Environmental Report

Environmental Report 2004

SHINWA KAIUN KAISHA, LTD.

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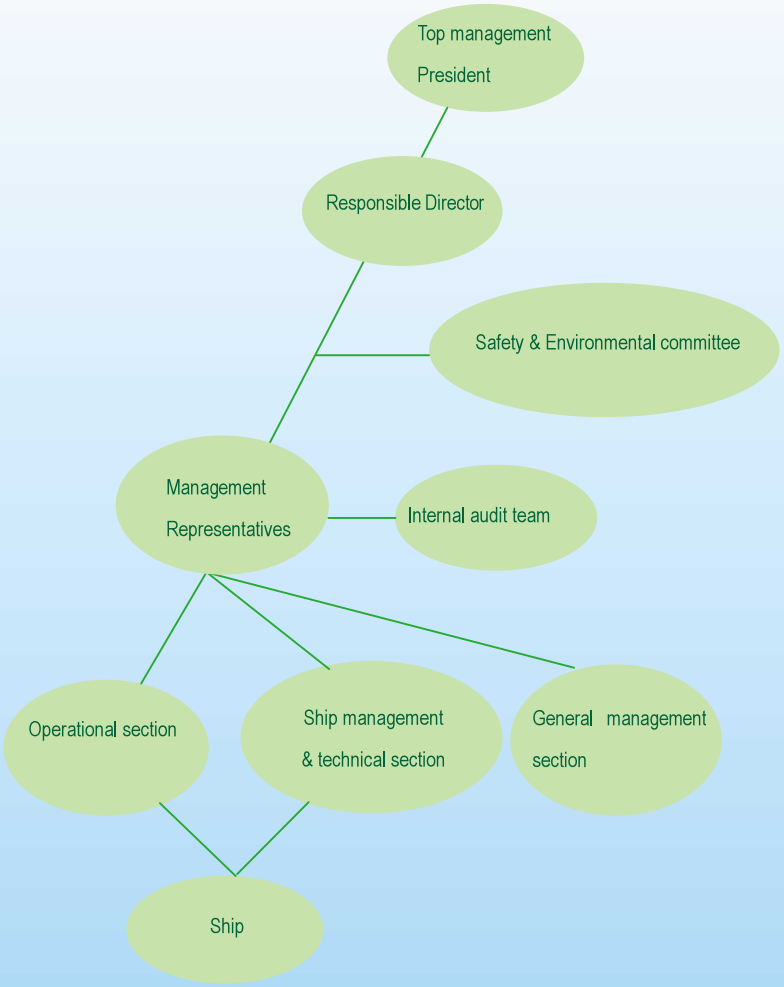
Organization Chart of EMS



History of our Environmental Preservation Activities

Oct. 2001	Established the Environmental Charter of Shinwa Kaiun Group
May. 2002	Issued the Environmental Report 2002
Nov. 2002	Established the Environmental Management Manual
Apr. 2003	Acquired of ISO 14001 Approval from Nippon Kaiji Kyokai
Sep. 2003	Issued the Environmental Report 2003
Jun. 2004	Issued the Environmental Report 2004

Greeting

Social concern over environmental issues have recently focused on the company's environmental protection efforts, which are regarded as one of the criteria for evaluating a company. According to a survey by Ministry of Environment, approximately half of the companies in Japan have positioned the environmental efforts as one of the most important strategies or as a critical factor that affects company's performance.

Ships which can carry much cargo at a time have come under the spotlight as a more energy efficient and more environmentally-friendly transportation mode than others. However, once the accident such as an oil spill from a tanker happens, it is possible to cause damage on a nationwide scale. Therefore, we are firmly convinced that the environmental protection activities of the Shinwa Kaiun Group do nothing less than promote safe and effective navigation.

We established the Environmental Charter of Shinwa Kaiun Group in October 2001 and acquired ISO 14001 approval for marine transport services in April 2003. Since acquiring ISO 14001, we have been dedicated to developing our human resources by providing all our members with intensive lectures on ISO 14001 and the personnel of our overseas' manning agencies with environmental education, and also by increasing the number of internal environmental auditors.

