

# Strict Safety Management

## Safety Initiatives

### Consolidated Medium-Term Safety Plans for Fiscal 2010–2012 and Fiscal 2013–2017

Since fiscal 2005, the Cosmo Oil Group has carried out the Consolidated Medium-Term Safety Plan to eliminate work-related accidents and injuries and secure the confidence and trust of the community. Under the Plan, the Group implements initiatives for each stage of business (production, distribution and sales).

In fiscal 2012, the final year of the Third Consolidated Medium-Term Safety Plan, safety activities were carried out based on the Group-wide safety goal of achieving zero

accidents. The strategy was to identify and eliminate latent risks in the workplace, while ensuring that everyone is fully aware of their roles and responsibilities. Under the next Consolidated Medium-Term Safety Plan (Fiscal 2013–2017), the safety level will be further improved through the enhancement of management by using PDCA cycles, with the aim of realizing and maintaining safe operations and stable supply systems.

#### Initiatives and Results in 2012 under the Third Consolidated Medium-Term Safety Plan

Degree of achievement: Achieved (A), Partially achieved (B), Not achieved (C)

Divisions		2012 Goals	2012 Results	Achievement of Goal
Refining and manufacturing	4 refineries and Cosmo Matsuyama Oil	Reduce unsafe and failure incidents <sup>1</sup> by 90% or more from the benchmark year <sup>2</sup> (meaning 11 or less incidents)	Unsafe and failure incidents: 112 (4% reduction from benchmark year)	C
	Cosmo Oil Lubricants (manufacturer of lubricating oil)	<ul style="list-style-type: none"> <li>Achieve target of zero work-related accidents</li> <li>Reduce accidents/incidents by 30% over previous year</li> </ul>	<ul style="list-style-type: none"> <li>Work-related accidents: 6 (2 requiring time off from work, 4 not requiring time off from work)</li> <li>Accidents/incidents: 14 (down 7% year on year)</li> </ul>	C
	Cosmo Petroleum Gas (LPG storage/delivery)	Maintain zero accidents/incidents	Accidents/incidents: 0	A
Distribution	Cosmo Delivery Service (ground shipments)	<ul style="list-style-type: none"> <li>Eliminate oil-mixing accidents to zero</li> <li>Encourage employees to report near-miss accidents, with a target of 20,000 reports</li> </ul>	<ul style="list-style-type: none"> <li>Oil-mixing accidents: 5</li> <li>Near-miss accident reports: Over 20,000</li> </ul>	C
	Cosmo Kaiun (sea shipments)	<ul style="list-style-type: none"> <li>Maintain zero accidents involving marine oil spills/ships run aground</li> <li>Reduce equipment failure to 50% of benchmark year (2008)</li> </ul>	<ul style="list-style-type: none"> <li>Marine oil spills: 0; maritime accidents: 2</li> <li>Equipment failures: 8 incidents (down 72% compared to 2008)</li> </ul>	C
	Oil depots	<ul style="list-style-type: none"> <li>Maintain zero work-related accidents</li> <li>Limit the number of fires/oil spills to less than 2 incidents per year</li> </ul>	<ul style="list-style-type: none"> <li>Work-related accidents: 0</li> <li>Oil spill: 1 (2010–2012 annual average: 1.3)</li> </ul>	A
	Crude Oil & Tanker Dept.	Complete action plan (prevent accident reoccurrence and strengthen prevention measures)	<ul style="list-style-type: none"> <li>Incidents: 3</li> <li>Incidents were substantially reduced compared to the 12 incidents in 2010 (75% reduction)</li> </ul>	A
	Petroleum Products Trading Dept.	Achieve target of zero serious accidents relating to ship movements	Serious accidents relating to ship movements: 0	A
Sales and other operations	Sales & Marketing Coordination Dept. (Service Station)	Maintain zero work-related accidents in service station construction	Work-related accidents: 0 (2010–2012)	A
	Project Development Dept. (co-generation, etc.)	Achieve target of an average of no more than one accident a year during the Medium-Term Plan (2010–2012)	Accidents/incidents: 0 (2010–2012)	A
	R&D Dept.	<ul style="list-style-type: none"> <li>Achieve target of no incident per year</li> <li>Continue analysis on near-miss accident reports</li> </ul>	<ul style="list-style-type: none"> <li>Incidents: 1</li> <li>Continued analysis on near-miss accident reports</li> </ul>	B
	Research and Development Center	<ul style="list-style-type: none"> <li>Maintain zero work-related accidents</li> <li>Reduce number of accidents/incidents compared to previous year</li> <li>Achieve zero cases of seriously unsafe incidents</li> </ul>	<ul style="list-style-type: none"> <li>Work-related accidents: 3 (not requiring time off from work)</li> <li>Incidents: 5</li> <li>Seriously unsafe incidents: 0</li> </ul>	B
	Cosmo Engineering	Steadily reduce work-related accidents to zero	Work-related accidents: 13 (4 requiring time off from work, 9 not requiring time off from work)	B

