

Occupational and environmental health and safety: Risk analysis and management

The rapid growth of industry has contributed greatly to increasing overall prosperity in the Asia-Pacific region. However, this rapid growth has also engendered new challenges, among which occupational safety and health with associated risks are notable. Industrialization in the Asian-Pacific region has relied on SMEs, making the task of applying sound occupational health and safety standards and risk management difficult because of specific manpower, finance, space, and technology limitations. In addition, industrialization requires infrastructure, which in turn leads to a burgeoning in the construction sector, where the majority of occupational accidents occur.

The APO organized a workshop on Occupational and Environmental Health and Safety with the Focus on Risk Management in the Republic of China, 22–26 May, in association with the China Productivity Center. Seventeen individuals from 13 member countries were in attendance to discuss in detail related topics encompassing hazard identification and analysis, risk level determination, and prioritization and formulation of emergency response plans (ERPs). APO experts deputed from Malaysia, India, and Japan demarcated four phases in the general risk management strategy: preincident planning, actual incident, incident control, and rehabilitation (the PAIR concept). During the workshop, participants were divided into three groups and each group was given a factory warehouse layout and asked to develop an ERP for the case of a fire. Subsequently, they were given escalating emergency scenarios and asked to describe how they would cope based on the ERPs developed. Upon completion of the exercise, the experts assessed the applicability of the ERPs in the sample scenarios.

As a part of the workshop, a field visit was organized to the Chinese Petroleum Corporation, the largest petroleum company in the Republic of China.



Participants debating an ERP

As it deals with petrochemicals, the corporation must have a comprehensive risk management system. Ming-min Wang, Director, Health, Safety and Environment Division, made a detailed presentation, the crux of which was that commitment from top management is vital for the best possible occupational safety and risk management standards. The participants found it somewhat surprising that the president of one of the largest enterprises in the Republic of China doubles as the head of its internal safety committee and periodically joins walk-through exercises to monitor and evaluate the risk prevention measures in place. After the initial presentation by Wang, the participants visited sections of the corporation for firsthand observations. It is envisioned that efforts to emulate the examples of safety-conscious enterprises can reverse the trend of worsening Asian-Pacific occupational safety and health records, with concomitant improvements in productivity.