwater. A 2009 study by the independent Delhi-based Centre for Science and Environment found water 3.0 kilometres (1.8 miles) from the factory was severely contaminated with chemicals and heavy metals linked to birth defects.

US multinational Dow, a top sponsor of the London Games and the International Olympic Committee (IOC), has rebuffed calls for more compensation for the victims. It points to a 1989 deal that saw Union Carbide pay the Indian government $470m (£298.89m) to settle all of its liabilities. It says any further health and clean-up costs are the state’s responsibility. It adds that Union Carbide had also sold its shares - and liabilities - in its Bhopal subsidiary to an Indian company five years before Dow began its $35bn (£24.80bn) takeover of the group in 1999. A spokesman for Dow Chemical, Scott Wheeler, told reporters that the company regretted the “misinformed and misdirected allegations” against it. Its sponsorship of London 2012 has caused immense anger in Bhopal, where protest posters have been pasted around the city, and it led the Indian government to ask the IOC to drop the Michigan-based firm. Some of the anger is also directed at Britain.

Winners of the races collected medals in front of a poster depicting the Bengal famine of 1943 blamed on Winston Churchill. The opening ceremony featured a re-enactment of a colonial-era massacre by soldiers in Amritsar in 1919. “A lot to be ashamed of if one is a Brit,” read one banner hung from a crumbling concrete stand in which several hundred spectators clapped the children during the 90 minutes of sport. One race was titled “the crab walk” in which three children who were unable to stand heaved themselves down the 25-metre race course with their hands. As a top-tier sponsor, Dow will display its branding to billions of TV viewers during the Olympics and it has funded a fabric wrap that will go around the main stadium. Beyond the row about corporate social responsibility, the management of the Bhopal disaster also points to the failings of the Indian state. Local authorities assumed responsibility for cleaning up the site in 1998 but they have failed to clear the waste. The justice system produced its first convictions only 25 years after the event.
A petrochemical plant without proper safety mechanisms in place is a terrifying thought. One just has to think back to Bhopal (December 1984). Martin McLaughlin of The International Committee of the Fourth International puts the results of the incident into perspective when he describes the effects of methyl isocyanate as,

"... five times more toxic than the phosgene (mustard gas) used as a weapon in the trench warfare of World War I. It is especially damaging to the soft tissues of the body - eyes, mouth, nose, throat, lungs, and reproductive organs. Many of the victims died by drowning on their own mucus and vomit."

He goes on to say about the accident,

"From the standpoint of capitalist law, Bhopal was an ‘accident’, and not an act of homicide against a helpless population. It was a nonetheless monstrous crime. Subsequent investigations revealed that there had been repeated safety violations at the plant - faulty valves, cracked storage tanks, a lack of automated systems for filling tanks or stopping gas leaks, a lack of emergency evacuation procedures (and) a total lack of training of the plant staff."

More than 500,000 people are still trying to obtain compensation from Dow, the entity that effectively owns Union Carbide. To put the reparations by the corporation into perspective, Exxon paid US $940 for cleaning each oil-contaminated sea otter following the Exxon Valdez oil-spill off Alaska.

The Bhopal payouts to date have been a paltry US $570 per person which, despite Dow-Carbide’s now famous dictum that ‘$500 is plenty good for an Indian’, do not even begin to cover the medical expenses the victims have had to cover for the past two decades. It makes one wonder what would be ‘plenty good for an American?’

Sea Otters are more valuable than Human Beings, if they’re Indians
Union Carbide documents showing that “unproven technology” was used in Bhopal.

Secret Union Carbide documents obtained by “discovery” during a class action suit brought by survivors against the company in New York, reveal for the first time that the technology used at the fatal Bhopal factory – including the crucial units manufacturing carbon monoxide and methyl isocyanate (MIC) – was unproven, and that the company knew it would pose unknown risks.

For 18 years since the disaster, Carbide has consistently lied by claiming that the technology in its fatal Bhopal factory was identical to that used in its plant at Institute, West Virginia. The corporation’s lawyers and PR gurus even referred to Institute as Bhopal’s “sister plant”. But Bhopal was the ugly sister, always underfunded, always second-best.

The corporation knew the danger, but regarded it as an acceptable “business risk”.

The proposal’s 50 pages demonstrate a blithe disregard for human safety. Nowhere is there any mention of risks to surrounding communities – the city’s railway station was less than a mile away and downwind of the plant. Instead they reveal that the company was obsessed to keep control of its Indian subsidiary at all costs – an obsession which led directly to underfunding of the MIC-Sevin unit, and which explodes another of Carbide’s long-standing lies: that it had no control over its Bhopal plant.

Speaking at a press conference in Bhopal today, Satinath Sarangi of the Bhopal Group for Information and Action, one of the plaintiffs in the New York case, ob-
served that “Union Carbide built the MIC unit in order to retain control, they used untried technology to keep control, they under-funded it to keep control. When it turned Bhopal into a gas chamber, they said they’d had no control.”

