Appendix D: Union Carbide Corporation

M.J. Peterson Revised March 3, 2008

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- 2.) Summary of 1982 Union Carbide Safety Survey of Bhopal Plant
- 3.) Summary of 1985 Inspection of West Virginia Plant

References used in this section:

Thomas J. Lueck, "1982 report cited safety problems at plant in India, *The New York Times*. December 11, 1984. UMass internet users go here: http://proquest.umi.com.silk.library.umass.edu:2048/pqdweb?did=120505048&sid=1&Fmt=10&clie ntld=2724&RQT=309&VName=HNP

Kenneth B. Noble. "U.S. agency cites Carbide for 'willful neglect' on plant leak," *The New York Times*. October 2, 1985.

Philip Shabecoff, "Union Carbide had been told of leak danger," *The New York Times*. January 25, 1985. [focuses on conditions in UCC's West Virginia plant] UMass internet users go here: http://proquest.umi.com.silk.library.umass.edu:2048/pqdweb?did=119135082&sid=1&Fmt=10&clie ntld=2724&RQT=309&VName=HNP.

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Additional Readings:

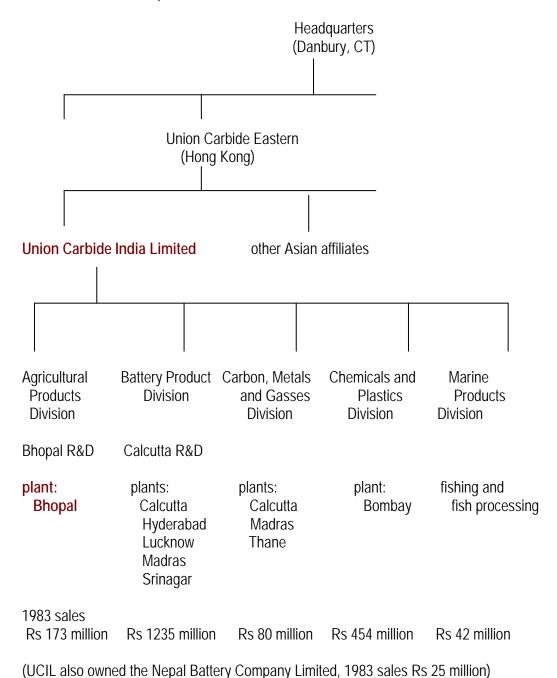
Union Carbide Website: www.unioncarbide.com

Wil Lepkowski, "The Restructuring of Union Carbide since Bhopal," in Sheila Jasanoff, ed. *Learning from Disaster: Risk Management after Bhopal* (Philadelphia: University of Pennsylvania Press, 1994).

Richard Ice, "Corporate publics and rhetorical strategies: The case of Union Carbide's Bhopal Crisis," *Management Communications Quarterly* 4/3: 341-362 (Feb 1991). [Probably overestimates how well Union Carbide did with some of the audiences, but has an interesting classification of audiences and analysis of how rhetoric that worked with some undermined efforts to persuade others.]

Organization Chart

Union Carbide Corporation, 1982



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Summary of 1982 Union Carbide Safety Survey of Bhopal Plant

Overall conclusion: "no situations involving immanent danger or requiring immediate correction" but situations present that do require attention and remediation.

10 conclusions are listed as particular concerns:

- 1.) Potential for gas leaks in phosgene/MIC production area
- 2.) Potential for gas leaks in MIC storage area
- 3.) Lack of fixed water-spray protection systems in several parts of the plant
- 4.) Potential for overfilling, excess pressure or contamination in MIC storage tanks
- 5.) Deficiencies (including leaks) in safety valves
- 6.) Malfunctioning pressure gauges
- 7.) Inadequate instrument maintenance programs
- 8.) Maintenance workers' failures to insert slip blinds into pipes before starting water washing to clean filters
- 9.) Problems stemming from high personnel turnover, particularly in operations teams
- 10.) Lack of contingency plans for coping with serious leaks

Summary of 1985 Inspection of West Virginia Plant

In April 1986 the U.S. Occupational Safety and Health Administration (OSHA) proposed a \$1.4 million fine against Union Carbide Corporation for their disregard of health and safety laws. The violations were publicized after a September 1985 inspection of five of 18 plant units at Institute, West Virginia alleged 221 violations of 55 health and safety laws. OSHA classified 72 of the 221 violations as "serious," meaning there was substantial probability of death or substantial physical harm.

An October 1985 New York Times article cited the "Willful" violations as:

- 1.) Negligently exposing six workers to toxic chemicals within the plant.
- 2.) Failure to follow standard company operating procedures in the storage and transfer of toxic chemicals, as well as company emergency procedures.
- Failure to provide an adequate number of respirators accessible to workers handling toxic chemicals.

Other violations included:

1.) An inadequately ventilated control room. Air conditioning equipment brought vapors into the control room.

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