We will reinforce environmental education for our employees, and at the same time we will strive to conserve the global environment by positively introducing technologies and equipments that reduce environmental loads. This is the third Environmental Report we have issued. We hope you will understand our approach to environmental issues, and our corporate activities for preserving the environment, and address opinions and suggestions to us for future guidance.

June 2004

President　Yoshikazu Sumi

The Environmental Charter of SHINWA KAIUN GROUP

Ideology

Shinwa Kaiun Kaisha, Ltd. and its Group companies will strive to maintain a healthy global environment–a common property of all mankind–as a marine transportation corporate group providing services in worldwide waters.

Basic Policies

1 Promoting Safe Navigation
We recognize that a marine accident can cause huge damage to the environment; for example, marine pollution from an oil spill. We will strive to realize zero marine perils and always practice safe navigation.

2 Complying with Laws
We will not only uphold laws concerning water and air pollution, we will establish our own criteria when necessary and strive to reduce our burden on the environment.

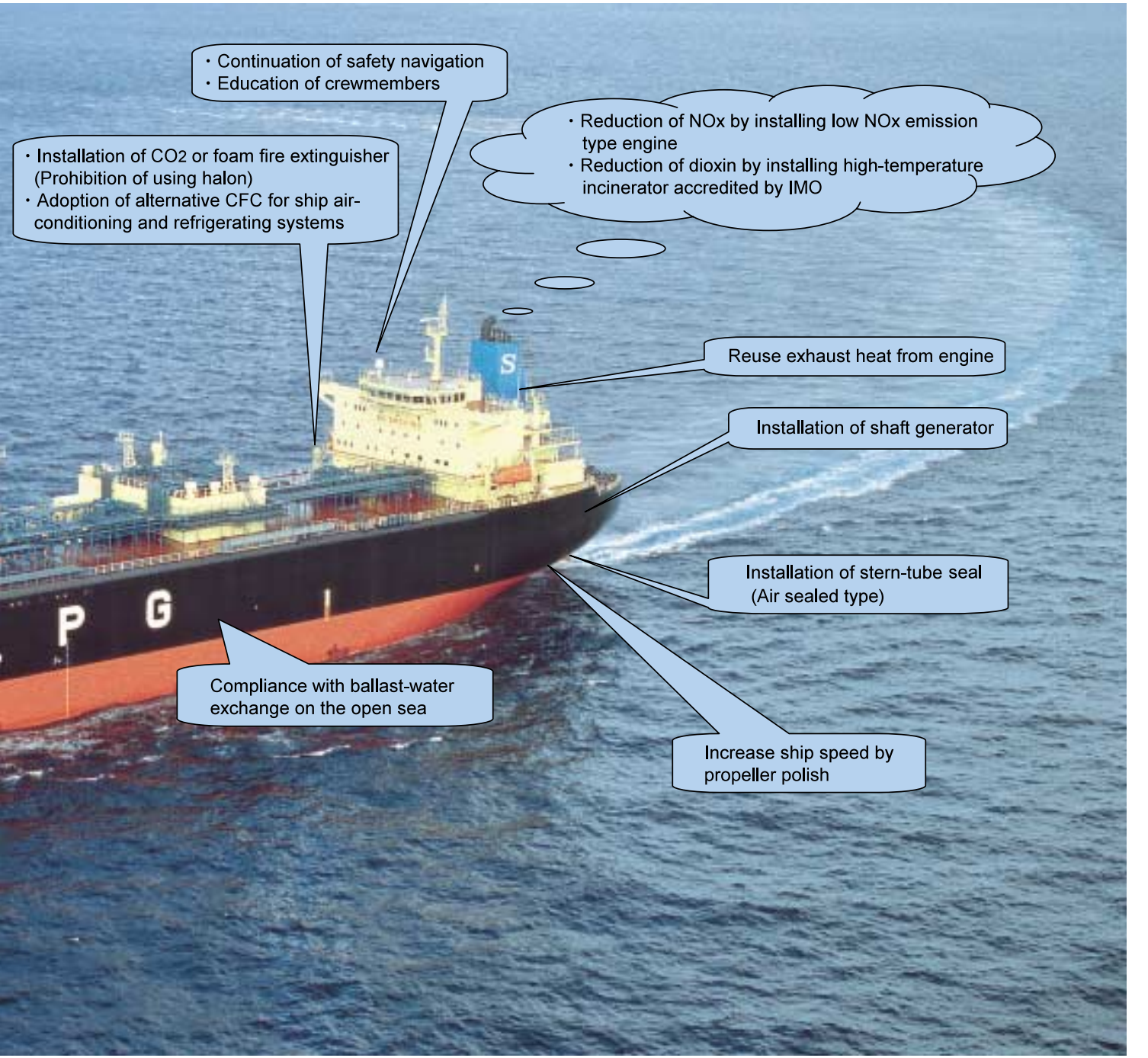
3 Promoting Energy-Saving Navigation
We will perform energy-saving navigation and develop the technologies for improving it.