Pressure Mounts For Anderson’s Extradition

Carbide’s ex-CEO Warren Anderson, who since 1992 has been refusing to appear before a criminal court in Bhopal, was one of the select Management Committee who approved the Bhopal MIC project.

“We now know for sure that senior Carbide officials, including Warren Anderson, not only knew about design defects and potential safety issues with the Bhopal factory, they actually authorised them,” Sarangi said.

“This is the documentary proof, the ‘high standard of evidence’ that the Indian Attorney General Soli Sorabjee claimed he didn’t have to be able to press for Warren Anderson and Union Carbide’s extradition. What we’ve found shows both prior knowledge and intent on the part of the accused: it is so significant that it demands the revision of the pending criminal charges in the Bhopal court.”

In this opening report, timed to coincide with a press conference being held today in India by the survivors’ groups involved in the New York litigation, Bhopal.Net brings you the original documents.

We will be following with detailed analyses of the documents in the light of the mountain of evidence that exists about the plant’s defective siting, construction, production processes, storage, waste disposal, maintenance, training and safety systems.

For what sum did Carbide find it worth risking the life of a whole city?

One Old Mystery Can Be Cleared Up Right Away

Union Carbide stored liquid MIC in Bhopal in huge tanks, far in excess of what ever would have been permitted in the US. MIC is a dangerously volatile chemical and these tanks were supposed to be kept cooled to 0°C. It is known that for some months prior to the huge and fatal gas leak of December 1984, the refrigeration system had been switched off to save the cost of freon gas.

For the last 18 years, survivors have wondered just how much
the company must have been saving, to make it worth risking the lives of an entire Indian city.

Now we know. The figure was $37.68 per day.

Blueprints For Disaster

On 2 December 1973 three documents were presented to the Management Committee of Union Carbide Eastern Inc, a subsidiary of Union Carbide Corporation: a two-page internal memorandum relating to the company’s plan to begin manufacturing methyl-isocyanate at its Bhopal factory; supported by a four-page capital budget plan and a forty-four page project proposal.

There was a dark prophecy hidden in the date of these documents.

Exactly eleven years later – on the night of December 2nd 1984 – Carbide’s unproven technology, functioning badly in a by then run-down and loss-making factory – combined with non-existent staff training, a savage programme of cost-cutting and almost total absence of maintenance – released 27 tonnes of deadly methyl-isocyanate into the night air of Bhopal.

Notes For Journalists

Discovery of the new documents comes from a Class action suit ongoing in the Federal Southern District Court of New York. The suit mainly alleges that:

A. Union Carbide demonstrated reckless or depraved indifference to human safety and life in the design, operation and maintenance of its MIC facilities in Bhopal as well as its safety mechanisms.

B. UCC pursued a systematic policy of racial discrimination in the design, construction and operation of the Bhopal factory.

C. Union Carbide demonstrated reckless or depraved indifference to human life in the manufacturing, storage, treatment and disposal practices at the UCIL plant, resulting in severe contamination of the soil and water in and around the UCIL plant.

D. Union Carbide and Anderson were and are fugitives from the lawful jurisdiction of the Bhopal District Court where criminal charges remain pending against them.
The suit is based on the legal provisions under US law of the Alien Torts Claims Act [ATCA]. ATCA provides for civil remedies for ‘crimes against humanity’ [atrocities and offences, including but not limited to murder, extermination, enslavement, deportation, imprisonment, torture, rape, or other inhumane acts committed against a civilian population] committed by a US agency in a US court. The suit seeks the federal court’s decree directing UCC and Anderson to pay exemplary punitive damages in amounts to be proven in trial.

**The plaintiffs and co-plaintiffs**

Seven individual victims and five organizations (Bhopal Gas Peedit Mahila Udyog Sangathan (BGPMUS), Gas Peedit Nirashrit Pension Bhogi Sangharsh Morcha (GPNPBSDM), Bhopal Gas Peedit Mahila Stationery Karmachari Sangh (BGPMSKS), Bhopal Gas Peedit Sangharsh Sahayog Samiti (BGPSSS), and Bhopal Group For Information and Action (BGIA). See www.earthrights.org/bhopal

**Important events with dates**

**November 15, 1999** – Class action complaint is filed

**November 18, 1999** – Effective service of process on Carbide is accomplished at their Danbury offices.

**November 21, 1999** – Process servers inform plaintiffs’ counsel at GLRS that Anderson’s Long Island address is a vacant lot.

**November 25, 1999** – Process servers inform plaintiffs’ counsel at GLRS that service on the New York condo is not effective service since its only a mailing address.

**March 8, 2000** – Mr. Krohley indicates to GLRS that they would, now, be willing to accept service on behalf of Warren Anderson and tried to suggest that he had not been evading service but has had “some heart trouble” lately.

**August 28, 2000** – Mr. John F. Keenan dismissed the class action suit mainly on the ground that the Bhopal Act [Bhopal Gas Leak Disaster (Processing of Claims) Act, 1985] prevented individuals or organizations outside the Government of India from bringing an action against Union Carbide or its official.

