



MANAGEMENT SYSTEM FOR SUSTAINABLE DEVELOPMENT

Arrangements to discharge the company's responsibility to society

2. Management system for HSSE (health, safety, security and environment)

~To promote efforts to improve HSSE~

① Commitment to HSSE

■ Fundamental policies concerning HSSE

Showa Shell Sekiyu has the following fundamental policies for H (health), S (safety), S (security) and E (environment).

BASIC POLICY ON HEALTH, SAFETY, SECURITY AND ENVIRONMENTAL PRESERVATION

Acknowledging that it is the Company's societal responsibility to ensure safety, promote health, avoid hazards arising from all sorts of corporate activities and preserve environment in conducting its business activities based on its Management Philosophy and the Code of Conduct, Company sets forth the following basic policy on health, safety, security and environmental (HSSE) preservation:

- 1 Concerning HSSE, the Company not only complies with relevant laws and regulations, but also strives for continual improvement in performance implementing appropriate measures such as carrying out HSSE-MS.**
- 2 As to HSSE, the Company will implement the following items.**
 - (1) In conducting its own businesses the Company further pushes its efforts for reduction of resources and energy conservation as well as reduction of environmental loading through, for example, prevention of polluted effluents.
 - (2) The Company takes HSSE into consideration throughout all stages from product development to its disposal and offer information on proper handling and consuming methods of that product to consumers.
 - (3) In case of starting a new business, construction of large facilities and development of new products, the Company undertakes prior assessment about HSSE and reviews it as necessary in accordance with the changing situation.
 - (4) The Company establishes contingency plans against inadvertent accidents and takes measures required to contain damages as low as reasonably practicable, in collaboration with relevant authorities.
 - (5) The Company enlightens, educates and trains employees on HSSE to enhance their awareness and induce their voluntary participation and cooperation. In addition the Company seeks the cooperation of its contractors, dealers and affiliates and gives recommendations and/or guidance as required.
 - (6) The Company strives to pioneer research on HSSE and promotes practical application of the outcome of the research made by its own and Group Companies.
 - (7) The Company strives for reducing work related injuries in operation.
 - (8) The Company widely publishes its views on HSSE, sets its objectives for improvement thereof and reports the result to get understanding and support of society in general.
- 3 The Company periodically audits its compliance with laws, regulations and voluntary rules concerning HSSE and the status of various measures being implemented.**
- 4 The Company evaluates the performance regarding HSSE, and if required, reassesses the action plan.**

Established January 1985
Revised September 1992
Revised August 2004

Haruyuki Niimi
Chairman, Representative Director

■ HSSE management system

In the Showa Shell Group, we have developed and put into operation an HSSE management system (HSSE-MS), following the exemplary system of the Royal Dutch Shell group, which permits the comprehensive management of health, safety, security and environment risks.



This system utilizes the mechanism of a so-called PDCA cycle and aims at continual performance improvement through voluntary efforts.

It employs a technique called HEMP (hazard and effect management process); in the Plan and Do stages, potential risks and environmental impacts (called hazards) are identified for a

target facility, and the significance of these hazards is evaluated by taking into consideration the seriousness of possible disaster or environmental pollution resulting from such hazards and their probabilities of occurrence so that action priority may be determined according to the significance of hazards.

