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Living the Lessons We Learn from Experience

Vernon Law, a retired major league baseball pitcher who played for the Pittsburgh Pirates in the 1950s and '60s, said, "Experience is a hard teacher because she gives the test first, the lesson afterward." This quote, which appears in the article "Understanding Process Safety Management" by Adrian Sepeda (pp. 26–33), seems a fitting theme for this month's editorial.

While writing, I came across an article in *The New York Times* by William J. Broad entitled "Taking Lessons from What Went Wrong," and I was struck by his first sentence: "Disasters teach more than successes." He points out that "while that idea may seem paradoxical, it is widely accepted among engineers." And he quotes the book *Success Through Failure*, in which author Henry Petroski says, "Nobody wants failures. But you also don't want to let a good crisis go to waste."

Sepeda points out that learning from our own experiences can be slow and painful, but that much can be gained by observing and learning from the experiences of others. He discusses four ways to capture such knowledge: incident investigation, measurement and metrics, auditing, and management review and continuous improvement. These tools should be part of every company's process safety management (PSM) program, and chemical engineers should put their lessons to good use.

Although devising a PSM program is regarded by many as management's responsibility, implementing the organization's process safety culture is everyone's job. This includes sharing information so that mistakes are not repeated and best practices are disseminated and encouraged.

CCPS offers numerous ways we can learn from one another: publications (more than 100 books at last count), conferences (such as the Global Congress on Process Safety, held in conjunction with AICHE's Spring Meetings), continuing education courses, presentations and white papers documenting case histories that can be downloaded free of charge from the CCPS website (www.aiche.org/ccps), and more.

Perhaps the most widely distributed CCPS resource is the *Process Safety Beacon*, a one-page monthly e-newsletter that presents a real-life incident, describes the lessons learned, and provides practical tips to prevent a similar accident. A recent article ("Create Effective Process Safety Moments," by Deborah Luper, May 2010, pp. 23–27) provided suggestions for sharing the *Beacon's* lessons during safety meetings.

This month's *Beacon* (p. 34) uses the Deepwater Horizon oil spill in the Gulf of Mexico as a teaching moment — to reinforce the importance of knowing what to do if something goes wrong at your facility. As the investigations of this incident unfold, many other lessons will surely become apparent.

Yet, knowing lessons is not enough. Each of us needs to live the lessons we learn from our own experiences and those of our colleagues. In this month's Commentary (p. 4), Eleanor Bloxham quotes AICHE's Code of Ethics, which requires all members to "hold paramount the safety, health and welfare of the public and protect the environment in performance of [our] professional duties." She reminds us that this code should guide us when we are faced with difficult decisions in difficult situations — even when "budgets are tight or time is short."

Cynthia F. Mascone, Editor-in-Chief