4 Acquiring Environmentally Sound Supplies
We will choose environmentally sound supplies when acquiring vessels, instruments, materials, and other products.

5 Saving Resources and Reducing Waste
We will promote resource saving in all corporate activities, including those in land offices, as well as reducing the amount of waste generated by all facilities.

6 Raising Employees' Awareness of Environmental Issues
We will raise employees' awareness of environmental issues through environmental education and in-house promotional activities.

Established October 26, 2001


・Continuation of safety navigation
・Education of crewmembers
・Installation of CO2 or foam fire extinguisher (Prohibition of using halon)
・Adoption of alternative CFC for ship air-conditioning and refrigerating systems
・Reduction of NOx by installing low NOx emission type engine
・Reduction of dioxin by installing high-temperature incinerator accredited by IMO
Reuse exhaust heat from engine
Installation of shaft generator
Installation of stern-tube seal (Air sealed type)
Compliance with ballast-water exchange on the open sea
Increase ship speed by propeller polish

Verification of Environmental Management Program 2003

PLAN ⇒			DO ⇒
Environmental Policy	Enviromental Objectives	Targets for 2003	Contents of activities
Promotion of Safe Operation	Preservation of Marine Environment	Zero Accidental Oil Spill from Ship	・Provide awareness education of Crewmambers ・Enhanced inspection of sealing device of stern tube during Dry-docking. ・Regular maintenance and calibration of the Oil Detecting Equipment
		Complete Exchange of Ballast water by Bulk Carriers	・Provide awareness Education of Crewmambers ・Compliance with SMS Procedure
		50% of Tributyltin(TBT)-free paint adoption	・Adoption of TBT-free Paint for docking ship and New ship
Resource-Saving & Reduction of Wastes	Reduction of Consumption of Natural Resources	10% Reduction of Fuel Oil Consumption as compared 1990 (per cargo transported)	・Provide awareness Education of Crewmambers ・Information gathering of New product of Hull paint ・Bottom blast or Propeller polish ・Preparing of effective operation plan ・Increase of loading quantity
		1% Reduction of Annual Power Consumption in the office over the Previous Year	・Awareness Education of Shore Employees ・Post notice on bulletin board system in Inter-Office Network ・Saving of Unnecessary lighting
		Promotion of the Recycled Consumables in the office total 20 items(Newly 10 items)	・Education of Shore Employees
	Reduction of Waste Generation	5% Reduction of Shipboard Waste Generation over the Previous Year	・Complete segregated collection and retention ・Promotion of Recovery and Recycling of Lashing materials
		Separating trash completely in office(100%)	・Complete Separation of Recyclables, Combustibles and Noncombustible
Preservation of the Air	Reduction of Air Pollutant	Curb of Dioxin	・Incinerator as IMO standard to be adopted to New Ship
		10% Reduction of NOx Emission per Transport unit over the Year of 1990	・Installation of New type Engine on new ship
		10% Reduction of CO_2 Emission per Transport unit over the Year of 1990	・Installation of New type Engine on new ship
		・Supply Low-Sulfer Fuel ・Consideration on the Ammount of Emission	・Selection and analysis of Fuel oil
		Grasp of figure of CFC Emission.	・Confirm onboarded figure of CFC ・Grasp of figure of CFC Emission
		Curb of Halon (Extinguishant) Discharge	・Adoption of CO_2 Extinguisher or Form Extinguisher for New Ship

