

# Compliance Magazine™

## Safety Excellence Supports Product Quality

By Allen Lasater

**F**lint Hills Resources believes superior safety and environmental performance is essential for businesses seeking long-term competitive performance in today's global markets. The Wichita, Kan.-based company integrates market-based management as a key element to achieve outstanding safety and environmental performance. Market-based management, a business philosophy adopted from Flint Hills' parent company, Koch Industries Inc., empowers employees and encourages them to think like owners. The company uses market-based management's fundamental components, along with a clearly defined set of business principles, to apply free market thinking in meeting customer and stakeholder expectations. The company's safety and environmental programs build upon these values and principles.

The refineries have not only earned safety accolades, but their products are also meeting consumer needs for cleaner fuels well ahead of regulatory requirements. In Texas, facility changes will enable the refinery to produce fuels with sulfur levels 80 percent lower than the industry average. In Minnesota, Flint Hills produces Blue Planet gasoline, a low-sulfur product that meets the Environmental Protection Agency's stringent maximum per gallon sulfur specifications early, and will reduce emissions in the next generation of autos by 75 to 85 percent from the national average gasoline. The refineries are among the

country's best in minimizing criteria air emissions — 55 percent less per barrel than peer refineries in the continental United States.

### Safety Performance

While averaging about 4 million work hours per year, Flint Hills has an exemplary safety record. Combined, the



Like all Flint Hills Resources (FHR) employees, Molly Brown has environmental, health and safety performance expectations in her roles and responsibilities. Brown is a blend specialist at the FHR Minnesota location.

### Company Profile

Flint Hills Resources LP is a refining and chemical company with facilities in Texas and Minnesota. The refineries process a total of about 600,000 barrels of crude oil daily, producing gasoline, diesel, jet fuel and various petrochemicals used to manufacture products such as plastic bottles and DVDs.

The Texas refinery, which employs about 900, recently received the 2003

National Petrochemical and Refiners Association (NPRA) Distinguished Safety Award, the industry's highest safety designation. Both refineries earned multiple 2003 NPRA safety achievement awards for workplace safety. In addition, the Pine Bend Refinery, which employs about 700, received the Governor's Safety Award for Outstanding Achievement from the Minnesota Safety Council in 2000 and 2001.

refineries achieved their lowest-ever OSHA recordable incident rates in 2002, dropping from 1.53 to 0.64. For the second consecutive year, Flint Hills had no OSHA lost-time incidents; combined, refinery employees have exceeded 8 million work hours and processed more than 410 million barrels of crude without a lost-time incident.

Flint Hills' outstanding safety record reflects employees' active participation in programs to promote on-the-job safety. For example, the Corpus Christi refining facility has earned "Star Status" in the OSHA Voluntary Protection Program, a designation earned by only the top 11 percent of refining facilities for workplace safety. The VPP program, which calls for a third-party audit and review process, drives improvement because employees must consistently review and refine in order to continue Star status. In Minnesota, the refinery's Safety Champs program identifies employee leaders willing to develop safety programs and model excellent behavior.

**Employee-Centered Safety**

Flint Hills believes that employees are the keys to safety success and to continuous improvement. Safety is part of employees' roles, responsibilities and expectations, as the company calls individual job performance expectations. The safety staff of about three dozen at the refineries includes medical personnel, industrial hygienists and safety technicians and, in Minnesota, union representatives. The safety staff works in conjunction with facility safety councils that represent all levels of employees to implement safety plans comprising of short- and long-term goals.

**Flint Hills  
Resources Safety  
Statistics**

Recordable Incidents	
2001	1.53
2002	0.64
Lost Time Incidents	
2001	0
2002	0

Refining crude oil requires complex processes. By focusing on safe work behaviors to protect employees, contractors and the community, both refineries have minimized serious incidents and reduced all injuries and incidents. Employees receive regular training on the hazards present in the workplace and on the proper equipment needed to complete tasks safely, as well as on safe work behaviors. Any employee can stop a process or action at any time if he or she thinks it will compromise safety.

Audit programs, safety meetings at the onset of every shift, recording near misses, and root-cause analyses are other essential elements of the company's safety program. The company uses a software system to track incidents, and the TapRoot system, Knoxville, Tenn. provides root cause analysis methodology. Flint Hills also instituted systems and programs customized by employees, including behavior observation cards and start-of-shift checklists.

**Motivating Superior Performance**

The company consistently underscores its commitment to operational safety

excellence through programs established to recognize safe behavior. All employees have the responsibility to work safely, help co-workers be safe and improve the process. Members of the facility safety councils suggest ways to improve the work process and make it safer. Each shift begins with a brief safety program: Employees plan presentations and are encouraged to develop non-work subjects to share with co-workers, such as bike safety and housekeeping tasks.

Recognizing safe work habits with on-the-spot rewards, such as movie tickets or gift certificates, is another way that Flint Hills safety leaders and supervisors motivate their teams. At the Minnesota refinery, not only is there an overall safety plan in place, safety teams adopt individual safety plans.

**Conclusion**

To reach its goal of being the operator of choice in the communities in which the company operates, Flint Hills Resources concentrates on hiring capable people who care about their work, their company and their community. They support those people with the knowledge and tools they need to do a superior job and to be confident the person working beside them knows how to respond in case of an unexpected equipment failure. The company and its employees believe there is value in a cleaner environment, value in a safer workplace and value in being integrated into a community. They recognize their efforts as an ongoing journey of continuous improvement.

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