**October 2000** – Appeal against Judge Keenan’s decision filed before the Second Circuit Court of Appeal of the US Federal Court. Futile requests to the Indian government, over several months, to file an amicus curae before the Court of Appeal to clarify the role and scope of the Bhopal Act in support of the appeal.

**November 15, 2001** – The Second Circuit Court of Appeal part affirmed and part dismissed the decision of Judge Keenan’s court. Claims under seven counts regarding contamination of ground water and soil in and around the factory and consequent health damages are directed to Keenan for re-consideration. Plaintiffs file motion to discovery.

**April, 2002** – In the ongoing discovery proceedings before Judge Keenan Union Carbide submitted over 4000 pages of company documents.

**June 2002** – in response to a petition moved under Rule 56 [f] by plaintiff’s attorney on June 20, 2002 Judge Keenan has directed Union Carbide to provide additional documentation related to the case. Union Carbide obeyed this order.

**September 20, 2002** – plaintiffs and their attorney Mr. Raj Sharma filed affidavits on the basis of about 100 “smoking gun” documents before Keenan.

**FERA**

The Foreign Equity Regulation Act brought into Indian statute in the 1970’s required foreign holdings to be reduced to a maximum of 40%. At the time, Union Carbide’s stake in UCIL stood at 60%. Union Carbide’s corporate policy manual states that “it is the general policy of the Corporation to secure and maintain effective control of an Affiliate.” A specific statutory exemption to FERA enabled Carbide to retain majority control since it would be engaging in MIC production that required high-technology inputs not available in India. MIC production finally started in Bhopal in 1978/9.
The Design Temple Mumbai special promotion in aid of Bhopal Medical Appeal for the 28th anniversary of the Bhopal Disaster. 3rd-8th December. Our thanks go to Divya Thakur for her amazing gesture and her support.
Internal Union Carbide documents, (1) made public today by the International Campaign for Justice in Bhopal (2), reveal that Union Carbide knew for over a decade that the 1984 Bhopal disaster site and drinking water that supplies nearby communities was severely contaminated with toxic chemicals, yet claimed it was clean.

The confidential documents, written by the company in the years after the disaster, that killed 8,000 people and injured half a million in Bhopal, India after gas leaked from its pesticide plant, were obtained from the U.S. courts following a discovery motion during a class action suit against Anderson and Union Carbide. (2)

“These documents throw light on an unfolding corporate crime. It’s chilling to read how Union Carbide set about a corporate cover up to evade its liabilities in Bhopal. The company publicly insisted the site was clean for years rather than issuing warnings to people living near the plant and cleaning it up,” said Ananthapadmanabhan, Executive Director of Greenpeace India.

The documents show that Union Carbide and its former Chief Executive Officer (CEO) Warren Anderson, continued to assert there was no contamination in and around its factory site in Bhopal, even though its own studies found contamination there in “substantial quantities”. Tests conducted by the U.S. multinational in June-July 1989, five years after a gas leak, found levels of naphthol and Sevin “in quantities far more than permitted by ISI for on land disposal” in a majority of liquid samples. Levels of contamination were so severe that “all the samples caused 100% mortality to fish in toxicity assessment studies.”

Instead of acting on its findings, Union Carbide repeatedly cited another study,(3) that today’s documents show it thought to be unreliable, to misinform the public and the government of Madhya Pradesh, the state in which Bhopal is located, that “no contamination of soil and ground water was observed”. (doc reference: UCC 034585).

“This is a shocking example of a corporate crime, one that has not only manipulated a government but that has further abused the human rights of an already traumatized community,” added Ananthapadmanabhan.
Dow Chemical, the new owners of Union Carbide, today refuses to accept responsibility for the ongoing disaster caused by Union Carbide in Bhopal. Although it has Shouldered the costs for Carbide’s crimes before (4), it’s CEO, Michael Parker, insists that Union Carbide “has done what it needs to do to pursue the correct environment, health and safety programs” in Bhopal. Yet people in Bhopal have been exposed to the poisons Union Carbide abandoned there for eighteen years. 120,000 people there still need urgent medical attention and they are now finding the impacts of the gas exposure is being passed on to their children.

Survivor of the Bhopal gas disaster, Rashida Bi, concluded: “In light of this new evidence, any further claims by Dow Chemical that Union Carbide did all it could in Bhopal would be shameful. The Bhopal disaster will not end until Dow accepts its responsibilities in Bhopal, cleans up the contamination, and provides the people there with medical assistance, clean running water and proper compensation.”

VVPR info: Photos and video of Bhopal and Greenpeace activities there are available on request.

