Bhopal Plant Disaster
Case Contents

Revised March 3, 2008

1.) Case Study: Situation Summary

2.) Appendices:

These may be used selectively by each instructor, depending on his or her emphasis in the use of the case. The appendices provide the technical details for an in-depth analysis of Bhopal as well as additional references both for the instructors and the students.

Appendix A: Chronology

1.) Bhopal Chronology
2.) Ensuing Litigation Chronology

Appendix B: Stakeholders and Level of Responsibility

1.) H-O-T Analysis of Industrial Accidents Applied to Bhopal Gas Leak
2.) Stakeholder Orientations in Industrial Disasters Table
3.) Stakeholder Effects and Responses Table
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3.) Excerpts from and Comments on Union of India Foreign Exchange Regulation Act 1973

4.) Government of India, Planning Commission, 4th Five-Year Plan

5.) Government of India Tenth Five Year Plan: 2002-07 [for comparison of current to prior policy orientations]

Appendix D: Union Carbide Corporation

1.) UCC Organization Chart

2.) Summary of 1982 Union Carbide Safety Survey of Bhopal Plant

3.) Summary of 1985 Inspection of West Virginia Plant

Appendix E: Issues in Chemical Processing

1.) Toxicity of Chemicals present in the Bhopal Plant

2.) [Fragmentary] Notes on Making SEVIN

3.) Types of Hazard in Manufacture and Use of Industrial Products Chart

4.) Types of Hazard in Product Use/Consumption Chart

Appendix F: Assessing Responsibility: The Legal/Regulatory System

Topic 1: Litigation

1.1) Note on Indian Supreme Court Decisions regarding Bhopal Gas Disaster, MJ Peterson

Topic 2: On Policy Changes Inspired by Bhopal Disaster

2.1) Western European Policy on Information about Chemical Plant Hazards, 1982 [excerpt from Josee van Eijndhoven, "Disaster prevention in Europe" in Sheila Jasenoff ed, *Learning from Disaster: Risk Management after Bhopal*(Philadelphia: University of Pennsylvania Press, 1994) pp. 113-132]

2.2) United States Policy on Information about Chemical Plant Hazards, 1987- [excerpt from Susan G. Hadden, "Citizen Participation in Environmental Policy Making" in Sheila Jasenoff ed, *Learning from Disaster: Risk Management after Bhopal* (Philadelphia: University of Pennsylvania Press, 1994), pp. 91-112.]

Appendix G: Assessing Responsibility: The Engineers and Scientists

1.) Contrasting Views of Responsibility for the Bhopal Disaster

Appendix H: Assessing Responsibility: Technical Expertise and Managers

1.) Engineers and Managers

3.) Additional Recommended Readings for Students:

B. Bowonder, Jeanne X. Kasperson and Roger E. Kasperson, “Avoiding future Bhopals,” *Environment* 27/ 7 pp. 6-37 (Sept 1985).

Ronald J. Willey, Dennis C. Hendershot, and Scott Berger, “The Accident in Bhopal: Observations 20 Years Later,” *Process Safety Progress* 26/3 pp. 180-184 (Sept. 2007).

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