■ HSSE management system flow



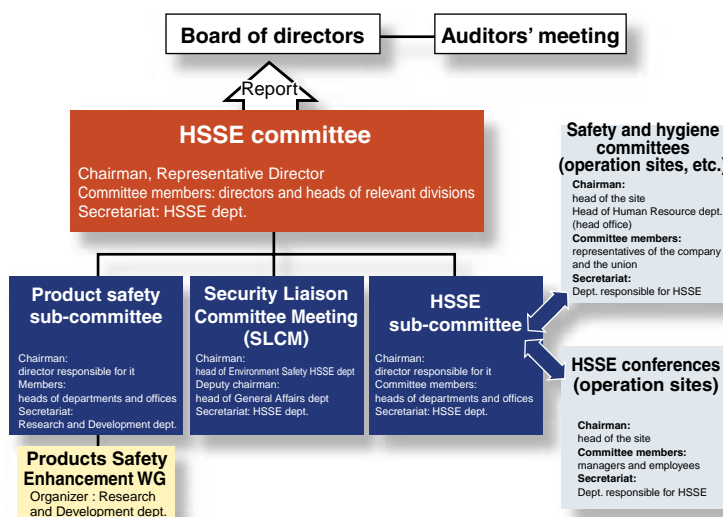
1. Leadership and commitment
In the management policies, the company declared that it would strive to achieve growth while fulfilling its social responsibilities, including environmental preservation, provision of a stable supply of energy, and operational safety.
2. Policies and strategic goals
The company has defined its fundamental policies concerning health, safety, security and the environment and publicized its policies relating to specific measures.
3. Organization, roles and responsibilities
The company has clearly showed the roles of its organizations including the HSSE committee chaired by the chairman of the company, various tiers and divisions.
4. Plan and process
As for problems pointed out in HEMP, actions are considered and a plan is formulated.
5. Execution and monitoring
The outcomes from various activities concerning HSSE are monitored and necessary feedbacks are provided.
6. Auditing
The auditing function performs HSSE audit regularly and improvements are studied for the correction of nonconformity.
7. Management review
Audit results are reported to the management and strategic objectives are reviewed.

■ HSSE management system

We have established the HSSE committee as the highest-level HSSE-related decision-making organ to approve yearly fundamental policies for HSSE, review objectives and performance and hear sub-committees' reports. Placed under the HSSE committee are the

Product Safety sub-committee, the HSSE sub-committee, and the Security Liaison Committee Meeting. Sub-committees deliberate on the following issues.