Notes: (1) The documents, “Presence of Toxic Ingredients in Soil/Water Samples Inside Plant Premises” can be seen on: http://www.bhopal.net/welcome2.html(2) Discovery of the new documents comes from a Class action suit ongoing in the Federal Southern District Court of New York(3) The report was carried out by the Indian governmental National Environmental Engineering Research Institute (NEERI) but overseen by an external U.S. company employed by Union Carbide. (4) In January 2002, Dow accepted Union Carbide’s liabilities in the U.S. and settled and asbestos suit in Texas, originally filed against Union Carbide. On 19th November, Greenpeace and survivors of the gas disaster cordoned off an area of land in a densely populated part of the city near the Union Carbide factory site and set up signs warning people that it is ‘Poisoned and awaiting Dow clean up’. See the Greenpeace website for details Greenpeace is working in Bhopal as member of the International Campaign for Justice in Bhopal. Members include: Bhopal Action Resource Center USA, Bhopal Gas Peedit Mahila Stationary Karmachari Sangh India, Bhopal Group for Information and Action India, Bhopal Information Network Japan, Center for Health & Environment USA, Corpwatch India, Essential Action USA, Ecology Centre of Michigan USA, Environmental Health Watch USA, National Campaign for Justice in Bhopal India, Pesticide Action Network USA, The Other Media India, UK Campaign for Justice in Bhopal.

Meredith Alexander, Sustainability Commissioner and Ethics Adviser to Lord Coe & LOCOG, resigns live on BBC Newsnight over Dow Chemical sponsorship - see http://bhopal.org/ for full story.
The Chingari Award winners pictured at today’s effigy burning protest, December 3rd, 2012.

The ‘Chingari Award for Women against Corporate Crime’ was handed over to two women, Rani Dasan and Thenmozhi Manickam, representing the thousands of brave women activists who have rallied against the powerful nuclear establishment in a continuing struggle for justice against great odds. Eminent environmental activist, Dr. Vandana Shiva, the Chief Guest at the function, said, “The Kudankulam struggle has emerged not merely as the most defining challenge to nuclear power in the country today but is also one of the strongest demonstrations of non-violent people’s power. The role of the women in the struggle has been critical in ensuring that the energy of the fight remains undiminished. They are truly the ‘chingaris’ of the struggle and it is an honour to be able to present the award to them.”

Image thanks to Giles Clarke ©2012
Torch rally in Bhopal tonight, December 3rd, 2012, to commemorate 28 years since the Bhopal Gas Disaster. Image thanks to Giles Clarke ©2012
Making protest posters in Bhopal.

Image thanks to Giles Clarke ©2012
Reason 28: “Sambhavna’s pathology laboratory is equipped to carry out routine, microscopic and bio-chemical medical testing. This is the only place where survivors of the Bhopal gas disaster can access services of this kind.”
To learn more, visit www.bhopal.org and make a donation if you can and if you can’t, don’t forget to share this post and this story with your friends!
Reason 13: Unlike other healthcare providers in Bhopal, the Sambhavna Clinic uses computerized records to document every patient's medical records. This ensures continuous treatment and allows for progress to be monitored by doctors and patients.

To learn more, visit www.bhopal.org and make a donation if you can and if you can't, don't forget to share this post with your friends!

Image thanks to Giles Clarke ©2012
Reason 8: At the Sambhavna Trust Clinic, seven dedicated Community Health Workers work in 14 gas-affected or water contaminated slum communities. They are trained in various forms of health promotion and provide acute medical screenings for those who are unsure, worried or physically unable to seek treatment at the clinic. To learn more, visit www.bhopal.org

Image thanks to Giles Clarke ©2012
The 2012 celebration of the world’s fittest & healthiest athletes is brought to you by our kind partners ...

You know, the same guys that brought us WAR, DEBT, CANCER, OBESITY, OIL SPILLS and BHOPAL.

Boycott The Olympics
maybe they’ll just go away

Giles Clarke ©2012
The UCIL factory was built in 1969 to produce the pesticide Sevin (UCC’s brand name for carbaryl) using methyl isocyanate (MIC) as an intermediate. A MIC production plant was added in 1979. After the Bhopal plant was built, other manufacturers including Bayer produced carbaryl without MIC, though at a greater manufacturing cost. However, Bayer also uses the UCC process at the chemical plant once owned by UCC at Institute, West Virginia, USA.

The chemical process employed in the Bhopal plant had methylamine reacting with phosgene to form MIC, which was then reacted with 1-naphthol to form the final product, carbaryl. This “route” differed from the MIC-free routes used elsewhere, in which the same raw materials were combined in a different manufacturing order, with phosgene first reacting with naphthol to form a chloroformate ester, which was then reacted with methyl amine. In the early 1980s, the demand for pesticides had fallen, but production continued, leading to buildup of stores of unused MIC.

