

Port Safety, Health and Environmental Management System (PSHEMS)



Partnerships in Environmental Management
for the Seas of East Asia
(PEMSEA)



PEMSEA PSHEM Code Initiative

Ports and harbors are an integral part of the majority of coastal communities of the East Asia region. They serve as the center of economic development and activity and as the doorway to domestic, regional and international markets. Port authorities and operators face a number of challenges with respect to their role and impact in ICM programs and sustainable development of coastal areas.

For the past five years, PEMSEA has been actively engaged in the development of a Port Safety, Health and Environmental Management (PSHEM) Code and the demonstration of the PSHEM System (PSHEMS) through the implementation of a safety, health and environmental management system for the port industry.

Port Safety, Health and Environmental Management (PSHEM) Code

The PSHEM Code is aimed at providing port authorities or any other company operating within the port, whose activities may have an effect on the health and safety of people, environment, cargoes, and port installations, with a voluntary standard against which to measure the performance of their operations with regard to quality, safety and health, and the protection of the environment.

The PSHEM Code is structured using the "PSHEMS Framework" which is based on the "Framework for Sustainable Development of Coastal Areas Through ICM Implementation" and the key elements of recognized international standards, namely ISO 9001 (Quality Management), ISO 14001 (Environmental Management), and OHSAS 18001 (Occupational Health and Safety).

PSHEMS Recognition

PSHEMS Recognition System is established to formally acknowledge that the established PSHEMS of the Port meets the requirements of the Code and confirms the effective implementation of the system.

The PSHEMS Recognition system is structured in a tri-level approach to encourage the Port Authority and/or Operator to strive for excellence through continuous improvement.

The recognition process goes beyond the typical certification trend using the concept of "compliance" to international standards, since the assessment criteria involves the evaluation of the degree of performance/impact achieved through the implementation of the PSHEMS.

Three levels of recognition:

Level 1 Recognition for Compliance of PSHEMS:

Integrated management system for PSHEMS developed and implemented, compliant with the requirements of the PSHEM Code and consistent with the requirements of ISO 14001, OHSAS 18001 and ISO 9001.

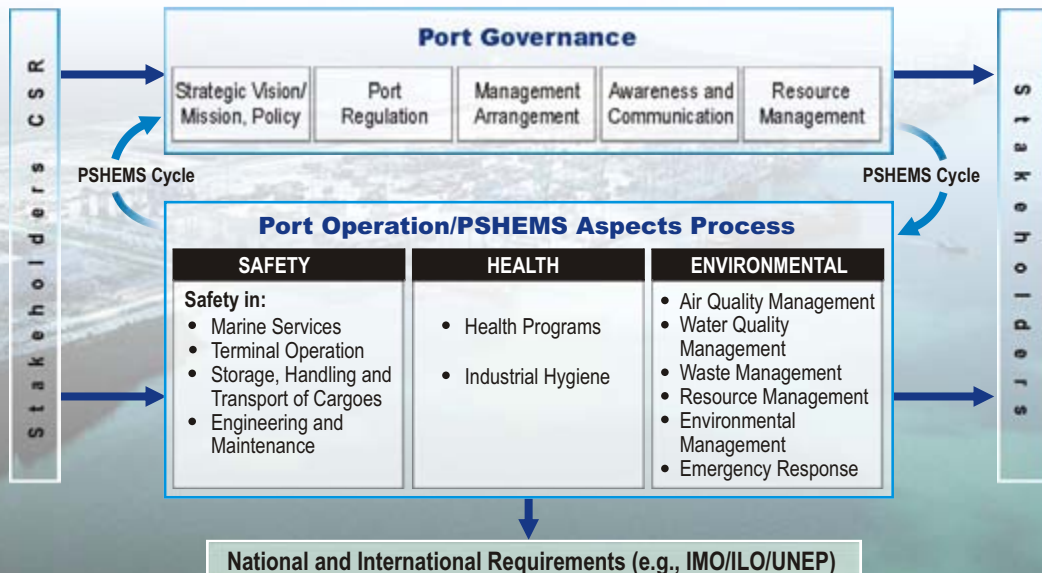
Level 2 Recognition for Proficiency in PSHEMS:

Significant progress in building sound processes achieved and superior results demonstrated.

Level 3 Recognition for Performance Excellence in PSHEMS:

High level of Excellence in PSHEMS performance achieved.

