HEALTH, SAFETY, SECURITY & ENVIRONMENT

In its relentless pursuit of excellence, SembCorp Marine continued to benchmark itself against the highest standards of health, safety, security and environmental excellence in its service performance and daily operations.

HEALTHY LIFESTYLE

As a caring employer, SembCorp Marine focused on creating a culture of health and fitness, initiating many programmes during the year, for the well-being of its employees. Underlying its efforts was the recognition that health went hand in hand with productivity and performance.

Recognition in Gold
As active advocates of health and fitness in the workplace, Jurong Shipyard, Sembawang Shipyard and Jurong SML Shipyard were recognised with Gold Honours at the Health Promotion Board’s Singapore H.E.A.L.T.H (Helping Employees Achieve Life-time Health) 2006 Awards for their comprehensive and holistic Workplace Health Promotion Programmes.

Health Screening & Intervention
Health assessments continued to be conducted on a yearly basis for employees across the yards. Such assessments kept employees updated on their health status in addition to providing early warnings for possible chronic medical conditions. Employees identified with chronic health problems or were assessed to be in the high-risk category underwent follow-up sessions or treatment subsequently with medical professionals.

The “Take Charge of Your Health” Chronic Disease Management Programme in Jurong Shipyard was one such follow-up programme initiated during the year. The sessions were aimed at helping employees keep illnesses such as diabetes, high cholesterol, and hypertension, under control. The first session held between June to August was conducted in English, while the second session was organised in Mandarin between November and December.

Hearing Conservation
A Hearing Conservation Programme was conducted at PPL Shipyard, where a total of 987 employees were screened for signs and symptoms of noise-induced deafness. They were also educated on the precautionary measures to protect their hearing and prevent the onset of related ailments.

Health Seminars
Yards with the Group organised regular health talks on wide-ranging topics to promote greater wellness among their employees. During the year, these talks provided insights on subjects ranging from AIDS prevention, hand-related injuries and osteoporosis to hair loss, anxiety disorders and cholesterol management.

Healthy Diets
The Group’s yards embarked on several health initiatives to encourage good dietary habits among employees. Throughout the year, fresh fruits were distributed to employees during major health events to reinforce the healthy eating message.
A Healthy Food Trail was organised by Jurong Shipyard together with the Health Promotion Board in November to help participants be more discerning about their choice and selection of food. Employees also learnt about the lesser-known topic of enzyme nutrition during a workshop in September.

Smoking Cessation Support was given to employees who wanted to quit smoking. A five-month-long Smoking Cessation Programme was held at Jurong Shipyard from May to October to help smokers take their most difficult first steps towards a smoke-free lifestyle. Programme participants were given advice, guidance and support by their employers in their quest to quit smoking. Those who stopped successfully were rewarded for their determination and identified as role models for others to follow.

Active Lifestyles Sporting calendars were packed with activities at all yards. From mass aerobics, hi-lo exercise sessions and workplace fitness programmes to A.C.T.I.V.E (All Employees Together in Various Exercises) Day workout, employees were kept physically fit throughout the year.

With the aim of firing up its employees’ passion for exercise, Jurong Shipyard continued its workplace fitness line-up of fun-filled and novel exercise classes in yoga, pilates, aerobics, line dance, salsa and Latin dance. Another fitness promotion initiative was Sembawang Shipyard’s ‘Get Fit With Your Feet’ workout in November, which saw more than 100 employees walking and jogging for 2 km around the Yio Chu Kang Stadium track. The purpose of the activity was for participants to assess their heart rates and gain a better awareness of their fitness level.

Friendly tournaments initiated by the sports and recreation committees of the various shipyards also provided employees with a means keep fit and healthy. Sporting events in bowling, soccer, volleyball, badminton, basketball, table-tennis, darts, snooker and paintball served to strengthen individual physiques and team camaraderie.