Earlier Leaks

In 1976, two trade unions complained of pollution within the plant. In 1981, a worker was splashed with phosgene. In a panic, he removed his mask, inhaling a large amount of phosgene gas which resulted in his death 72 hours later. UCC was warned by American experts who visited the plant after 1981 of the potential of a “runaway reaction” in the MIC storage tank. Local Indian authorities had warned the company of the problem as early as 1979, but constructive actions were not undertaken by UCIC at that time. In 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. One month later, in February 1982, a MIC leak affected 18 workers. In August 1982, a chemical engineer came into contact with liquid MIC, resulting in burns over 30 percent of his body. Later that same year, in October 1982, there was another MIC leak. In attempting to stop the leak, the MIC supervisor suffered intensive chemical burns and two other workers were severely exposed to the gases. During 1983 and 1984, there were leaks of MIC, chlorine, monomethylamine, phosgene, and carbon tetrachloride, sometimes in combination.

Contributing Factors

Factors leading to the magnitude of the gas leak mainly included problems such as; storing MIC in large tanks and filling beyond recommended levels, poor maintenance after the plant ceased MIC production at the end of 1984, failure of several safety systems due to poor maintenance, and safety systems being switched off to save money—including the MIC tank refrigeration system which could have mitigated the disaster severity. The situation was worsened by the mushrooming of slums in the vicinity of the plant.

Other factors identified by the inquiry included: use of a more dangerous pesticide manufacturing method, large-scale MIC storage, plant location close to a densely populated area, undersized safety devices, and the dependence on manual operations. Plant management deficiencies were also identified—lack of skilled operators, reduction of safety management, insufficient maintenance, and inadequate emergency action plans.

Work Conditions

Attempts to reduce expenses affected the factory’s employees and their conditions. Kurzman argues that “cuts...meant less stringent quality control and thus looser safety rules. A pipe leaked? Don’t replace it, employees said they were told ... MIC workers needed more training? They could do with less. Promotions were halted, seriously affecting employee morale and driving some of the most skilled ... elsewhere”. Workers were forced to use English manuals, even though only a few had a grasp of the language.

By 1984, only six of the original twelve operators were still working with MIC and the number of supervisory personnel was also halved. No maintenance supervisor was placed on the night shift and instrument readings were taken every two hours, rather than the previous and required one-hour readings. Workers made complaints about the cuts through their union but were ignored. One employee was fired after going on a 15-day hunger strike. 70% of the plant’s employees were fined before the disaster for refusing to deviate from the proper safety regulations under pressure from the management.

In addition, some observers, such as those writing in the Trade Environmental Database (TED) Case Studies as part of the Mandala Project from American University, have pointed to “serious communication problems and management gaps between Union Carbide and its Indian operation”, characterised by “the parent companies [sic] hands-off approach to its overseas operation” and “cross-cultural barriers”.

Equipment And Safety Regulations

The MIC tank alarms had not been working for four years and there was only one manual back-up system, com-
pared to a four-stage system used in the United States. The flare tower and several vent gas scrubbers had been out of service for five months before the disaster. Only one gas scrubber was operating: it could not treat such a large amount of MIC with sodium hydroxide (caustic soda), which would have brought the concentration down to a safe level. The flare tower could only handle a quarter of the gas that leaked in 1984, and moreover it was out of order at the time of the incident. To reduce energy costs, the refrigeration system was idle. The MIC was kept at 20 degrees Celsius, not the 4.5 degrees advised by the manual. Even the steam boiler, intended to clean the pipes, was inoperational for unknown reasons. Slip-blind plates that would have prevented water from pipes being cleaned from leaking into the MIC tanks, had the valves been faulty, were not installed and their installation had been omitted from the cleaning checklist. The water pressure was too weak to spray the escaping gases from the stack. They could not spray high enough to reduce the concentration of escaping gas. In addition to it, carbon steel valves were used at the factory, even though they were known to corrode when exposed to acid.

According to the operators, the MIC tank pressure gauge had been malfunctioning for roughly a week. Other tanks were used, rather than repairing the gauge. The build-up in temperature and pressure is believed to have affected the magnitude of the gas release. UCC admitted in their own investigation report that most of the safety systems were not functioning on the night of 3 December 1984. The design of the MIC plant, following government guidelines, was “Indianized” by UCIL engineers to maximise the use of indigenous materials and products.

Mumbai-based Humphreys and Glasgow Consultants Pvt. Ltd., were the main consultants, Larsen & Toubro fabricated the MIC storage tanks, and Taylor of India Ltd. provided the instrumentation. In 1998, during civil suits in India, it emerged that the plant was not prepared for problems. No action plans had been established to cope with incidents of this magnitude. This included not informing local authorities of the quantities or dangers of chemicals used and manufactured at Bhopal. An investigation of the piping on the spot in 2004 indicated that a saboteur must have had intimate knowledge of piping into and out of the tank as well as act extremely fast and exact.

The Leakage And Its Immediate Effects

The Release

Methylamine reacts with phosgene producing methyl isocyanate which reacts with 1-naphthol to yield carbaryl.

