HEALTH, SAFETY, SECURITY & ENVIRONMENT

HEALTH

“The workplace is an ideal setting for health promotion as many Singaporeans are in the workforce. Local experiences have shown that having a well-planned Workplace Health Promotion Programme contributes to a company’s bottomline. Benefits include improvement in at-risk health behaviour, reduced healthcare costs and reduced absenteeism. Employees who are healthy and happy also work better and stay longer with the organisation.”

Mr Wong Yew Meng
Chairman of Health Promotion Board
6 October 2005

The SembCorp Marine Group continued to engage in its comprehensive list of initiatives to promote a healthy work environment for customers, employees, contractors and the community. Throughout the year, 47 activities were held to promote the well-being of employees in the areas of healthy eating, smoking cessation, physical activities, stress management, risk factor management and other initiatives. Programmes initiated ranged from food trails, sports tournaments, aerobics, dance workshops and awareness programmes to inspire employees to live more healthy lifestyles. Due to the Group’s concerted effort in helping the employees, lead healthy and vibrant lives, Jurong Shipyard scored a Gold Award in the Singapore HEALTH (Helping Employees Achieve Life-Time Health) Awards for three consecutive years.

Healthy Eating

The second ‘Health Food Trail’ was held on 15 November following the success of the pioneer campaign at Jurong Shipyard. The trail took employees on an excursion to the supermarket and food centres led by representatives from the Health Promotion Board who shared tips on healthy dietary habits. Both entertaining and practical, the trail allowed employees to apply the useful tips to their daily lives. The increased number of participants during this second food trail was testimony to the growing awareness and interest among employees to eat more healthily.

Smoking Cessation

A three-month ‘Quit Now!’ programme at Jurong Shipyard provided professional help for smokers to stub out their smoking habit over six sessions. Held between August and September, the programme enlisted professionals to monitor the progress of employees through the smoking cessation period. Employees who persevered to the end were presented with special awards in recognition of their commitment towards a smoke-free lifestyle.

Physical Activities

Two new exercise workshops – Cardio Mix and Line Dancing – were introduced to Jurong Shipyard in March 2005 to boost the existing line up of workplace fitness activities. The new activities drew high participation rates from receptive employees.
HEALTH, SAFETY, SECURITY & ENVIRONMENT

Stress Management
In order to combat the hectic demands of modern life, the "Path to Mindfulness" meditation course offered employees inner peace and relaxation to overcome stress. The course was conducted over four sessions by a qualified meditation trainer from Singapore General Hospital in September. It imparted breathing meditation techniques to make the mind calmer and more focused for stress reduction and balance.

Risk Factor Management
Under the "My Health Check@ Jurong" initiative, the Group brought health screening to the workplace to raise employees’ awareness of their health status and facilitate the early detection of any chronic medical conditions. The Group believed that a healthy workforce would be a key to a productive workforce.

Other Initiatives
In order to inspire team synergy for maximise performance among employees, a two-day teambuilding workshop was organised for a group of employees at Sentosa. The participants enjoyed an interactive and hands-on learning experience as they acquired a deeper understanding of personal and team effectiveness through a series of games and activities in leadership, trust, cooperation and communication.
The Group continued to place high importance in safety among employees and subcontractors by adopting its "Safety First" policy at all times. The safety practices and measures taken by the SembCorp Marine shipyards are consistent with and in compliance with the present requirements of the Workplace Safety and Health Act that was recently passed in Parliament, some even exceeding these requirements and in conformance with international requirements.

This year in review, the SembCorp Marine Group conducted numerous enriching workshops, forums and exhibitions to ensure safety measures were maintained at the highest levels.

**International Certification**

Internationally recognised certified systems have been well implemented throughout SembCorp Marine’s shipyards. When possible, the yards integrate environmental, quality and safety measurement systems by achieving certification under the ISO 9001, ISO 14001 and the Occupational Health & Safety OHSAS 18001.