Yard employees also participated in various external sporting health and recreation programmes. Winning honours for the Group, Jurong Shipyard’s team defeated 12 other teams in the Singapore 3-on-3 Basketball Challenge to clinch second place in the Men’s Corporate Challenge in November. A duo from Sembawang Shipyard’s Hull Department also won accolades by being placed seventh at the Bintan Triathlon, which saw 900 participants competing in a challenging race comprising a 1.5km swim, a 40km cycling and a 10km run held in May. Other notable external events included the Launch of the National Healthy Lifestyle 2006, Sheares Bridge Run & Army Half Marathon, Mizuno Wave Run, National Runway Cycling, and Children’s Cancer Foundation Walk-a-Jog.

Work-Life Balance The Group continued to encourage employees to strike a healthy balance between work and other areas of life. While talks on improving family relationships and stress management had been very well-received amongst employees, social events, such as outings to Sentosa and getaways to Vietnam, provided them with more opportunities to interact with their family and friends. Other social activities such as dance classes also served to encourage employees to adopt new hobbies outside of work.
HEALTH, SAFETY, SECURITY & ENVIRONMENT

Safety

Safety had always been of paramount importance throughout SembCorp Marine’s operations. The Group’s Shipyards maintained their comprehensive and stringent safety management systems to promote and enforce proactive “safety-first” culture among employees and subcontractor partners and to achieve zero-incidents.

International Certification

The high standards of quality, safety and environment upheld by SembCorp Marine’s yards are evident from the quality, safety and environmental re-certifications accorded by renowned international accreditation bodies.

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Safety Achievements

Among the many safety achievements for the year, SMOE attained 1.526 million man hours without lost-time injuries for the Third Transmission Pipeline Project – a turnkey offshore platform system. In recognition of this achievement, the Ministry of Manpower awarded SMOE the Silver award at the Annual Safety and Health Performance Award 2006 for its sound management system and good safety performance.

SMOE also recorded an accumulative 16 million lost-time-injury-free work hours, a commendable safety performance by industry standards.

Safety Education

Yard employees underwent various forms of safety training and safety education programmes to ground them with the requisite knowledge and skills to carry out safe and sound operations. These included Ministry of Manpower registered courses, such as the safety instruction course, safety officers training course, shipyard supervisor safety course and shipyard safety assessor course for hot work certification.

Safety induction courses continued to be carried out for new employees, and trade-specific safety training for various sections to educate employees on their exposure to hazards. Employees were also sent to safety-related courses to equip them with a range of skills including forklift and overhead crane handling, fire-fighting, first-aid and noise monitoring. Where relevant, training was extended to selected employees to undertake specific roles such as marine signalmen, rigger, environmental control officer, lifting supervisor, scaffolding supervisor, SMS auditor and OHSAS 18001 internal auditor.

Safety Performance

Based on the number of accidents per million man-hours worked in 2006, the Group recorded an Accident Frequency Rate (AFR) of 2.1. The Severity Frequency Rate (SFR), the number of man-days lost per million man-hours worked, was at 583.3.

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Best Practices across the Group
Joint workshops and seminars had always encouraged the sharing of best safety practices and safety improvement insights across the Group’s subsidiary yards. In September, the Group held its inaugural Safety Convention, which featured a mini-exhibition showcasing innovative workplace and safety inventions, in addition to lively exchanges and discussion.

The convention also saw the launching of the yard’s Best Practice Safety Manual. The manual leveraged the Group’s network of shared expertise and experience by consolidating recommended regulations from subsidiaries to serve as a benchmark of safety excellence for employees. The launch was marked by a signing ceremony involving Mr. Hawazi Daipi, Senior Parliamentary Secretary, Ministry of Manpower, and Mr. W.S. Wong, SembCorp Marine’s President and Chief Operating Officer.