The 1985 reports give a picture of what led to the disaster and how it developed, although they differ in details. In November 1984, most of the safety systems were not functioning and many valves and lines were in poor condition. In addition to this, several vent gas scrubbers had been out of service as well as the steam boiler, intended to clean the pipes was nonoperational. Another issue was that Tank E610 contained 42 tons of MIC which was much more than what safety rules allowed. During the night of 2–3 December 1984, water entered Tank E610 containing 42 tons of MIC. A runaway reaction started, which was accelerated by contaminants, high temperatures and other factors. The reaction was sped up by the presence of iron from corroding non-stainless steel pipelines. The resulting exothermic reaction increased the temperature inside the tank to over 200 °C (392 °F) and raised the pressure. This forced the emergency venting of pressure from the MIC holding tank, releasing a large volume of toxic gases. About 30 metric tons of methyl isocyanate (MIC) escaped from the tank into the atmosphere in 45 to 60 minutes.

The Gas Cloud

The gases were blown in southeastern direction over Bhopal. As of 2008, UCC had not released information about the possible composition of the cloud. Apart from MIC, the gas cloud may have contained phosgene, hydrogen cyanide, carbon monoxide, hydrogen chloride, oxides of nitrogen, monomethyl amine (MMA) and carbon diox-ide, either produced in the storage tank or in the atmosphere. The gas cloud was composed mainly of materials denser than the surrounding air, stayed close to the ground and spread outwards through the surrounding community.

The nature of the cloud is still discussed. The chemical reactions would have produced a liquid or solid aerosol with high density. The concentrations at ground level would have been much higher than earlier published.

Release Theories

Much speculation arose in the aftermath. The closing of the plant to outsiders (including UCC) by the Indian government and the failure to make public contributed to the confusion. The initial investigation was conducted entirely by the Council of Scientific and Industrial Research (CSIR) and the Central Bureau of Investigation. Theories differ as to how the water entered the tank. At the time, workers were cleaning out a clogged pipe with water about 400 feet from the tank. They claimed that they were not told to isolate the tank with a pipe slip-blind plate. The operators assumed that owing to bad maintenance and leaking valves, it was possible for the water to leak into the tank.

However, this water entry route could not be reproduced. UCC maintains that this route was not possible, but instead alleges water was introduced directly into the tank as an act of sabotage by a disgruntled worker via a connection to a missing pressure gauge on the top of the tank.

Early the next morning, a UCIL manager asked the instrument engineer to replace the gauge. UCIL’s investigation team found no evidence of the necessary connection; however, the investigation was totally controlled by the government, denying UCC investigators access to the tank or interviews with the operators.

Acute Effects

Reversible reaction of glutathione with methyl isocyanate allows the MIC to be transported into the body. The initial effects of exposure were coughing, vomiting, severe eye irritation and a feeling of suffocation. People awakened by these symptoms fled away from the plant. Those who ran inhaled more than those who had a vehicle to ride. Owing to their height, children and other people of shorter stature inhaled higher concentrations. Many people were trampled trying to escape.

Thousands of people had succumbed by the morning hours. There were mass funerals and mass cremations. Bodies were dumped into the Narmada River, less than 100 km from Bhopal. 170,000 people were treated at hospitals and temporary dispensaries. 2,000 buffalo, goats, and other animals were collected and buried. Within a few days, leaves on trees yellowed and fell off. Supplies, including food, became scarce owing to suppliers’ safety fears. Fishing was prohibited causing further supply shortages.

Within a few days, trees in the vicinity became barren, and 2,000 bloated animal carcasses had to be disposed of. On 16 December, tanks 611 and 619 were emptied of the remaining MIC. This led to a second mass evacuation from Bhopal. The Government of India passed the “Bhopal Gas Leak Disaster Act” that gave the government rights to represent all victims in or outside of India. Complaints of lack of information or misinformation were widespread. An Indian Government spokesman said, “Carbide is more interested in getting information from us than in helping our relief work.”

Formal statements were issued that air, water, vegetation and foodstuffs were safe within the city. At the same time, people were informed that poultry was unaffected, but were warned not to consume fish. No one under the age of 18 was registered at the time of the accident. The number of children exposed to the gases was at least 200,000.
The acute symptoms were burning in the respiratory tract and eyes, blepharospasm, breathlessness, stomach pains and vomiting. The causes of deaths were choking, reflexogenic circulatory collapse and pulmonary oedema. Findings during autopsies revealed changes not only in the lungs but also cerebral oedema, tubular necrosis of the kidneys, fatty degeneration of the liver and necrotising enteritis. The stillbirth rate increased by up to 300% and neonatal mortality rate by around 200%.

**Hydrogen Cyanide Debate**

Whether hydrogen cyanide (HCN) was present in the gas mixture is still a controversy. Cyanide concentrations of 300 ppm can lead to immediate collapse. The non-toxic antidote sodium thiosulphate (Na2S2O3) in intravenous injections increases the rate of conversion from cyanide to non-toxic thiocyanate.

Initial reports based on the autopsies of victims’ bodies suggested cyanide poisoning based on which UCC’s Dr. Bipan Avashia advised amyl nitrate and sodium thiosulphate. Treatment was tentatively used on some people, with mixed results.

