

Achieving and Maintaining Record of Zero Accidents at Refineries

All Cosmo Oil refineries and Cosmo Matsuyama Oil Co., Ltd. have introduced Change 21 Activities, ¹ the ultimate goal of which is achieving and maintaining a record of zero accidents. These activities have a near-term target of reducing the number of unsafe and failure incidents² by 90% or more compared with the base year (September 2006–August 2007) by 2012. An additional goal is to achieve a record of zero serious unsafe and failure incidents, including work-related injuries that require days off of work. The number of unsafe and failure incidents in 2010 stood at 99, a 21% decrease from the 126 incidents in 2009.

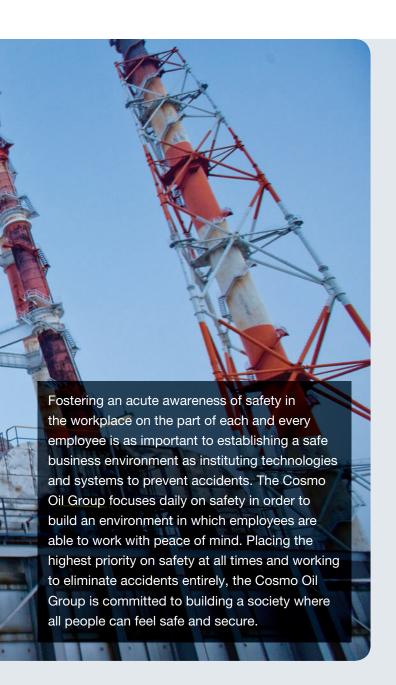
The Cosmo Oil Group expresses its deepest regret for the concern and inconvenience caused to those in the local community, as well as all other persons affected, by the fire and explosions that occurred in the LPG tank area at the Chiba Refinery when the Great East Japan Earthquake struck on March 11, 2011.

The Cosmo Oil Group considers safety in all its business activities to be its most important corporate responsibility. As such, the Group has formed an Accident Investigation Committee made up of internal and external experts and representatives of relevant organizations, to investigate the circumstances and cause of the Chiba Refinery fire and draft measures to prevent its recurrence. Drawing on the invaluable lessons learned from this fire, the Cosmo Oil Group will focus on the steady implementation of preventative measures and increasing the level of safety at its refineries.

- Activities under the Third Consolidated Medium-Term Safety Plan, including Change 21 Activities, are based on a calendar year rather than a fiscal year.
- 2. "Unsafe and failure incidents," as defined by the Cosmo Oil Group, include the following: extraordinary accidents as defined by the Act on the Prevention of Disaster in Petroleum Industrial Complexes and Other Petroleum Facilities; trouble and failures that do not rise to the level of extraordinary accidents; leaks of non-toxic substances (industrial water, steam, etc.); and work-related injuries that require days off of work.



Employees pledge commitment at Safety Declaration Meeting



Persisting with Steady, Proactive Efforts to Ensure Safety at Refineries



Naoyuki Takahashi Manager, Safety & Environment Control Office, Sakaide Refinery, Cosmo Oil Co., Ltd.

At Cosmo Oil, the entire company is focused on zero-accident activities. At the Sakaide Refinery, we communicate this focus in the workplace using three intuitive themes: visualizing accident prevention, paying careful attention, and communicating well.

We train employees to focus closely on activities in specifically assigned areas and on-stream inspections during actual operations. Activities in assigned areas are designed to focus employee attention on a specific area that he or she is in charge of keeping clean and in good repair to ensure that dirty equipment does not prevent irregularities from being detected. With on-stream inspections, employees closely inspect equipment for signs of decay, aging, and other concerns and immediately report any irregularities to the relevant department to prevent accidents before they occur. The Sakaide Refinery has also developed its own additional practice of having employees fill out accident prevention reports. The refinery actively integrates examples given in these reports of steps taken by employees to guarantee safety and secure their own peace of mind.

All of our employees are focused on frontline activities tailored to their specific workplace, rather than on academic discussions of safety. I believe this site-based approach is especially important to ensuring safety at refineries.

Strengthening Safety Management in Distribution

With regard to tanker trucks and other ground shipments, the Cosmo Oil Group has made its comprehensive safety management system for contracted ground shipment service providers into a full-scale operation that aims to help them build their own independent safety systems. In fiscal 2010, Cosmo Delivery Service Co., Ltd. audited the operations of all contracted ground shipment service providers and verified the suitability of the structure and operation of safety management systems. Safety Measure Coordination Conferences are held monthly between Cosmo Kaiun Co., Ltd. and contracted coastal shipment service providers to coordinate safety in marine transport by coastal tankers. These conferences are used to investigate the causes of incidents and oversee measures to prevent their recurrence, as well. Ship safety committees at refineries also conduct

patrols by visiting ships as well as other safety management activities. The Cosmo Oil Group will continue to improve safety management and strengthen safety activities to eliminate accidents in the future.



Coastal tanker

Cosmo Gas Safety Support Program

The Cosmo Gas Safety Support Program provides support for safety activities at Cosmo Petroleum Gas dealers. In Japan, aging and decayed equipment has caused a recent increase in the number of gas-related accidents, many of which could have been detected and prevented with regular daily inspections. Cosmo Petroleum Gas Co., Ltd. focuses on providing the support needed to maintain conditions under which gas can be consistently and safely used. In addition to strengthening measures for the safe operation of gas filling stations, the program also focuses on reevaluating inspection methods, providing safety officers at Cosmo Petroleum Gas dealers with the most up-to-date accident-related information, and explaining government guidelines.

In the future, the program will expand to provide opportunities for safety dealers to share information with each other and develop

better solutions for normal working procedures and disaster response.

Going forward, Cosmo Petroleum Gas will remain committed to taking these steps to prevent accidents and establishing an environment in which customers can use gas with complete peace of mind.



Cosmo Petroleum Gas dealers receiving training at the gas-tank filling station