The Port of Tanjung Pelepas (Malaysia), Bangkok Port and Laem Chabang Port (Thailand) were awarded a certificate of recognition by PEMSEA at the East Asian Seas Congress 2009.



PSHEMS Framework

Port photos courtesy of Xiamen and Bangkok Ports.

PSHEMS Development, Implementation and Continual Improvement Process



PSHEMS Continual Improvement Cycle

Application of the PSHEM Code

The Code has been successfully demonstrated at the Port of Tanjung Pelepas (Malaysia), Bangkok Port and Laem Chabang Port (Thailand). To achieve the objectives of the PSHEM Code, these ports followed the PSHEMS framework and the "continual improvement cycle."

Phase 1 Initial Status Review

Consists of a system review to establish the current status of the existing processes and the system being implemented by the port.

Phase 2 Strategic Planning

Involves the identification of hazards and the conduct of risk assessment and the establishment of objectives, targets and programs.

Phase 3 System Development and Documentation

Involves the establishment of the business process, manuals and procedures to facilitate the control of the processes and address identified risks.

Phase 4 Implementation and Monitoring

Consists of the progressive implementation of the policy, programs and procedures as well as measurement of performance.

Phase 5 PSHEMS Auditing

Consists of planning and conduct of audits and the reporting of audit findings.

Phase 6 Continual Improvement

Comprises a Top Management Review of the PSHEMS, its policy and the achievement of objectives.

The PSHEMS developed in these ports achieved the following results:

- Improved operational business efficiency and cost savings;
- Reduction in accidents and resulting environmental damages;
- Improved system of safety, health and environmental governance to control private terminal operators;
- Improved handling of dangerous cargoes and waste materials; and
- Reduction of safety, health and environmental risk through improved access control in the port.

Present Status of the PSHEM Code

Collaboration with international agencies, authorities and associations (with concerns/focus on port development and operation) is being developed to solicit international recognition of the PSHEM Code. The German Technical Cooperation (GTZ) and PEMSEA signed a Letter of Cooperation to support the project Sustainable Port Development in the ASEAN Region. The project supports the ASEAN Ports Association (APA) to improve environmental and occupational safety and health management in selected ports of the region (Bangkok and Laem Chabang in Thailand, Saigon in Vietnam, Phnom Penh and Sihanoukville in Cambodia, Tanjung Priok and Tanjung Perak in Indonesia, Cagayan de Oro and Iloilo in the Philippines). PEMSEA and GTZ have agreed to assist jointly the ports participating in the project, in particular to develop and implement an integrated systematic approach in accordance with the provisions of the Port Safety, Health and Environmental Management (PSHEM) Code.

Sihanoukville Autonomous Port and Philippine Ports Authority (Port of Iloilo) signed a Memorandum of Agreement with PEMSEA for the development and implementation of PSHEMS in their respective ports.

GTZ and PEMSEA conducted the Sustainable Port Development Inception Workshop and the Initial Review of the safety, health and environmental management systems in the participating ports. The participating ports agreed to the GTZ recommendation to implement the PSHEMS based on the PSHEM Code and the approach recommended by PEMSEA.

Future of the PSHEM Code:

Other ports (Saigon in Vietnam, Phnom Penh in Cambodia, Tanjung Priok and Tanjung Perak in Indonesia, Cagayan de Oro in the Philippines) have expressed interest in the PSHEM Code and are requesting PEMSEA to extend technical assistance for the development of PSHEMS in their ports.

Collaboration with international agencies, authorities and associations (with concerns/focus on port development and operation) will be continued to solicit international recognition of the PSHEM Code. Regional and international agencies organizations and associations, including APA, will be invited to endorse the PSHEM Code and Recognition System for voluntary use by member ports.

A Governance System will be established to properly manage the activities related to revision/update of the PSHEM Code, processes related to recognition as well as the administration of activities for PSHEMS services.



For more information, please contact

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Fifty-two representatives of APA, GTZ, PEMSEA and the port authorities of Bangkok and Laem Chabang (Thailand), Saigon (Vietnam), Phnom Penh and Sihanoukville (Cambodia), Tanjung Priok and Tanjung Perak (Indonesia), Cagayan de Oro and Iloilo (Philippines), Dili (Timor-Leste) participated in an Inception Workshop on Sustainable Port Development organized by GTZ, ASEAN Ports Association and PEMSEA on 21–22 January 2010.