■ HSSE committee/conference structure

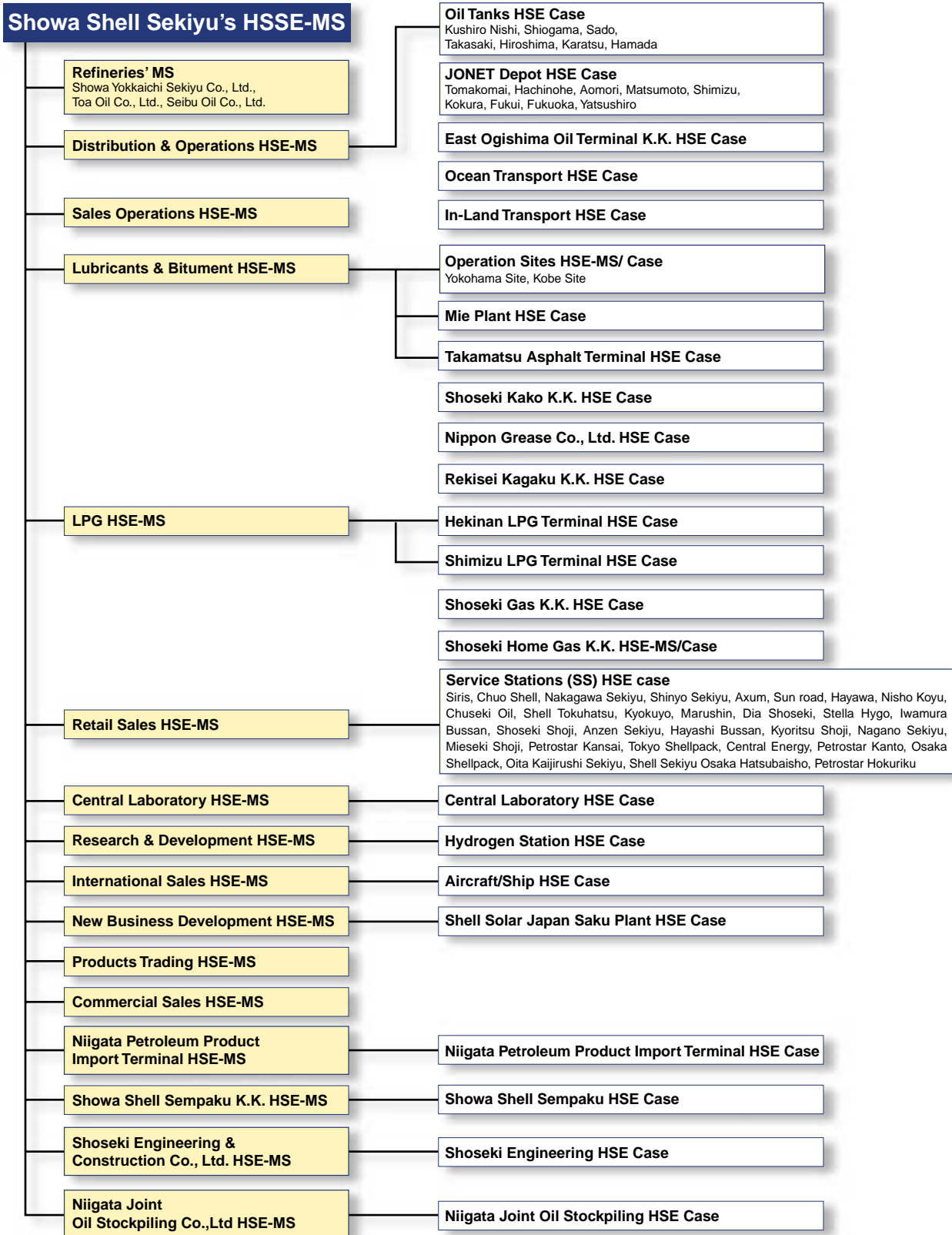


- **Product safety sub-committee**
This sub-committee deliberates on comprehensive measures to secure product safety throughout the product life-cycle from development to disposal, so that the products supplied by the company do not result in physical, property, or environmental damage before, during or after their use.
- **HSSE sub-committee**
It formulates HSSE-related plans, monitors progress statuses and discusses matters relating to performance review according to the fundamental policies concerning HSSE.
- **Security Liaison Committee Meeting (SLCM)**
It deliberates on security-related policies, measures, proposals and the distribution of tasks.
- **Safety and hygiene committees**
They deliberate on matters relating to safety such as the causes of industrial accidents and the prevention of recurrence and matters relating to health such as the prevention of employees' health problems and the maintenance and promotion of employees' health at the head office and operation sites.
- **HSSE conferences (operation sites)**
They deliberate on matters relating to HSSE in general at operation sites.



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■ HSSE-MS framework (as of February 2004)



Note 1: HSE Case means an HSSE-MS covering a specific facility or operation.

Note 2: The above-illustrated framework also includes a unit where an HSSE-MS or HSE Case is under development or revision.

Note 3: An HSE-MS is operated as an HSSE-MS by incorporating security (S) into the scope of management.

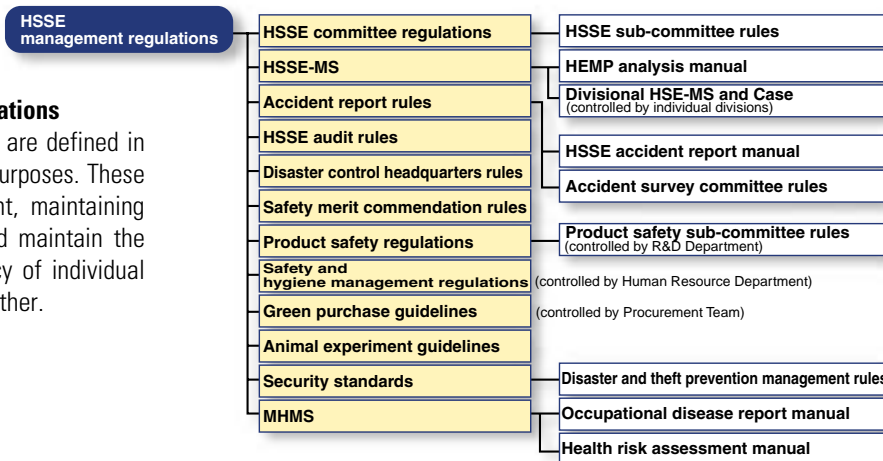
The revision of an HSE-MS or Case to an HSSE-MS or Case is now underway at each unit.

