Our (absent) speakers





Balkrishna Namdev Gas Affected Destitute Pension-entitled People's Front

London Bristol Bradford Leeds Edinburgh Glasgow



Safreen Khan Children Against Dow Carbide

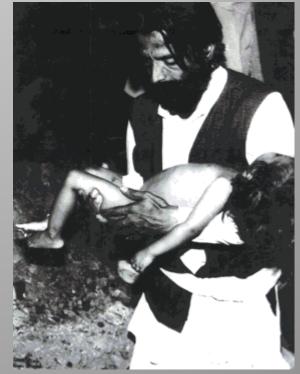
Manchester Liverpool Dublin Belfast Galway Mayo

International Campaign for Justice in Bhopal

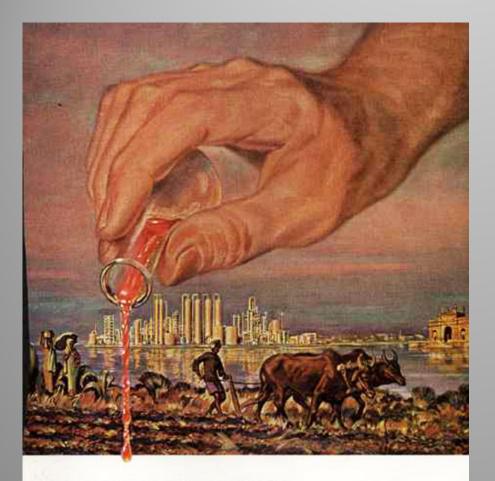
Bhopal December 1984











Science helps build a new India

Oxen working the fields . . . the eternal river Ganges . . . jeweled elephants on parade. Today these symbols of ancient India exist side by side with a new sight —modern industry. India has developed bold new plans to build its economy and bring the promise of a bright future to its more than 400,000,000 people. > But India needs the technical knowledge of the western world. For example, working with Indian engineers and technicians, Union Carbide recently made available its vast scientific resources to help build a major chemicals and plastics plant near Bombay. > Throughout the free world, Union Carbide has been actively engaged in building plants for the manufacture of chemicals, plastics, carbons, gases, and metals. The people of Union Carbide welcome the opportunity to use their knowledge and skills in partnership with the citizens of so many great countries.

A HAND IN THINGS TO COME

CARBID

WRITE for baskies & 3 "The Existing Universe of University," isheeft to be here resource in the Solde of carbon, chemicale, gaves, mobile, plastics and successerency here a bringing new conders into your life, Univer, Cartiale Corporation, 270 Park Annue, New York 11, N. Y.

Union Carbide Bhopal

Green Revolution

 1969 Union Carbide (India) established Sevin insecticide assembly plant in Bhopal

Backwards integration

 1979 factory upgraded to manufacture Sevin: store Methyl Isocyanate

Shifting costs

 Fall in profitability shifting investment to Latin America

Cutting costs – increasing productivity

- **Reduction in maintenance staff**. No night shift maintenance supervisor.
- Production supervisor recently transferred, **untrained**, from battery plant.
- Valves made from cheap carbonated steel, rather than resin (which is required in UCC safety manual)
- MIC stored at atmospheric pressure rather than under pressure of nitrogen.
- **Refrigeration unit shut down**. Temperature gauge malfunctioning. MIC probably close to 20°C rather than required temperature of 0°C.
- Extensive corrosion. Valve malfunctioning. Rust in pipes and tank.
- 'Minor' leaks regular and regarded as 'normal'.
- Vent gas scrubber (neutralises gas) inadequate for volume and speed of gas and switched off 2 months previously. Indicator malfunctioning.
- Backup tank **should have been empty** but contained MIC.
- Gas flare tower partially **dismantled** 6 weeks previously.
- Backup system discontinued
- Water spray system **not strong enough** to reach height of gas release
- No automatic alarm triggered by system
- Alarm had been turned down, audible only inside factory
- **No emergency procedure** for local community, no evacuation plan

The struggle for justice

Spontaneous protests



Local movements



Solidarity activists



Unionisation of women's worksheds



The second disaster

- Water and soil contamination
 - 1999 GREENPEACE The Bhopal Legacy
 - 2009 Centre for Science and Environment
- 2001

• 2008 Children against Dow Carbide



2012 London Olympics