**Mr Gan Kim Yong**

Minister of State for Education & Manpower

7 October 2005

### Shipyards ISO 14001 Certification ISO 9001 Certification OHSAS 18001 Certification/Others

<table>
<thead>
<tr>
<th>Shipyards</th>
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<tr>
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<td>ISO9001:2000 Det Norske Veritas 2005 Recertification</td>
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HEALTH, SAFETY, SECURITY & ENVIRONMENT

'I CARE' Safety Campaign

A week-long ‘I Care’ safety campaign was organised in May to enhance safety awareness in the Group’s effort to achieve a zero-incident rate. The campaign aimed to further encourage personnel to adopt a proactive attitude towards safety by exercising CARE (Commitment, Awareness, Recognition and Evaluation) in preventing incidents at work. At the launch, employees, subcontractors and customer partners participated in a pledge-taking and signing ceremony led by Jurong Shipyard's senior management.

The implementation of the ‘I-Care’ Safety Campaign in May 2005 and the ‘STAR’ Safety Programme for contractors between the period of July and August 2005 saw a significant reduction in the accident frequency rate. Before their implementation, the Overall Accident Frequency Rate stood at 5.4 accidents per million man hours worked in the month of May 2005, based on the recordable cases in Jurong Shipyard. This decreased steadily to a lower frequency rate of 3.1 at the end of November 2005. By the end of December 2005, Jurong Shipyard recorded an overall frequency rate of 2.9 accidents per million man hours worked. The Pulau Samulun site, in particular, achieved the frequency rate target of 2.8, set by the Advisory Committee in Accident Prevention in Shipbuilding & Ship-Repairing Industries by the Ministry of Manpower. Such significant reduction in rates had been attributed to the successful execution of the two safety programmes.

Subcontractor Safety Scheme

Jurong Shipyard launched two new initiatives – the Safety Merit Point Programme and the Star Safety Programme – in June 2005 to encourage greater involvement by sub-contractor partners in maintaining high safety standards during operations.

Safety Merit Point Programme & Star Safety Programme

The Safety Merit Point Programme rewarded sub-contractor partners for achieving good safety performance. Depending on the risk level of their work and the number of employees, sub-contractor companies who had successfully maintained zero injury time would be awarded merit points. At the end of every quarter, accumulated merit points would be converted to cash rewards. In addition, sub-contractors that remained incident-free over a continuous period of time would be presented commendation certificates, including the ‘Million Man-hour Gold Award’ for 1,000,000 man-hours without lost injury time. As a counteractive measure, sub-contractor groups that incurred lost-time injuries were required to participate in the ‘STAR’ Safety programme. This scheme would discourage further incidents from occurring by supporting sub-contractors in the drive towards zero incidents.

Safety tags on display for head count accountability when working on board vessel.
Safety Milestone for P-54 conversion
Jurong Shipyard attained 3.5 million man-hours without loss-time injuries for the Petrobras-54 floating production-storage-offloading (FPSO) conversion project in September 2005. To mark this safety milestone, a commendation plaque was presented to the shipyard by the project team from Petrobras Netherlands BV in October 2005.

Emergency Response
SembCorp Marine’s subsidiary shipyards conducted fire and evacuation drills throughout the whole year on board vessels as well as at workshops and offices. Such exercises were aimed at familiarising both employees and sub-contractors with the emergency preparedness procedures. Some of the drills were also conducted at different sites and covered varying scenarios to allow wider coverage of participation from production workers and higher emergency responsiveness.
Jurong Shipyard’s Safety and Fire Section held 32 fire and evacuation drills on board vessels and at workshops and offices in both Pulau Samulun and Tanjong Kling in order to fine tune its fire-fighting and evacuation system. PPL Shipyard, which had in place a comprehensive fire-prevention procedure and support, carried out three emergency evacuation drills during the year, including two on-board Hulls No P2006 and P2007. Sembawang Shipyard carried out a total of (x) emergency exercises, including a joint exercise with the Singapore Civil Defence Force on-board ERHA FPSO.

Safety Workshops
Safety workshops and campaigns continued to establish best practices and accelerate improvement in standards and regulations to reduce any incidents, injuries and economic impact. Workshops held throughout the year covered a range of safety topics in shipbuilding, ship-repair, ship-conversion and rig-building operations.