Critics argue that both the Government and Union Carbide tried to avoid mentioning the emotionally provocative word “cyanide.”

Exposed to high temperatures, MIC breaks down to hydrogen cyanide (HCN). According to Kulling and Lorin, at +200 °C, 3% of the gas is HCN. However, according to another scientific publication, MIC when heated in the gas-phase starts to break down to hydrogen cyanide (HCN) and other products above 400 °C.

Chemically, HCN is known to be very reactive with MIC. HCN is also known to react with hydrochloric acid, ammonia, and methylamine (also produced in tank 610 during the vigorous reaction with water and chloroform) and also with itself under acidic conditions to form trimers of HCN called triazenes. Laboratory replication studies by CSIR and UCC scientists failed to detect any HCN or HCN-derived side products. None of the HCN-derived side products were detected in the tank residue.

**Long Term Effects**

**Long Term Health Effects**

All data about the health effects are still not available. The Indian Council of Medical Research (ICMR) was forbidden to publish health effect data until 1994.

A total of 36 wards were marked by the authorities as being “gas affected”, affecting a population of 520,000. Of these, 200,000 were below 15 years of age, and 3,000 were pregnant women. The official immediate death toll was 2,259, and in 1991, 3,928 deaths had been officially certified. Others estimate 8,000 died within two weeks.

The government of Madhya Pradesh confirms a total of 3,787 deaths related to the gas release.

Later, the affected area was expanded to include 700,000 citizens. A government affidavit in 2006 stated the leak caused 558,125 injuries including 38,478 temporary partial injuries and approximately 3,900 severely and permanently disabling injuries.

**Health Care**

In the immediate aftermath of the disaster, the health care system became overloaded. Within weeks, the State Government established a number of hospitals, clinics and mobile units in the gas-affected area to treat the victims. Since the leak, large number of private practitioners were opened in Bhopal. In the severely affected areas, nearly 70 percent were under qualified doctors. Medical staff was unprepared for the thousands of casualties. Doctors and hospitals were not aware about proper treatment methods for MIC gas inhalation and they were directed to give cough medicine and eye drops to the patients, which had no positive effect.

The Government of India had focused primarily on increasing the hospital-based services for gas victims thus hospitals had been build after the disaster. When UCC wanted to sell its shares in UCIL, it was directed by the Supreme Court to finance a 500-bed hospital for the medical care of the survivors. Thus, Bhopal Memorial Hospital and Research Centre (BMHRC) was inaugurated in 1998 and was obliged to give free care for survivors for eight years. BMHRC was a 350-bedded super speciality hospital were heart surgery and hemodialysis were done however, there was a dearth of gynaecology, obstetrics and paediatrics. Eight mini-units (outreach health centres) were started and free health care for gas victims were to be offered till 2006. The management had also faced problems with strikes, and the quality of the health care being disputed. Sambhavna Trust is a charitable trust, registered in 1995, that gives modern as well as ayurvedic treatments to gas victims, free of charge.

Still, as of today, Warren Anderson leads a life of leisure and he’s never faced the courts for his part in the Bhopal Disaster and very likely he never will.

**June 29th, 2012**

New York: In a setback to the victims of the Bhopal gas tragedy, a US court has held that neither Union Carbide nor its former chairman Warren Anderson were liable for environmental remediation or pollution-related claims emanating from the world’s worst industrial accident.
because $500 is Plenty Good for an Indian ...
FB helps spread gas tragedy word

AWARENESS Bhopal Medical Appeal posts special material on gas tragedy

Neesa Santoshi
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BHOPAL: Facebook is emerging as a strong medium for those fighting for the cause of people affected by the world’s largest industrial disaster—Bhopal gas tragedy.

Bhopal Medical Appeal, a Facebook (FB) page has posted pictures, special photo essays on gas tragedy by Giles Clarke, Alex Masi and Adriano Marzi. Also, artistic posters, protest banners and photographs of the various events organised in connection with the 28th anniversary of the disaster are also posted on the page.

The page has also shared a special photo essay on the tragedy by Giles Clarke, including ten photos on “Inside the former Union Carbide pesticide factory Bhopal”, showing shocking photos of gas affected children at the Chingari Trust Rehabilitation Centre. The page has also shared a link to Adriano Marzi’s photo essay titled “Bhopal toxic legacy” which has been extensively depicting the complexity of the disaster that has percolated down in so many aspects of the gas survivors.

Some of the pictures posted on this page have evoked strong reactions. In her post, former Union Carbide writer writes, “Thank you for making me aware, but it is really painful. Of course whatever pain it causes me is nothing compared to the horror of what these people endure and have endured for so long.”

Another user, Richard Lach, writes, “Give a little to help the victims.

The FB page has been developed by Bhopal Medical Appeal that funds two clinics in Bhopal, offering health care to people affected by the gas disaster. Bhopal Medical Appeal is a UK charity that funds both the Ambulance Clinic and the Chingari Rehabilitation Centre in Bhopal.