Safety Induction DVDs
Jurong Shipyard officially launched the Permit-to-Work Safety DVD in August 2006 to improve its employees’ understanding of the yard’s safety control framework. The DVD systematically covered the necessary safety precautions and standard operating procedures under the Permit-to-Work system, which required employees and sub-contractors to submit forms and obtain management approval for potentially hazardous jobs such as hot work, spray painting, work in confined spaces and the acquisition and use of chemicals and hazardous materials.

Since then, the DVD became part of the yard’s safety induction training programme for new employees. A second safety induction DVD on forklift safety would be launched in 2007.

Safety Promotion
Various activities were held throughout the year to foster greater safety consciousness. To heighten safety awareness among employees and sub-contractors, safety campaigns, exhibitions and workshops were organised to drive home the importance of conforming to good safety practices.

At SembCorp Marine’s subsidiary, Jurong Integrated Services, a “Zero Accident Safety Campaign” was launched in March. The campaign, which included a 30-day exhibition for employees and contractors, successfully reinforced participants’ knowledge of steel fabrication and hot work safety as well as proper equipment handling on the job.

PPL Shipyard’s annual safety week campaign was held in November to educate employees on safety and health issues. Participated by 1,100 employees, the campaign featured an interesting line-up of programmes, from seminars and talks on basic first aid, fire-fighting techniques, Personal Protective Equipment usage, handling of eye trauma and emergencies, depression and stress management. Free health screening sessions were also made available for employees to learn about their current health situations.

Safety-Conscious Culture
The Employee Safety Consciousness Culture Programme was initiated at Jurong Shipyard in January 2006. Using a two-pronged approach, the programme involved a Safety Performance Award and the ALERT Programme to achieve good safety record.

Under the Safety Performance Award, employees would be collectively rewarded by sections for attaining an incident-free track record. By maintaining zero-incident for consecutive periods of six and 12 months, they could convert their safety merits into cash or bonus points. Safety certificate awards would also be given out quarterly to sections that remained incident-free for a continuous period of at least three months. Sections or yards with considerable incidents would be given demerit points, which could be converted into cash equivalents for deduction.

As a counteractive measure, sections and subsidiaries that had incurred lost-time injuries would then be required to participate in the ALERT Programme. This programme was designed with an individual rehabilitation programme for the injured employee to be trained, a safety performance record tracking the injured employee’s performance, monitoring and closer supervision of the injured employee by the section manager for a year and a bonus deduction of the injured employee’s bonus in line with existing practice. Subsequent incidence recurrence could double or triple the employee’s rehabilitation period.

Safety Programmes for Contractor Partners
Besides employee programmes, the Group did not neglect to promote good safety performance to its contractors and subcontractors.

At Jurong Shipyard, a new Safety Mentoring Scheme was introduced in August to motivate and encourage contractor partners to raise the bar in safety to meet targeted key performance indicators. Under the scheme, subcontractor partners with poor safety performance would be coached by a mentor from the yard. The mentor would discuss and advise on safety issues with subcontractors and help them address legal, technological, cultural and economical constraints.

Jurong Shipyard also continued with the Safety Performance Awards Programme and STAR Safety Programme introduced in 2005 for contractor partners. The Safety Performance
Awards Programme was introduced to reward contractors for achieving zero lost-time injury (LTI). Merit points could be converted to cash awards every quarter, and safety certificates would be given to subcontractors that remained incident-free over a continuous period of three, six, nine and 12 months. As a special commendation, companies who achieved 1,000,000 man-hours without lost-time injury would be conferred the "Million Man-Hour Gold Award".

Similar to the employee ALERT Programme, sub-contractor companies that had incurred lost-time injuries were required to participate in the STAR Safety Programme. This programme would include an individual rehabilitation programme for the injured worker, a temporary suspension of the company from safety merit points and awards and a safety performance bond of $5,000 by the company as a promise to remain incident-free for three months. It also required close monitoring by yard safety engineers and a safety briefing by the subcontractors’ bosses to their employees.

