

CPO Seminar on “Refinery Offsite Operations” Held at PETROBRAS

1. Background

This seminar was implemented in response to a strong request made by a participant from Brazil’s state-run oil company, PETROBRAS, who participated in a regular course in 2008. The request was for a seminar, to be held in Brazil, that would provide PETROBRAS employees an overview of recent developments and information relating to refinery offsite departments in Japanese oil companies.

2. Seminar Overview

A five-day seminar was organized to be held from August 30 to September 3, 2010, in a training room at PETROBRAS University, located in Rio de Janeiro. The team of lecturers included K. Kojima from JCCP (Training Dept.); and from outside companies, Mr. Yukinori Kawashima from Cosmo Oil Co., Ltd. (Head Office Technology Dept.), Mr. Tetsuo Nagayama from JX Nippon Oil & Energy Corporation (Head Office Overseas Operations Dept.), and Mr. Hisamichi Kobayashi from Idemitsu Kosan Co., Ltd. (Operations Section, Tokuyama Refinery). Lectures mainly covered the flow of oil products in the refinery and offsite operations in general, such as tank storage, inventory

management, blending treatment, quality control, and delivery of oil products.

3. Details

On the first day, lectures were given on Japan’s oil industry in general and the global energy situation. The first lecture mainly covered the importance of securing stable oil supplies to Japan and the unique characteristics of the oil industry in Japan, in reference to differences between Japan and Brazil, with Japan being an oil-consuming country with private oil companies, and Brazil being an oil-producing country with state-run oil company. The second lecture covered a number of issues of worldwide concern, including global warming, environmental issues, and the future outlook of primary energy demand.

On the second day, a lecture was given on general aspects of refinery offsite departments, with a focus on the organization and role of offsite departments, their relationship with the head office, and their position within the refinery. Questions from the participants centered on refinery organization and framework, emergency contact systems, employee training, and human resource development.

On the third day, a lecture was given on tank layout



Participants of the seminar

in the refinery and the maintenance and inspection of tanks and pipelines. In addition to providing a basic understanding of tank layout, the lecture also covered the principles of setting tank volumes for crude oil, semi-finished products, products, and of setting capacities at docks and tanker shipment terminals. Many of the questions from the participants were regarding quality maintenance and measures in Japan, particularly in relation to corrosion and leakage found during pipeline maintenance and inspection. The large differences in the environmental and geographical conditions of refineries between Brazil and Japan seemed to stimulate participants' interest in the quality management of products and the maintenance management of pipelines.

On the fourth day, a number of lectures were given on the efficiency and safety of product shipment; product blending and quality assurance; and strategies and the reality of stockpiling crude oil, semi-finished products, and products. These lectures highlighted TPM and other safety activities, environmental initiatives, and grievance resolution in the refinery. The participants' questions were strongly concentrated on TPM activities and employees' interactions with management in Japanese oil companies.

On the fifth day, a lecture was given on production plan optimization and loss management in offsite areas. The participants noted that PETROBRAS has established a department dedicated to optimization to actively explore actual optimization methods and practices, and will be directing further resources to optimization in the future.

4. Summary

The seminar enjoyed a large turnout, with some 40



Seminar scene

participants from refineries throughout Brazil. Although it took several hours for many of the participants to reach the seminar venue, with the country being so incomparably larger than Japan, they were nonetheless more than willing to make the trip to acquire Japan's technologies and knowledge. In the final evaluation form, many participants indicated their wish to participate in a customized program in Japan (CPJ), so we hope to realize their wish in the near future and organize a program that could benefit a large number of participants.

PETROBRAS is the largest comprehensive oil company in the southern hemisphere and one of the largest energy companies in the world, but in the downstream sector they are still in the developing stages. JCCP therefore wishes to provide ongoing cooperation through these seminars.

For three of the four Japanese lecturers, this was their first trip to Brazil. Despite some jet lag, we were able to complete the seminar successfully with the support and cooperation of the seminar staff members on the PETROBRAS side, we were able to complete the seminar successfully. For this we are truly grateful to PETROBRAS.

<by Kazuo Kojima, Training Dept.>