



You are here: [Home](#) → [Publications](#) → [Periodicals](#) → [Natural Outlook](#) → [Summer 2003](#) → 3M's Experience with EMS

» Questions or Comments: [ac@tceq.texas.gov](mailto:ac@tceq.texas.gov)

Site Navigation

- [Cleanups, Remediation](#)
- [Emergency Response](#)
- [Licensing](#)
- [Permits, Registrations](#)
- [Preventing Pollution](#)
- [Recycling](#)
- [Reporting](#)
- [Rules](#)

## 3M's Experience with EMS

**This international firm has benefited from adopting its own internal environmental standards.**

When 3M announced it would begin instituting internal environmental standards, Environmental Engineering Specialist Fred Kelly realized he would have to teach his job to all 580 employees at the 3M Brownwood plant.

His coworkers were about to learn that the environmental performance of an organization can be affected by many different job functions--from purchasing to production.

"It used to be that, as the environmental engineer, all the compliance issues were my job," said Kelly. "But with an internal program like an environmental management system (EMS), what essentially happens is that everyone at the plant has to take ownership, from top management all the way down to floor level. Every person has roles and responsibilities that involve environmental issues. And management has to be totally committed to the program."

3M has embraced the EMS philosophy at its operations in 60 countries. The Brownwood plant in Central Texas, which makes reflective safety products for the transportation industry, is an example of how environmental stewardship can be implemented in a practical, effective manner.

Kelly said the assignment in Brownwood began with creation of a core team to develop an EMS and to determine where improvements were needed. The core team, consisting of a manager and department representatives, identified important environmental issues in each department based on the equipment used, the type of operations, and the final products. Next, objectives and targets were developed, and implementation plans prepared.

Each department then took on at least one environmental project. For example, one part of the plant reformulated the printing process by switching from a solvent-based ink to a water-based ink. Another employee team reduced the amount of waste going into the landfill by eliminating an intermediate liner from a major product line.

Training played a major role. Employees were taught to anticipate problems and minimize incidents, such as liquid spills or air emissions upsets.

That training, combined with departmental projects, reduced the plant's impact on the environment and helped the corporate pocketbook. In the last three years, according to Kelly, the Brownwood 3M plant has cut waste generation by 9 percent, energy costs by 7 percent, and emissions of volatile organic compounds by 23 percent. The savings from pollution prevention projects approached \$4.8 million, he added.

"If you're making your processes more efficient, you have less waste and your unit costs go down," Kelly explained. "When you pay less to make the product, your bottom line improves and your company becomes more competitive, not only in the U.S. but internationally as well.

"No question that as you improve operations and produce less waste, you save money. That's a given."

[Print this](#)

- [Data](#)
- [Forms](#)
- [Maps](#)
- [Public Notices](#)
- [Publications](#)
- [Records](#)
- [Webcasts](#)

- [About Us](#)
- [Contact Us](#)

How 's our Customer Service? Please fill out our [Customer Satisfaction Survey](#)