1. "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; and trouble, failures and work-related accidents that do not rise to the level of extraordinary accidents.  
 2. Benchmark year: September 2006–August 2007

### Change 21 Activities

All Cosmo Oil refineries and Cosmo Matsuyama Oil Co., Ltd. have introduced Change 21 Activities, the ultimate goal of which is achieving and maintaining a record of zero accidents. These activities are designed to strengthen the safety management system and further improve the level of equipment maintenance. While these efforts have produced a certain level of results, they have also uncovered new issues. Under the new management system, the activities will be continued by the Refinery Safety Reform Committee, chaired by the President, further strengthening the safety management system.



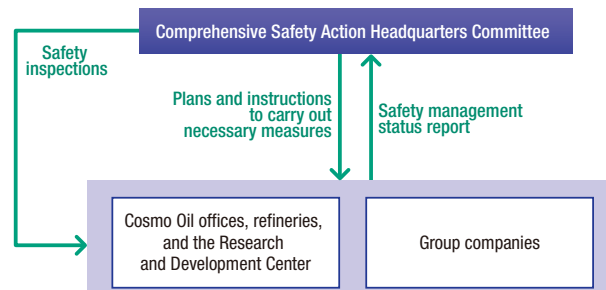
Change 21 activity

## Safety Inspections

The Cosmo Oil Group has established a Comprehensive Safety Action Headquarters Committee, as its Group-wide safety management organization, in the Cosmo Oil Head Office. This Committee performs coordination and deliberation of important safety management matters in order to ensure thorough initiatives for enhancing safety management systems. An annual safety inspection is also held each year for operation sites and the Head Office divisions that oversee them.

In fiscal 2012, safety inspections were conducted at 12 workplaces and departments, including four refineries. Especially in the inspection of refineries, efforts are made to enable better, more effective improvements and guidance from a third-party perspective by including personnel from other refineries, in addition to workers from the Head Office, among the internal inspectors.

## Safety Management System



## General BCP Training

In March 2013, the Group conducted business continuity plan (BCP) training for the sixth time, based on the hypothetical scenario of earthquakes in the Tokai, Tonankai, and Nankai regions immediately after a major earthquake in Tokyo. This time, a communication drill was carried out using a new multi-channel access wireless system. The Group will continue to perform these exercises based on various assumptions in order to strengthen its system for ensuring a stable supply of petroleum products, with the top priority being placed on human life in the event of a major disaster.



General BCP training

## Initiatives to Foster a Culture of Safety

The Company fosters Cosmo Oil Small Group Initiatives<sup>1</sup> at its refineries in order to achieve safer operations, stable supply, and even better competitiveness. These initiatives involve a bottom-up system in which each group works on the safety themes it decides on, using its creative approaches. Representative groups from each refinery then gather at an annual presentation meeting to share the results of their activities. Through these activities, Cosmo Oil is working to foster a culture of safety at its refineries, while improving human resources management capabilities at the same time.

1. Cosmo Oil Small Group Initiatives are voluntary initiatives implemented by small groups formed in the workplace to achieve the objectives of Cosmo Oil Group's management policies



Group-wide activity presentation meeting

## Establishment of Refinery Safety Reform Committees

All Cosmo Oil refineries, along with Cosmo Matsuyama Oil Co., Ltd., have revised their previous safety management activities through the Change 21 Activities Promotion Committee. In fiscal 2013, a Refinery Safety Reform Committee was established, aiming to strengthen and enhance PDCA management and to establish systems for safe operations and stable supply.

In order to foster a culture of safety, the Cosmo Oil Group is working to strengthen its safety management systems and to raise its level of equipment maintenance. The Group will do this by encouraging even greater safety awareness among employees, in addition to the introduction of systems and technologies to prevent accidents.

Note: Please refer to Special Feature 1 on page 10 for more details.



Refinery Safety Reform Committee meeting