# **Initiatives for Safety**

# http://www.cosmo-oil.co.jp/eng/sustainable/07/safe/index.html

We aim to raise the level of safety control with company-wide efforts to implement autonomous safety activities that refocus on the fundamentals.



## Safety Control System in Fiscal 2006

The Cosmo Oil Group conducts safety control activities under the management of the Comprehensive Safety Action Headquarters Committee, a group-wide safety control organization chaired by the director in charge of maintaining safety. Every year we set safety targets for the refineries, as well as the production, logistics, and sales sections. Further, based on these targets, each refinery sets its own safety targets.

Our Refining & Technology Department has built its own safety management system that incorporates the concept of ISO 14001 and has been operating this system since fiscal 2004. Our Distribution Department instructs consigned transportation carriers on how to prevent accidents through such measures as making safety inspections as well as implementing inspections for loading and unloading operations. Our Sales Control Department focuses on daily inspections at each service station as the basis of its safety activities and provides training to service station staff to raise safety awareness.



Detailed data Safety Performance http://www.cosmo-oil.co.jp/eng/sustainable/07/safe/index.html



#### Activities in Fiscal 2006

The Cosmo Oil Group has formulated the Consolidated Medium-Term Safety Plan, which runs from fiscal 2005 to fiscal 2007, under which we are building a disciplined safety control system and proactively carrying out safety efforts to improve safety throughout our operations while also increasing levels of stable supplies. In carrying out our safety initiatives in fiscal 2006, we established four themes: "construct a framework for a safety control system," "identify, evaluate, and reduce potential risks," "enhance and strengthen our crisis control structure," and "systematically implement education and training." We also set targets for each of these themes and implemented well-planned activities in working to attain these targets. Cosmo Oil placed particularly high emphasis on strengthening our crisis management structure, with all departments implementing measures in preparation for a major earthquake (evaluating earthquake resistance, formulating a Business Continuity Plan (BCP), and undertaking drills and other activities). Additionally, the headquarters conducted systematic safety inspections at eight business sites, including the four refineries.

# Rebuilding the Refinery Safety Control System (Change 21 Activities)

In response to the explosion and fire at our Chiba Refinery on April 16, 2006, we initiated Change 21 activities aimed at rebuilding our safety control system. In June 2006, we established the Refinery's Safety Management System Restructuring Committee (currently Change 21 Project Action Committee), chaired by the director in charge of maintaining safety. To rebuild our safety control system, we reviewed the various safety control measures taken to date and added new activities and other measures. By establishing working groups and task teams as organizations under this committee, the headquarters and refineries are now able to carry out activities in unison.

Slogan: "Let's build a safe and secure refinery that employees can be proud of and that will enable us to earn the continued trust of society"

Vision of Goal: "Achieve and maintain zero accidents"—Achieve over 90% reduction in unsafe and failure incidents by 2010 compared with the base year1

To achieve our goals, we will change our previous awareness, which focused on "early detection," toward an emphasis on "prevention (zero failures)." In tandem, to ensure that these efforts are not limited to top management and extend to the front lines of operations, we are carrying out activities based on a fundamental policy of self-initiated actions with an understanding of the "spirit" of measures.

#### **Details of Activities**

### Improve level of maintenance

Improve coverage: review scope of maintenance, review all regular inspections of machinery, complete early diagnosis of age-related deterioration, review parameters of inspections for any expansion of erosion and corrosion<sup>2</sup>, etc.

Improve predictability: review structural changes over the past 10 years, etc.

Improve reliability: develop equipment with durability to withstand operational variations and disturbances

Improve control: organize basic maintenance materials, etc.

#### Solid initiatives and operations

- Optimize regulations and standards: review control of modifications, etc.

Ensure implementation of initiatives: rebuild framework for the lateral promotion of initiatives

Strengthen initiatives: implement an array of ongoing safety evaluations and other actions

- 1. Base year: September 1, 2006 to August 31, 2007
- 2. Repeated collisions of fluid with material results in a thinning effect due to the synergy of erosion, the physical damage caused by the surface being worn down, and corrosion, brought on by acid and other corrosive materials