■HSSE internal audit

The divisions of Showa Shell Sekiyu and its group companies have introduced HSSE management systems or HSSE cases applied to specific operation sites or facilities. Audits are conducted as a step to check whether the PDCA cycle functions properly in these systems. Audits include those conducted internally within the

division and those conducted by the Environment Safety (HSSE) Department of Showa Shell Sekiyu. Audits conducted by the Environment Safety (HSSE) Department are performed regularly at prescribed intervals and provide advice for HSSE performance improvement.

■HSSE-related regulation system



■Systematic development of HSSE-related regulations

In our company, various activities relating to HSSE are defined in internal regulations developed specifically for the purposes. These regulations as a whole realize HSSE management, maintaining their relations as designed. Therefore, we should maintain the integrity of the system by ensuring the consistency of individual regulations and clarifying their relations with each other.

■Acquisition of ISO14001 certification (as of March 2004)

Prior to the development of an HSSE management system, the group's refineries are acquiring, international environmental management system, ISO14001 certification. The company is

developing an HSSE-MS, taking its consistency with ISO14001 into consideration.

Refineries, operation sites, affiliates	Date of registration	Applicable standard	Accrediting organ	Certification No.
Seibu Oil Co., Ltd. Yamaguchi refinery	1998.12.10	ISO14001	LRQA	771922
Showa Yokkaichi Sekiyu Co., Ltd. Yokkaichi refinery	1999.07.29	ISO14001	LRQA	772522
Toa Oil Co., Ltd. Keihin refinery	1999.06.18	ISO14001	LRQA	772510
Showa Shell Sekiyu K.K. Hekinan LPG terminal	2001.12.21	ISO14001	KHK ISO CENTER	01ER-178
K.K. SVC Tokyo	2001.01.23	ISO14001	JET-EC	E00-165
Japan Oil Network Co., Ltd.	2002.12.15	ISO14001	JQA-ISO CENTER	JQA-EM1178

■Definition and scope of group companies

•For the purpose of management of HSSE-related affairs, the following companies are regarded as group companies. (As of February 2004)

Showa Shell Sekiyu K.K.
 Showa Yokkaichi Sekiyu Co., Ltd. Toa Oil Co., Ltd. Seibu Oil Co., Ltd. Showa Shell Sempaku K.K. Siris Co., Ltd. Niigata Joint Oil Stockpiling Co., Ltd. Japan Oil Network Co., Ltd. Shoseki Kako K.K. Rekisei Kagaku K.K. Shoseki Gas K.K. Shoseki Engineering & Construction Co., Ltd. East Ogishima Oil Terminal K.K. Nippon Grease Co., Ltd. K.K. SVC Tokyo Chuo Shell Sekiyu Hanbai K.K. Marushin K.K. Petrostar Kansai K.K. Kitamoto K.K. K.K. Stella Hyogo
 K.K. Axum Chuseki Oil Osaka Shell pack K.K. Central Energy K.K. Kyokuyo Co., Ltd. Shouseki Shoji K.K. K.K. Shinyo Sekiyu Tokyo Shell pack K.K. Petrostar Kanto Co., Ltd. Nakagawa Sekiyu Hayakawa Dia Shoseki K.K. Shell Tokuhatsu K.K. Nissho Koyu K.K.

■Performance report

The group companies report all their HSSE-related performance to Showa Shell Sekiyu. HSSE related performance means accidents, health problems and security problems associated with business operations and environment-related data. The company does not

only identify the group's HSSE-related activity statuses from the collected data, but also utilizes them for the prevention of recurrences, etc.



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Arrangements to discharge the company's responsibility to society

3. Risk management and crisis management system

~To implement risk and crisis management~

① The company's effort for risk management

Business risk management system and risk management through HSSE management system

As a means for internal control, the company has introduced a business risk management system, in which risks associated with Showa Shell Sekiyu's business operations are identified for the entire company operations every year and the management as a whole recognizes and at the same time verifies critical risks and

formulate action plans. As for HSSE risks in particular among the business risks, strict control under the HSSE management system is implemented so that the company can avoid impediments to business before they actually take shape or minimize their impacts on business even if they actually take shape.

