

**Managing Safety: A Guide for Executives, K. Bhagwati. Wiley-VCH Verlag GmbH & Co. KGaA, Weinheim, Germany (2006). 235 pp., US\$ 90.00, ISBN: 3-527-31583-7**

This book was written by a chemical engineer who worked for several years in industry as a project engineer, development chemist, project manager, plant manager, government relations manager, chief product steward, and director of environment, health and safety for the European division of a major U.S. chemical company. Currently he works as an independent consultant.

Bhagwati writes in a conversational, easy to read (even delightful) style. The book has 27 short chapters which are titled: (1) Introduction, (2) Consequences of accidents, (3) A small experiment, (4) Man or machine? (5) Why do accidents happen? (6) The underlying reasons, (7) How to make people not take risks, (8) The myths of management, (9) Who “makes” safety? (10) Management tools, (11) Pillar 1: total management commitment, (12) Pillar 2: safety visits – the basics, (13) Safety visits – the system, (14) Safety visits – the procedure, (15) The art of talking, (16) Pillar 3: involving the worker, (17) Brainstorming, (18) Pillar 4: accident investigation, (19) The methodology of an accident investigation, (20) The art of questioning, (21) Accident or incident? (22) Responsibility & authority, (23) The safety committee, (24) Lock out – tag out, (25) Communications, (26) Other managerial tools and (27) How to proceed.

In Chapter 4, the author notes that the Industrial Revolution brought society many benefits but also many dangers, not the least of which were boiler explosions. According to U.S. estimates, in the first half of the 19th Century, 250 steam boiler explosions took place killing approximately 2500 people. The worst accident was a boiler explosion on a Mississippi River steamboat, the Sultana, in 1865 which killed 1200 people. In those days, accidents were deemed “An Act of God.” This conclusion is in contrast to the real causes: faulty design, bad workmanship or unsafe worker acts. Bhagwati follows this historical recitation with descriptions of three more modern catastrophes: Bhopal, Chernobyl and the Herald of Free Enterprise (a ship accident in Europe). The author’s final statement in this chapter is the following:

“I think we now agree that even these big catastrophes are caused by human acts, because taking decisions is a human act too.”

The author then states that:

“Accidents happen because people take risks; People take risks because they are optimists; Optimists believe that bad things happen only to others, not to them; The essence of safety training is to educate people not to take risks; Nonrisky behavior must be a company principle, to be followed by all; and Management, from top to bottom, must promote nonrisky behavior.”

Clearly, the major goal of a Safety Programme is to convince workers not to take risks. But how is that to be accomplished?

Bhagwati then outlines a number of “Safety Management Myths” as follows:

- Policies printed on paper and exhibited everywhere will change people.
- The Safety Department should manage safety.
- The Safety Department should best report to Human Resources.
- Compliance with laws and regulations is all we have to do in the field of safety.

In Chapter 9, which is entitled “Who Makes Safety?” the author delineates what the Safety Professional is responsible for. Thirteen key points are made:

- Improving the attitude of workers towards safety.
- Keeping the managers’ head free of all safety-related matters.
- Discovering the need for safety training programmes of individuals.
- Organising site-wide safety seminars on selected topics.
- Writing the Company Safety Policy.
- Checking compliance with the Company Safety Policy.
- Bearing responsibility for site safety performance.
- Investigating all accidents at site and writing investigation reports.
- Coordinating safety activities of the site.
- Chairing the central safety committee.
- Participating in and coordinating outside safety audits, e.g. corporate audits, certification audits, etc.
- Being the information source for safety-related legislation and appliances.
- Being the advisor to management on safety issues.

I could continue in great detail reciting more of the author’s good advice on safety and safety programmes. The best way to do that would be to quote the entire book, which obviously is not an option. Suffice it to say, the book is excellent and should be required reading by all industrial/chemical plant managers from supervisors to the top manager in the organisation.

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