BRISK Programme

The BRISK Programme, launched by Jurong SML Shipyard in September, was another programme that brought employees and subcontractors together to take greater ownership of safety.

BRISK represented the five strategic thrusts – the Bond, Rehabilitation for injured, Incentive, Stick Strategy, and Key Persons programmes. It was designed with a unique incentive strategy. Individuals would earn merit points through sticker cards for participating in safety quizzes, safety poster and slogan competitions and hazard observations as well as for proposing innovative safety ideas. These merit points could be exchanged for NTUC vouchers. Conversely, demerit points would be meted out to companies for safety violations and lost-time incidents occurred.

In addition, points collected by employees and subcontractor workers would be added up by sections and companies to win further cash awards. However, companies with negative points would be required to participate in other safety programmes.

Safety Enhancement at Heights

To enhance safety standards while working at heights, Jurong Shipyard introduced a rope grab system in February. From then on, employees were required to secure a lanyard to life line using a rope grab while working on hanging scaffolds. To complement the system, body harness lanyards were also changed from double hooks to single hooks. Employees were also trained on the precautionary measures and the proper usage of the system.

Technical engineers and above were also required to don body harness as part of the yard’s essential Personal Protective Equipment, together with the safety helmet, safety glasses and safety
boots while working onboard vessels. Previously, only the body harness was required when working on hanging scaffolds.

**Risk Management Programme**

In quick response to the new Workplace Safety & Health (Risk Management) Regulations that came into effect on 1 September 2006, the Group rolled out a Risk Management System and managers’ education programme. Risk-assessment trainings were also conducted regularly on a Group-wide level to ensure that managers and supervisors from all yards were well-instructed on SembCorp Marine’s risk management system.

**Emergency Preparedness**

SembCorp Marine’s yards continued to hold numerous fire and evacuation drills to ensure swift and efficient employee response in the event of emergency. These drills were held at various locations, such as workshops, offices and onboard vessels. A total of 101 drills were held in 2006 by the Group’s yards.

In the wake of recent bird flu cases in the region, emergency response plans were drawn up across the yards to ensure that employees would be well prepared to handle possible outbreaks. Flu Pandemic Preparation Programmes were also held to equip employees with the necessary knowledge to protect themselves. One of these activities included a demonstration on the use of thermoscan and N95 masks at PPL Shipyard.

In addition, joint safety and evacuation mock exercises were conducted jointly with the Singapore Civil Defence Force to foster better rapport and synergy. In recognition of this close cooperation, the Force presented Sembawang Shipyard with the Strategic Partners Award in September during its 25th anniversary celebrations.
A proactive approach was adopted during the year to constantly identify and address potential threats to protect the well-being of all employees.

International Code for Security of Ships and Port Facilities

In recognition of their comprehensive security measures and systems, Jurong Shipyard and Jurong SML were certified in compliance with the International Code for the Security of Ships and Port Facilities (ISPS Code). The Maritime & Port Authority endorsed the certifications in October following Intermediate ISPS Verification Audits by STET ST Education & Training, an approved Recognised Security Organisation: Sembawang Shipyard and PPL Shipyard similarly achieved the necessary certifications.

Entry Checks

To protect against security breaches and acts of terrorism, stringent security measures continued to be in place to control and prevent unauthorised entry during the year. Vehicular inspections and personnel checks served as the first line of defence in keeping yards safe from potentially dangerous characters and items. When necessary, item searches would be carried out on suspicious persons to ensure that security was not compromised.

Controlled Access

The SMARTime system, leveraging RFID smartcard technology, was another way Group yards tracked the movements of employees and resident subcontractor workers.

Building on the success of this system, Jurong Shipyard began pilot-testing a new Biometric Vascular Control System to further assess control security. In addition to smartcards, the new system would require employees to undergo biometric scanning of their veins to allow more accurate identification before entry. Over 20 biometric machines had been installed for the pilot programme.