	CHECK ⇒			ACTION ⇒
	Verification results	Evaluation	Cause for un-achieved items	The improvement methods
	Oil spill accident "zero"	★★★		
	Achieved 100%	★★★		
	Adopted TBT-Free paint for 70% of ship	★★★		
	Achieved 10% reduction as compared with 1990	★★★		
	Achieved 7% reduction over the previous year	★★★		
	Achieved the 10 items	★★★		
	▪ Achieved waste segregate completely ▪ Failed of comparison "Record of Monitoring and Measuring" ▪ Failed of compile Lashing materials	★★	Comparision was not completed because the irregular unit was used in the report form of "Monitoring and Measuring".	Revise the report form
	Layout of waste boxes were improved, classified disposal 100%	★★★		
	Adopt the IMO standard incinerator on all new ship	★★★		
	Achieved 10% reduction as compared with 1990	★★★		
	▪ Fuel oil suited Internal standard ▪ Not computed SOx emission	★★	Not grasp content of sulfer because fuel analysis is inapplicable to all operating ship.	Review the target
	Grasped figure of CFC emission	★★★		
	No Halon emission	★★★		

★★★ : Achieved ★★ : Un-achieved partly ★ : Need review

Preservation of Marine Environment

1.Prevention of the oil spill accident

Adopt air-seal type stern tube sealing system

A stern tube sealing system prevents the ingress of sea water through the clearance between the propeller shaft, concurrently preventing the egress of stern tube lubricating oil into the sea.

We have positively adopted the air-seal-type stern tube sealing system, which has higher performance for preventing the ingress of sea water and the egress of stern tube lubricating oil, for new building ship.

Prevent Oil Spills from deck

There are possibilities of oil spills from hydraulic deck machinery installed on deck, and fouling of sea water with the oil content of grease applied to steel wire ropes when washed by rain water.

Oil absorbing filter

In our company, guidance is given to crew members so that only clean water trapped on deck is discharged after the oil content is removed with oil-absorbing filters.

Inspection and Maintenance of ODM(Oil Discharge Monitoring & Control System)

The cargo tanks of an oil tanker are washed with water before inspection (inside of cargo tank).

A large volume of wash water is subjected to oily water separation, and only clean water is discharged overboard.

The water discharged overboard in this way is subjected to continuous monitoring by ODM. If oil is detected, discharging is automatically stopped.

Manufacturer's engineers are dispatched to implement inspection and maintenance before using ODM.

2.Other Efforts to Preserve the Marine Environment

Ballast Water

Sea water carried by a tanker or a cargo ship in dedicated tanks to secure structural hull strength and maintain adequate drafts for a safe ballast voyage is called ballast water. Ballast water is discharged when cargo is loaded.

Ballast water contains aquatic organisms and pathogens originating in the region of waters where it was taken on and is discharged together with ballast water in waters where there are no such indigenous harmful aquatic organisms and pathogens, affecting the ecological system, and thus constitutes a serious concern.

International assessments of ballast water management were begun in 1994, and the International Convention for the Control and Management of Ships' Ballast Water and Sediments was adopted in February 2004.

Before adoption of this International Convention, we introduced procedural requirements in the Safety Management Manual for exchanging ballast water so that loaded ballast water can be exchanged with sea water with relatively insignificant harmful effects.

How to effectively minimize harmful aquatic organisms and pathogens contained in discharged ballast water will be the focus of attention in the future.

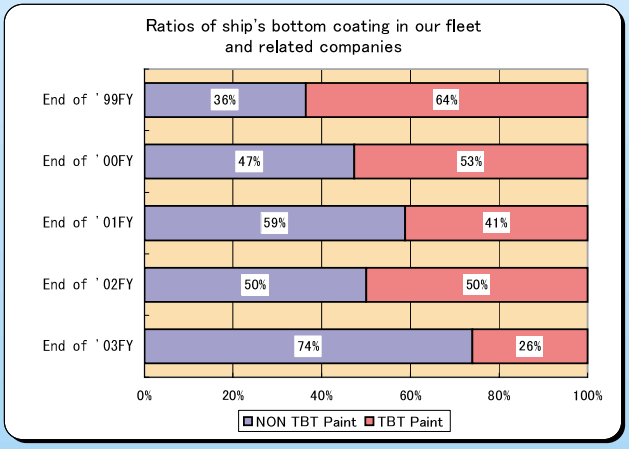
Ensuring Safety Navigation

Antifouling Paints containing Organotin Compounds

A ship's bottom is vulnerable to sealife such as algae and molluscs attaching themselves to the hull with consequent speed reduction and increased fuel oil consumption. Due to the excellent anti-fouling effects of paints containing organitin compounds, a number of ships have used such paints.