Among the many workshops, Jurong Shipyard organised a forum on 28 February that involved experts from the Maritime & Port Authority to share best practices on hot-work and welding operations. Personnel from the Group’s shipyards also participated in the ‘Falling Hazards & Electrocution’ safety workshop held in July 2005. During the session, participants discussed real-life case studies and shared effective approaches in preventing the occurrence of falling and electrocution incidents.

Third Edition of ‘My HSE Diary’
Sembawang Shipyard launched the third edition of ‘My HSE Diary’ on 26 October under its behavioural-based safety programme launched in 2001. Since its first edition, the diary had undergone several reviews and refinement; the latest edition incorporating several new tools to assist supervisors in performing their work more diligently and safely. A new set of behavioural-based safety posters were also unveiled with the launch of the diary’s new edition.

Annual Safety Performance Awards 2005
During the Annual Safety Performance Awards organised by the Ministry of Manpower Exhibition, Jurong Shipyard was accorded four accolades for its sound management system and good safety performance when it bagged two Silver and two Merit Awards. These awards were for projects with at least 100,000 accident free man-hours over a period of not less than 60 consecutive days, without any fatal or permanent disablement cases, no accident to any employee with one or more days of medical certificate and no industrial diseases.

Silver
Baobab Ivoirien MV 10
Project: FPSO conversion
Accident free record: 2,541,874 man-hours
MODEC Venture 11 (Hull)
Project: FPSO conversion
Accident free record: 1,417,676 man-hours

Merit
Nan Hai Fa Xian
Project: FPSO upgrading
Accident free record: 764,777 man-hours
FMC SOFEC Internal Disconnectable Turret
Project: Turret fabrication & installation

Fire fighting training for employees and sub-contractors
HEALTH, SAFETY, SECURITY & ENVIRONMENT

SECURITY

“We need to pull together our personnel, technology and physical infrastructure resources to serve all civilian and military assets necessary to detect, assess and respond to marine security threats. We need an effective network to facilitate communication between civilian and military fleets and between our ports and ships at sea.”

Mr Ong Kong Yong
Secretary-General of ASEAN
21 February 2005

In the security arena, the SembCorp Marine Group adopts a set of stringent framework and procedures to comply with the IMO’s International Code for the Security of Ships and Port Facilities within its group of shipyards.

International Code for the Security of Ships and Port Facilities

Jurong Shipyard, Sembawang Shipyard and Jurong SML met the IMO’s International Code for the Security of Ships and Port Facilities in 2004. This certification which would be liable for renewal every five years, maintained that the certified shipyards would undergo the ISPS Code Compliance Audit every 18 months.

In April 2005, the Maritime Port Authority graded Jurong Shipyard for its above-average compliance during a compliance audit.

Emergency and Evacuation Plan

A joint exercise with the Safety and Fire personnel was conducted in April 2005, to allow employees and subcontractors to familiarise themselves with the Emergency and Evacuation Plan. During the exercise, the local Police, Singapore Civil Defence Force and the Maritime Port of Singapore Authority were invited as observers.

Security Training and Development

In support of the Port Facility Security Plan, the Group continued to develop and upgrade its security personnel with necessary skills and knowledge. Employees had to undergo the National Skills Recognition System course conducted by a recognised security organisation assessed by POLWEL, Workforce Development Agency, so as to expand their security knowledge and increase job enhancement to carry out tasks efficiently.

Nationwide Recognition for the Shipyard Security Watch Group

After its Silver win at the district level, the Shipyard Security Watch Group initiative received nationwide recognition during the National CSSP Awards Ceremony organised by the Ministry of Home Affairs and the People’s Association on 21 July. The Shipyard Security Watch Group was initiated by Jurong Shipyard, Jurong West NPC, and two other shipyards to conduct joint patrols and evacuation exercises with police personnel. As a proactive measure to safeguard yard security and safety, the project had been fostering closer cooperation and information sharing among the yards and the Jurong West NPC.