Facebook is not only helping the activists to highlight the case before the international audience, but through this social networking site, the activists are also making appeals for the donations.

The Sunday evening update on the FB page read: “This evening is the 28th anniversary of the Union Carbide Gas Disaster in Bhopal. India. After years of suffering, thousands of Bhopalis have received comfort, support and healthcare from the Sahmipriya Trust Clinic and the Chingari Trust and Rehabilitation Centre. Please help to keep these inspiring community-based organisations alive and support the Bhopal Medical Appeal. To learn more, visit www.bhopal.org and make a donation. Don’t forget to share this post with your friends!”

The FB page also posted pictures of the evening’s event for Bhopal, a candle light procession, candle-light prayer, which ended after the ceremony at around 8 pm reaching out to a broader audience beyond Bhopal.

Candles, effigy burning mark anniv eve

Bhopal: Candle light vigils, demonstrations and burning of effigy of Warren Anderson, the former chief chairman of the Union Carbide Corporation, marked the eve of the 28th anniversary of the Bhopal gas disaster on Sunday.

Members of Sahmipriya Trust Clinic expressed deep concern on the deterioration of medical care of the people exposed to Union Carbide’s poison and the absence of medical research on exposure induced health problems by organising a poster exhibition on environmental health. The exhibition started on December 27 and concluded on Sunday. A candle light vigil was also held in variation with the ‘Save Our Bhopal’ campaign.

Members of Bhopal Gas Peedit Niyay Morcha paid tribute to the deceased of Gas Tragedy at Jhal Madi. On this occasion, a meeting was also organised. Former spokesperson of Madhya Pradesh Congress Committee Arif Masood addressed the meet and highlighted the problems of gas victims.

On the occasion, president of the organisation Abdul Naif said government was paying compensation of Rs 125 per month to each gas victim, a sum which was not sufficient. He said that the government should increase the compensation for the victims.

Children of gas survivors formed a human chain in front of the site of Union Carbide, Bhopal Gas Peedit Sangram Sahayata Samiti to protest anti-gas victim policies of the union and state governments.

GAS ACTIVISTS TO GHERAO PM CM

GHERAO: Activists belonging to different organisations will stage a demonstration outside the residence of the Prime Minister of the Union Government to protest against the government's decision to bring an ordinance to withdraw the Bhopal Gas disaster law.

CHRONICLES OF A FORGOTTEN HERO

‘Anderson’s release was done under due process of law’

BEREF OF SUPPORT

Gas devastated them even from safe distance.
Neil McCall sweating his way in 25 degrees heat over the finishing line of the Paris Marathon. Congrats and well done to Neil ... 

Giles Clarke ©2012
They're poisoning us with their food, our water and our air.
They're killing us in their wars.
They're killing us with corporations.
They're forcing us to use their currency.
They're making us fat.
They're stealing ALL the loot.

They're laughing at us...

Stop Participating.

Don't eat their food.
Don't drink their water.
Don't buy their stuff!
Murdering Liberty Killing Hope
The who, why and how of the events that occurred on 911 with almost 100 photostatic documents; banking, contracts and depositions, over 50 rarely seen high quality ground zero images and a story about the QRS11 Gyro Chip, Smacsonic®, the NASA Dryden Controlled Impact Demonstration, the real Mohamed Atta, the Clock Lady and Metastable Intermolecular Nano Composite Sol Gels.

or:
http://www.datafilehost.com/download-0c99b14c.html

After 911
Implicates the same players in the SubPrime crisis and connects the SubPrime crisis directly to the events of 911. Don’t believe what you hear in the media. This book introduces many of the lesser known players and provides the history of their connections to the intelligence community and also speculates on bond defaults in 2011-2012.

or:
http://www.datafilehost.com/download-ab3fa150.html

The Golden Lily
Provides the historic data from the mid-1940s through 1975 on the events that led to what we now call 911. Introduces the players that have long since died and ties them into the players on the global stage today.


There Were Bombs In The Building
Since September 11, 2001, there has been an undercurrent of testimony that the collapse of the WTC Towers was preceded by a series of explosions inside the towers, which appeared to those fleeing as totally unrelated to the holocaust created on the upper floors by the jet airliners. To a very large degree, those statements have been “sealed” by the FBI along with statements by the NY Fire Department and rescue workers. That information will never see the light of day for the next twenty years. There are however, ten sets of publicly available information which strongly suggest other explosions occurred in conjunction with the airline attacks on the World Trade Center. This report covers those ten sets of publicly available information.

or
http://www.datafilehost.com/download-b498239d.html

911 Gold
Vast Global Financial Fraud, gold market manipulation and what Dick Cheney and George Bush actually did while in the White House.

http://www.datafilehost.com/download-71072e4d.html

Fascism In America
A scathing report confirming the US Media is controlled by an Organized Crime Syndicate involved in murder and financial fraud.

or

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Stop Buying Their Stuff