Upon learning that organitin, which is an environmental hormone, has harmful effects on human bodies, it was resolved at the International Maritime Organization (IMO), to call for the global prohibition of applying organitin compounds as biocides in anti-fouling systems on ships by 1 January, 2003, and a complete prohibition by 1 January, 2008.

We have used anti-fouling paints that do not contain organotin compounds for ships when entering dry-docking.



Adequate Maintenance Management

It is generally said that wear and tear of the hull and structural members of a ship progresses at an accelerating rate as it ages.

We implement hull and machinery maintenance work for large ships engaged in long ocean-going voyages and ships operated in greater coasting areas of service, irrespective of their size and trade in accordance with the Long-term Maintenance Plan, which was prepared on the basis of our technical expertise accumulated through years of ship operating experience.

Maintenance work is carried out by crew members even when the ship is at sea to ensure high levels of ship maintenance.

Ship Inspection Activities

To forestall hull and machinery failures, ship inspection for maintenance (once every six months) and ship inspection for safety (once a year) are implemented for ships under our management on a regular basis. Ship inspection activities are also carried out positively for our chartered ship to ensure safety operation and protection of marine environment.

Saving Energy Resources

Cleaning Ship's Bottom and Propeller

When two ships of the same ship and engine types are operated with the same volume of fuel oil, the one with a cleaner bottom can run at a higher speed than a ship with a fouled bottom due to lesser hydrodynamic resistance of water. A ship is vulnerable to barnacles and other marine growths with increased sea-going resistance if she is in port for a long time.

Ships under our management are carried out ship bottom and propeller cleaning by divers whenever the hull is found to be fouled.

Before the hull is cleaned
The hull has barnacles and other marine growths adhered.

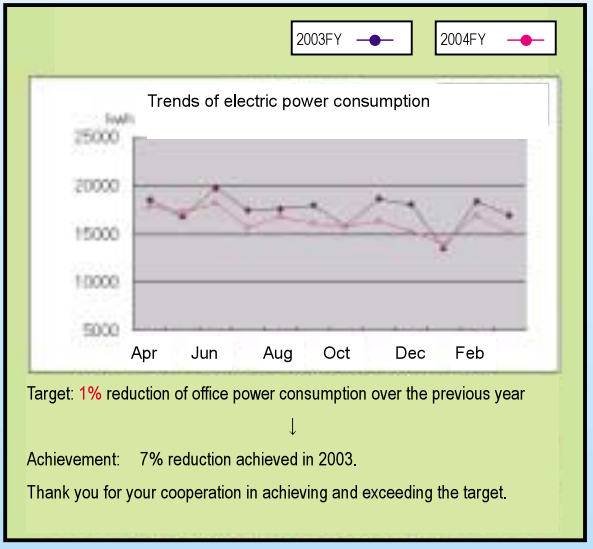
After the hull has been cleaned
The 4 m draft mark can be seen clearly.

Saving Electric Power Consumption

Following on from the previous year, our campaign to save electric power using the electronic bulletin board has been continued.

As a result, 1% of saving over the previous year that was set at the beginning of this year has been greatly surpassed with a significant 7% being achieved.

≪From In-house Electronic Bulletin Board≫



Target: 1% reduction of office power consumption over the previous year

↓

Achievement: 7% reduction achieved in 2003.

Thank you for your cooperation in achieving and exceeding the target.

Promoting the "Green Purchase"

The term "Green Purchase" means to purchase something, while fully considering the need, and giving priority not only price and quality but also environmental impact.

During 2003, ten items were purchased, achieving the target. We are planning to purchase in a positive manner.

Reduction of Waste Generation

In our comparative assessments of waste disposal records in all ships under management in the past, a numerical comparison was precluded by insufficient unification of units applied to wastes.

We will, therefore, make efforts to review records using compatible units for a fair data comparison.