Security check

Emergency & evacuation drill

Briefing by SCDF

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<tr>
<th>Shipyard</th>
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“Opportunities like the Green Wave Environmental Care Project provide an invaluable experience for our young people. I applaud Sembawang Shipyard for engaging the youth in their green efforts. It is through such projects that young people learn to better appreciate our collective responsibility for the environment, and influence their peers to care for and protect the environment.”

Dr Vivian Balakrishnan
Minister for Community Development, Youth and Sports
6 December 2005

Green Wave Environmental Care Project
Sembawang Shipyard’s annual Green Wave Environmental Care Competition for schools continued to attract enthusiastic student participation since its launch in early 2003. The competition aimed to inculcate awareness and motivate students to gain a sense of personal responsibility for the environment and to promote creative thinking for environmental improvement.

This year drew 257 submitted entries compared to 121 entries in 2004. The number of participants had also increased two-folds from 503 in 2004 to 1,012 students in 2005. The winners were announced in December 2005 at an award ceremony officiated by Dr Vivian Balakrishnan, Minister for Community Development, Youth and Sports. Winners at the junior college up to the tertiary institution levels would enjoy month-long development attachments at sponsoring companies, Sembawang Shipyard, Shell Trading and BP Singapore.

In 2005, the Green Wave Advisory Board was formed to guide the competition to another level of development, including possible expansion beyond Singapore to benefit youths and students of neighbouring countries. The Board comprised prominent members of society who shared the commitment towards preserving and improving the environment.

Copper Slag Recycling
Since the establishment of subsidiary JPL Industries, the Group had continually collected and recycled used copper slag throughout its Singapore yards to the extent that it no longer posed an environmental hazard. Every year, some 300,000 tonnes of copper slag would be used for abrasive blasting in shipyards, resulting in the copper slag grit being contaminated with rusts and paints during the blasting process. The Group remained committed in pioneering the recycling of copper slag, which was long considered the biggest source of waste generated from shipyards in Singapore.
Clean & Green Week Schools Carnival 2005
As part of its environmental outreach programme, the Group continued its support of the Clean & Green Week initiative, organised by the National Environment Agency, at schools. In 2005, the Group participated in the schools carnival, which featured innovative environment-related projects from the various schools, junior colleges and institutes in addition to stage performances, games, discovery activities and fashion shows. Selected winning projects from the Green Wave Environmental Care Competition were also showcased at the carnival. The carnival was launched by Mr Yaacob Ibrahim, the Minister for the Environment and Water Resources.

Energy Conservation & Clean Air
Sembawang Shipyard achieved its goal of phasing out all ozone-depleting substances from its fire-fighting systems in 2005 by using hydrofluorocarbon-based systems instead of the more destructive halon-based fire extinguishers.

Waste Management Programme
Sembawang Shipyard achieved a cost recovery of almost $3.8 million from its Waste Management Programme. It secured a contract on the proper disposal of waste wood at a cost savings of $40 per metric tonne and continued to reduce, reuse and recycle all general waste generated within the operations.

Anti-Dengue Fever Campaign
During the year, the Group formed an anti-dengue committee focused on driving and coordinating dengue prevention initiatives at the workplace. Training sessions, in collaboration with the Environment Agency’s South West Regional Office, were organised for employees and management to learn about mosquito breeding prevention. Banners and flyers were also distributed to reinforce the message. An anti-dengue awareness day was further organised for Jurong Shipyard’s 5,000 strong staff and subcontractors, at its Jalan Samulun and Tanjong Kling worksites. On that day, exhibits, multimedia shows, entertaining games and quizzes were also conducted to make the event a fun-filled one. These efforts – coupled with regular audits, monitoring and effective housekeeping regulations – have helped to keep the dengue menace at bay.

Bird Flu Vigilance
As part of its pandemic influenza preparedness plans, the Group undertook a comprehensive prevention and control plan that could be put to immediate implementation. These measures were organised to inform and educate employees to help prevent the spread of the influenza, to guard against the import of the influenza through foreign workers and to prevent its outbreak at the workplace. Finally, measures were also considered on isolating, ring-fencing and containing the infection in the event of such outbreak at the workplace.