Security Surveillance and Enforcement

Yards within the Group continued to step up their surveillance through conducting regular security patrols. CCTV surveillance cameras also monitored the safety of strategic areas such as the waterfront as well as key assets and property. Jurong Shipyard further made plans for the upgrading of its CCTV system to enhance security within its premises in the coming year.

In the area of security enforcement, subcontractors who violated security rules and regulations would have levy charges imposed as a deterrent to prevent repeat offences from taking place.

Shipyards Security Watch Group

Beyond the yard, Jurong Shipyard continued to be an active member of the Shipyards Security Watch Group - a partnership formed in November 2004 together with the Maritime & Port Authority, Police Coast Guard, Jurong Police Division Headquarters and two other shipyards - as part of continuous efforts to enhance community safety and security in the South West District Community.

Among the many programmes under the watch group, the yard took part in a modus operandi Combined ISPS Security Exercise in August to ensure operational readiness and swift response in an emergency. The watch group also organised the annual Shipyards Security Seminar in January, where Jurong Shipyard shared its anti-terrorism strategies with other members. The yard further participated in the Corporate First Responder Scheme, in which responsible authorised representatives from the Singapore Police Force and Singapore Civil Defence Force were given access to the yard’s premises to simulate an emergency.

For its outstanding contribution to the community, the Shipyards Security Watch Group was recognised with an Excellence Award during the South West District Community Safety and Security Programme Awards 2006 Presentation Ceremony in May.
HEALTH, SAFETY, SECURITY & ENVIRONMENT

ENVIRONMENT

The SembCorp Marine Group upheld its responsibility to conserve the environment for future generations. Where possible, the Group implemented operational improvements to minimise pollution and waste and to conserve natural resources.

Environment Friendly Operations

The Group encouraged the use of environmentally friendly options such as hydro-jet blasting and enclosed blasting chambers where possible. In fact, Jurong Shipyard expanded its enclosed-blasting capacity in 2006, allowing the yard to better control the environmental impact of its blasting and painting activities. These blasting chambers improved the yard’s efficiency by decreasing the yard’s reliance on good weather.

In addition, copper slag recycling continued to be practised at Jurong Shipyard through its subsidiary JPL Industries, which had been operating a specialised recycling plant to convert the copper slag from grit blasting into pavement bricks for sale as well as for in-house use.

Also respecting the environment, Sembawang Shipyard had successfully phased out the usage of all ozone-depleting substances from its fire-fighting systems in 2005. For its efforts, Sembawang Shipyard was the first shipyard in South East Asia to be certified with the ISO 14001 Environment Management System Certification in 2004. This certification was recently renewed in March 2006 by Det Norske Veritas Certification Ltd.

Green Wave Environmental Care Competition

Organised by Sembawang Shipyard together with the Ministry of Education, the annual Green Wave Environmental Care Competition continued to engage and influence young minds to think and act for environmental protection and improvement. Since 2003, students from primary to university levels had been encouraged to think proactively about today’s environmental issues.

Extending its reach, Sembawang Shipyard had been encouraging its customers to participate in the project. During the year, its alliance partners Shell Trading and BP Shipping became joint-sponsors, offering month-long work attachments to winners in the post-secondary categories of the competition.

Since 2005, the yard had also been reviewing the viability of developing students’ projects and prototypes for household and commercial use under its Green Wave IDEA Implementation Committee.

Other Green Initiatives

Continuing its support in spreading the awareness of environmental care, the Group participated in the annual Clean & Green Week launch and exhibition through its subsidiary Sembawang Shipyard. Its Green Wave Environment Competition was also showcased to reach out to more students.

Sembawang Shipyard also began a Tree Planting Programme to integrate more greenery into its infrastructure and facilities and to decrease the impact of greenhouse effects. Phase 1 of this three-phase programme was completed in November with the planting of more than 70 trees.

Green Wave IDEA Implementation Committee