Waste boxes were located for classified wastes from offices. As a result of addressing the need to classify waste in office news and in-house bulletin boards, the goal of conforming with ward regulations has been achieved.

Classified disposal of shipboard wastes

Classified disposal of office wastes

Installation Incinerators that Comply with the Technical Standards

To prevent the generation of dioxin, incinerators capable of controlling the exhaust gas temperature to lower than 350°C were installed for all new building ships.

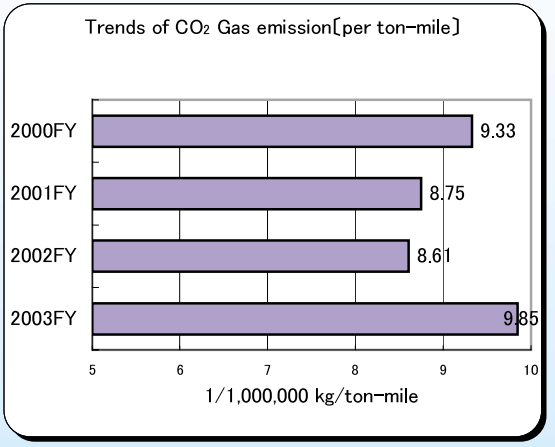
Incinerator

Exhaust Gas

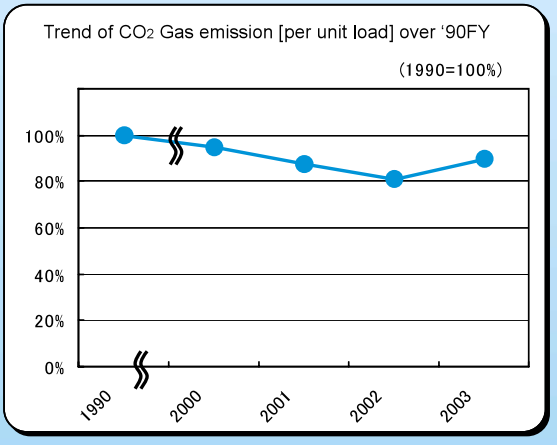
Exhaust gases from ships contain nitrogen oxides (NOx), which cause acid rain and photo-chemical smog, and sulfur oxides(SOx), which causes acid rain, and carbon dioxide (CO_2), which causes global warming.

For NOx, low-emission type engines are installed on new ships. For CO_2, efforts are being made to reduce CO_2 emission per unit load through highly efficient allocation at ships. For SOx, in the absence of details of the sulfur contents of fuel oil used in all ships in operation, the entire volume of SOx emissions cannot be computed. Thus, it remains to be clarified in the future.

NOx, low-emission type engine



※The term ton-mile is a figure that multiplies the cargo weight carried by distance carried, and data show the quantity of CO_2 generated when one ton of cargo is carried one mile.



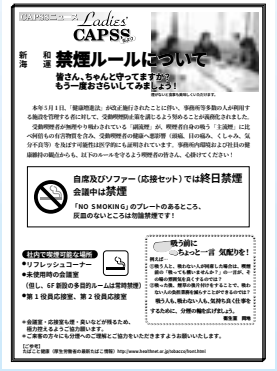
※Although the volume of CO_2 gas emission in 2003 per transport unit increased due to the decline of the volume of cargo handled during the year, a 10% reduction from 1990 has been achieved.

Other Activities

Ladies CAPSS (The Creative Action Plan for Shaping up SHINWA group)

Ladies CAPPS activities, which were begun of its own accord in the activities for profit earning and cost saving, have been engaged in reducing general administration cost and improving the office environment.

Last year, emphasis was put on activities to isolate smoking for improvement the office environment. We understand that there is a growing awareness of our activities probably due to the effects of the in-house bulletin board and periodic efforts to ask for cooperation you including external people to observe the requirement for isolated smoking areas.



From in-house magazine

Reinforcing Internal Auditors

It is prescribed in our Environmental Management Manual that an internal audit should be carried out at least once a year.

An internal audit is carried out by internal auditors designated within the groups of our company. A group of internal auditors comprises 2 persons who have taken an external auditor course and 9 in-house trainees, totaling 11 auditors. To raise the competence level of the internal auditors, a new group of 10 members was requested to take an external training course in December last year, and now our internal auditors are organized into a group with 12 members who have taken an external training course and 5 members who have taken an in-house training course, totaling 17.

