

Forming a Foundation for Asset Effectiveness

PEMEX GAS CASE STUDY

PEMEX Gas focuses on becoming a Sustainable Development and Growth Company



PEMEX Gas has 11,000 employees, 10 major gas processing centers comprising 64 plants, 15 terminals and 12,500 kilometers of pipelines spread over a large portion of Mexico.



Challenge

For PEMEX Gas, safety, health and the environment (SHE) are top management priorities. After five years of achieving dramatic results in SHE, the company has set new goals that will enhance the economic value of the company by creating a defect elimination and asset effectiveness business culture.

Solution

Use the excellent foundation in the safety, health and environmental arenas to increase asset effectiveness with the help of DuPont Safety Resources.

Results

- Established action plans to improve asset effectiveness, reliability and uptime levels of greater than 90% in the period 2001-2006.
- Reduced injuries by 92% in two years with the goal of zero safety, health and environment incidents.
- Recognized by the Mexican government for accomplishments including *Industria Limpia* certification by SEMANART, Mexico's most important environmental protection government agency.
- Enhanced employee morale through active involvement by management and staff to create a safer, cleaner and healthier work environment.



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Leadership in Safety Drives Business Performance Goals

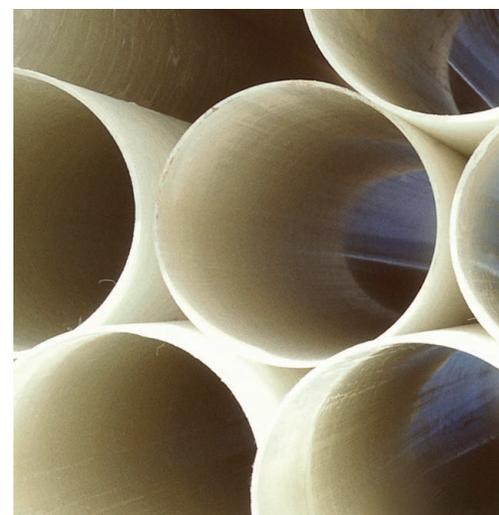
Marcos Ramírez Silva, Director General of PEMEX Gas, was convinced of the need to enhance the company's safety, health and environment (SHE) performance. In his view, this effort was the critical foundation to achieving sustainable development and growth. "Industrial safety and environmental protection are issues that must be given the highest priority for any organization seeking to achieve world-class status," says Ramírez. "The full commitment of all workers is required because they are the end and the means of our goal." After five years of work with DuPont, PEMEX Gas has achieved dramatic results in SHE performance, as well as significant savings. The injury frequency rate (injuries per 1 million man-hours exposure) dropped from 4.86 in 1996 to 1.07 in 1997 and down to 0.60 in 2001.

PEMEX Gas Takes Next Step

Ramírez and his staff are committed to making a positive difference in PEMEX Gas business performance through operational efficiency. This view was reinforced in 2000 when the Mexican Government and PEMEX General Director requested PEMEX and its subsidiaries to maximize the economic value from their operations. In 2001, PEMEX Gas and DuPont took up this charge by expanding efforts to solidify the SHE culture and to establish a defect elimination and asset effectiveness business culture. The operations strategy consisted of three elements: people involvement; use of the SHE Management System; and implementation of the DuPont SHE/Uptime® Continuous Improvement Process. Together, the DuPont and PEMEX Gas leadership team is customizing, implementing, auditing, improving and sustaining a continuous improvement process based on both top-down and bottom-up defect elimination strategies to improve SHE performance, asset effectiveness and reliability management systems.

Leading by Example is Critical

The "lead by example" attitude of PEMEX Gas management has increased staff buy-in of the improvement efforts. Through the Sustainable Growth Policy, all employees have a clear understanding of the long term commitment to improvement of SHE, operations, maintenance, and other management arenas. More importantly, they have a clear understanding of their critical role in helping the company achieve its vision and are recognized for their contributions. Employee participation has made a huge, positive difference in morale.



"With our goals of zero injuries, illnesses and incidents and continuous profit increase, we are definitely on our way to sustainable growth. Striving harder every day is crucial to meet the required levels of standards and specifications associated with a high-risk organization in which our employees are the most valuable asset."

**Marcos Ramírez Silva,
General Director,
PEMEX Gas**



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