tonnage of steel that is required on the shift. There is a butterfly valve that can be turned so that all of the dirty gas just goes right out of the stack. Since it is at night, there are no complaints from people in the surrounding area or from the environment board. You are the engineer working on the control of the precipitators, not in the production department.

What should you do? (K. H.)

Case 5

I am a fourth year engineer seeking employment. In January, I am offered a job by company X and am given ten days to accept their offer. I accept their offer.

Two weeks later I receive a better offer, in pay and position. I take the second offer and tell the first company that I am unable to work for them.

1. Is this ethical?
2. Would the situation change if I was offered another job in May just before I was to report for company X?
3. Does a company expect this to happen?

ChE letters

SAFETY PROBLEM CHALLENGED

Dear Sir:

I read with interest Professor Jan Mewis' article, "How Much Safety Do We Need in ChE Education."

Unfortunately, the equation used by Professor Mewis to solve the tank overflow problem is not rigorous, and can give outrageously bad results. A rigorous derivation and the correct solution to the protective system problem can be found on p. 459 of *Reliability Engineering and Risk Assessment*, by E. J. Henley and H. Kumamoto, Prentice-Hall Inc., Englewood Cliffs, NJ, 1981.

I agree with Professor Mewis that all engineers should receive some training in reliability and safety analysis. Short courses, such as given by the AIChE are, in my opinion, adequate. In many European countries risk studies such as those mandated in the nuclear industry are required of all industry. I think this is very unfortunate. You really can't legislate safety; it is an individual and corporate responsibility.

Ernest J. Henley
University of Houston

ChE book reviews

FUNDAMENTALS OF FLUIDIZED-BED CHEMICAL PROCESSES

by J. G. Yates
Butterworth Publishers, 10 Tower Office Park, Woburn, MA 01801, 1983; $49.95

Reviewed by L. T. Fan
Kansas State University

This lucidly written book contains five chapters. The first, which is the longest, deals with some fundamental aspects of fluidization. The modeling of fluidized-bed reactors is discussed in the second chapter; the majority of available models are compiled. The last three chapters cover the application of fluidization technology. More specifically, chapter three focuses on the well-known Fluidized Catalytic Cracking Process and chapter four on the combustion and gasification of coal. The last chapter outlines a number of miscellaneous processes, including production of several chemicals, sulphide ore roasting, and reduction of iron ores.

Continued on page 144.