Environmental Training for Company Members

In April last year, a lecture meeting on the environment was held for the shore-based employees of our company and those of the group company. In July last year, we visited subsidiary manning companies overseas, and the posture of the SHINWA Group towards environmental issues was explained. Pre-boarding training was provided for those before joining ships of the SHINWA Group. Environmental information and related activities of the world are introduced periodically on bulletin boards and in the in-house magazine.

Training scene at a manning company overseas

Environmental Management Program for 2004

Environmental Objectives	Targets for 2004	Contents of Activities
Preservation of Marine Environment	Zero Accidental Oil Spill from Ships (4 Continuous years)	・Education of Crewmembers ・Adoption of Air-seal type stern tube sealing device for New ships ・Regular maintenance of Oil detecting equipment and calibration
	Complete Exchange of Ballast Water in the Ocean	・Compliance with Procedure(s)
	Adoption of Tributyltin(TBT)-free Paint as Bottom Paint(85%)	・Adoption of TBT-free Paint as Bottom Paint for New Ship ・Alteration from TBT Paint to TBT-free Paint in Dry-docking
Reduction of Consumption of Natural Resources	1% Reduction of Annual Power Consumption in the Office over the Previous Year	・Education of Shoremembers ・Post notice on In-house electronic bulletin board ・Switch-off of Unnecessary Lighting
	Green Purchase of 30 items(new 10 items)	・Listing of object items ・Investigation and implementation of purchase of items
	10% Reduction of F. O. Consumption per Unit Load over the Year of 1990	・Education of Crewmembers ・Information gathering of New product ・Improving fuel oil comsumption by Bottom blast and Propeller polish ・Preparing of effective operational plan ・Increase of loading quantity
Reduction of Waste Generation	Grasp of Numerical Value of Shipboard Waste Generation	・Complete segregated collection and retention ・Review Record form
	Complete Segregation of Wastes Generated in the Office(100%)	・Complete Segregation of Recyclables, Combustibles and Noncombustible
Reduction of Air Pollutant	Reduction of Dioxin	・Adoption of Incinerators of IMO-Approved Type of New Ships
	10 % Reduction of NOx Emission per Unit Load over the Year of 1990	・Adoption of Improvement Machineries of New Ships
	10 % Reduction of CO_2 Emission per Unit Load over the Year of 1990	
	Supply of Low-Sulfur Fuel	・Selection and Analysis of Fuel oil to be Purchased
	Adoption of Alternative CFC Refrigerate Equipment for New Ships(100%)	・Adoption of Alternative CFC(R404a) Refrigerate Equipment and Air Conditioning System for New Ships
	Terminate Halon Extinguishant for New Ships	・Adoption of CO_2 or Air-Foam Liquid Extinguisher for New Ships

Corporate Profile (as of March 31, 2004)

【Company Name】	Shinwa Kaiun Kaisha, Ltd.
【Head Office】	Nittetsu ND Tower 5-6F, 1-5-7 Kameido, Koto-ku, Tokyo 136-8506, Japan
【Capital】	Yen 8,100,000,000
【Fleet】	86 ships 4,898,452 DWT(K/T)
【No. of Employees】	Shore-102 Ship- 60 Total- 162
【Principal Lines of Business】	Carriage of iron ore, coal, oil, and LPG by special carriers, carriage of export steel, non-ferrous metals, feed grain, fertilizer, wood chips, and many others by tramp ships, thus serving as an international shipping company deploying a wide range of shipping services around the globe.

≪Outline of Approval≫

Standards

ISO14001 :1996

JIS Q14001:1996

Scope of Application

Marine Transportation Service

Group companies

- Shinwa Marine Corp.
- Shinwa Business Management Kaisha, Ltd
- Shinwa Agency Co., Ltd.
- Shinwa Chartering Corp.
- International Marine Consulting Co., Ltd.

Validity of certificate until April 20, 2006

Recipients of Report and Frequency

Shinwa Kaiun Kaisha, Ltd., part of its group companies and ships under management.

The Environmental Management Program of FY2003

(April 2003 to March 2004)

For inquiries to

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