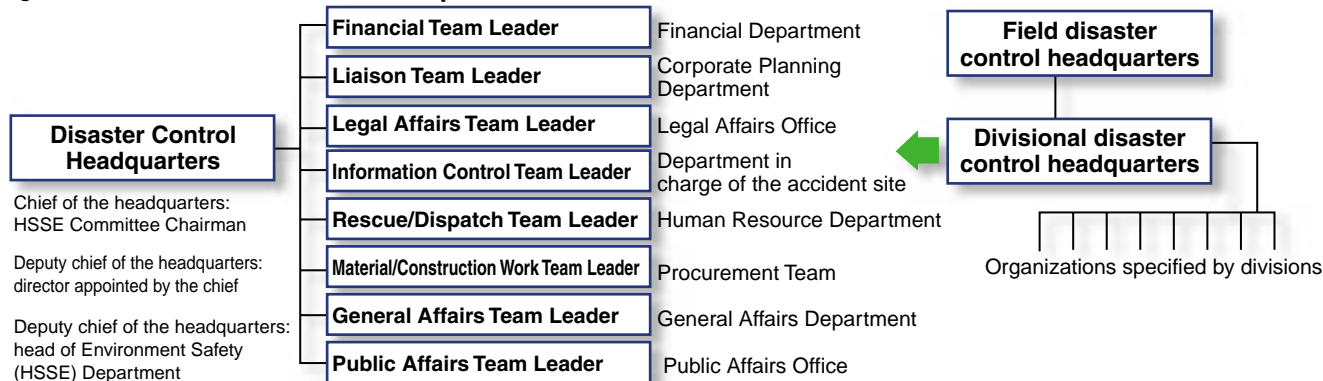
② Risk management system for disaster control

Management system for disaster control

Operation safety is one of the company's responsibilities to society. Particularly in the petroleum industry, a failure in this aspect can result in a serious accident such as a fire, spill or explosion endangering the lives and properties of residents in the neighborhood, so we take the utmost care in developing our disaster prevention system.

Emergency arrangements are specified in the relevant internal regulations to prepare for a time of need, and we are endeavoring to develop system to minimize damages from disaster by establishing the disaster control headquarters, improving divisional arrangements to cope with emergencies and updating emergency call chains regularly.

Organization of the disaster control headquarters



Counteractions formulated by a trans-departmental organization

Disaster control, crisis management in particular, cannot be left in the hand of a single department. For this reason, we have developed a trans-departmental organization to involve all relevant divisions of the company to study possible counteractions broadly. The organization named as the Security Liaison Committee Meeting (SLCM) designed specifically for this purpose is developing specific disaster control measures including the distribution of handbooks setting forth behavioral norms requiring employees' observation in an emergency and the method of ascertaining information on employees' safety including their families'.

required to prevent terrorists' attacks on oil-related facilities erected at ports and ensure the safety of neighboring areas and a stable supply of petroleum energy. In this regard, we think it is very important to put appropriate security measures in place to safeguard sea berths and wharfs constructed in international port facilities for receiving oil from overseas.

An effort to ensure security measures meeting the revised SOLAS convention requirements

Triggered by the 9-11, multiple terrorists' attacks in the U.S., the International Convention for the Safety of Life at Sea (SOLAS) was revised to enhance counter terrorism measures and enhanced security arrangements were put into effect on July 1 2004 at all international port facilities.2004 at all international port facilities.

Showa Shell Group companies engaged in the management of international port facilities have taken security measures including the following depending on the conditions such as facility locations, security levels, etc. in its effort to enhance security under the guidance of the relevant authorities so that they can fulfill their assigned tasks:

- Development of facilities to stop adversities' access to controlled areas
- Establishment of constant surveillance system and emergency police notification system
- Implementation of staff training and joint training with relevant organizations
- Reporting the appointment of a wharf security manager and acquiring approval of wharf security regulations

■Disaster control system in a time of need

Firefighting at refineries and oil tanks

At the refineries and oil tanks of the group, almost all processes are fully controlled with state-of-the-art computers operated under a centralized, around-the-clock monitoring system and equipped with fire extinguishers. In addition, refineries have disaster control equipment including large chemical fire engines on their premises and self-defense fire brigades consisting of firefighters selected from employees to prepare for an emergency.

Actual firefighting training conducted at the Niigata Disaster control training center

Generally it is believed to be of extreme importance to carry out initial-stage firefighting activity in an expeditious and apt manner when a fire breaks out. The same applies to a refinery fire, but a fire at a refinery is generally chemical fire, which requires appropriate professional knowledge and skills in fighting fire. For this reason, Showa Shell Sekiyu opened a disaster control training center in the Niigata Petroleum Product Import Terminal in April 1993 and gives actual firefighting training to members of its fire defense forces organized at the respective locations to help strengthen initial firefighting capability of its operation sites all over the country.

At this disaster control training center, our employees working in a refinery, an operation site, a terminal, an oil tank or the group's other facility master elementary firefighting knowledge and skills to control an initial-stage oil fire through training using model facilities. The training center has an oil tank, pump, drum, piping of various kinds, LPG tank, tank lorry, etc. like our actual operation sites and gives training, in a practical manner giving priority to safety, on the disaster control/firefighting methods most suitable for the respective fire types by simulating the most likely fire types assumed for actual operation sites by facility. This training center is established as an organization placed under the control of HSSE Department of the head office, which promotes earnest efforts for disaster prevention under a unified intention as the group with its staff members taking part in training as lecturers instructing basic stances toward disaster control as well as assisting actual firefighting training. Since its foundation, the training center has given training to approximately 1,800 employees in 12 years, contributing to the discernible improvement in their consciousness of disaster control and firefighting skills.

Local community exchange through disaster prevention

This disaster control training center receives a number of visitors in succession from various organs including government departments, local fire stations, schools and mass media, which indicates people's strong interest in disaster prevention. Our employees



trained in this training center play an leading role in disaster control training at operation sites, while they participate in firefighting training organized by local town block associations from time to time to ensure close communication with local communities and uphold people's consciousness of fire prevention.

■Actions to prevent ocean pollution

Adoption of a double hull construction for ocean-going oil tankers

Following the accident of the Exxon Valdez spilling 40,000kl of oil near the Alaskan coast in 1989, a double hull construction to arrange seawater ballast tanks on the bottom and sides of a ship was adopted as an internationally agreed standard.

As a result of the adoption of a double hull construction, even if a ship's exterior shell is damaged upon collision or contact, cargo fuel loaded in the vessel is protected and a spill of fuel, etc. into the ocean is minimized as its effect.

At the Showa Shell Group, we have been promoting the conversion to a double hull construction with completion targeted in 2008 and we have already converted 8 out of the 9 vessels we charter to a double hull construction, continuing our efforts to convert all of them as quickly as possible.

Crude oil tankers are obliged to the equipment of separate ballast tanks and no seawater is introduced into crude oil tanks any more. Thus, the problem of dirty ballast has been solved and the adoption of a double hull construction, which allows the outer shell to be used as ballast tanks, also contributed significantly in solving this problem.

Anti-oil pollution equipment/material stock points (#4 stock point)

The Petroleum Association of Japan has established anti-oil pollution equipment/material stock points at 6 places in Japan and 5 places in the Middle East and the Southeast Asia to prepare for a large-scale oil spill accident. Showa Shell Sekiyu supports this Association's initiative by offering a part of its Niigata Petroleum Product Import Terminal premises for use as an anti-oil pollution equipment/material stock point (#4 stock point).

In these stock points, oil skimmers, oil fences and beach cleaners are stored. Such equipment includes some large, high-tech machines, and the company assigns its employees to master equipment operations by giving them education and training.



#4 anti-oil pollution equipment/material stock point (in the Niigata Petroleum Product Import Terminal)