

Environmental Report

Environmental Report 2003

SHINWA KAIUN KAISHA, LTD.

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Preservation of Marine Environment
 Ensuring Safety Navigation
 Reduction of Consumption of Natural Resources
 Reduction of waste generation
 Reduction of Air Pollutant

Corporate Profile (as of March 31, 2003)

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 84 ships 4,955,110 DWT (K/T)

No. of Employees Shore – 105 Ship – 66 Total – 171

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.

Recipients of Report and Frequency

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

The Environmental Management Program of FY2002 (April 2002 to March 2003) and acquisition of ISO 14001 in April 2003.

(For inquiries to)

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Greeting



At the Earth Summit (United Nations Conference on Environment and Development) held in 1992 in Rio de Janeiro, Agenda 21, an action plan for handing down the precious heritage of the Earth's environment to future generations, was adopted, and activities were initiated on a global scale to tackle this challenging issue. Today, proposals and actions to positively suppress and reduce environmental loads are being witnessed in a variety of fields and serve as a golden rule for enterprises playing their individual roles in exercising social responsibility.

In addition to conventional activities for environmental protection, the Shinwa Kaiun Group acquired a Certificate of Approval of ISO 14001 (Environmental Management System) in the field of marine transport services in April this year. As a result, a variety of activities to control and manage environmental problems raised in association with corporate operations have been clearly defined to help encourage the company to combat environmental problems in accordance with a more specific action plan.

Although the results of a verification of corporate environmental activities during 2002 were not necessarily satisfactory, we are determined to implement the newly built Environmental Management Program to the fullest possible extent, thereby fulfill our social responsibility as an enterprise through an intensification of corporate efforts for **“Preserving the Marine Environment,” “Saving Energy Resources,” “Suppressing the Generation of Wastes,” and “Preserve the Atmospheric Air.”**

This is the second Environmental Report we have issued, and 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 our future guidance.

September 2003
President Yoshikazu Sumi

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Environmental Statute “Ideology and Basic Policies”

Ideology

SHINWA KAIUN KAISHA, LTD. and its group 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 remember safe navigation.

2 Complying with the Laws

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

3 Promoting Energy-Saving Navigation

Perform energy-saving navigation and develop the technologies for improving it.

4 Environment-Friendly Supply Acquisition

Choose environmentally friendly supplies when acquiring vessels, instruments, materials, and other products.

5 Saving Resources and Reducing Waste

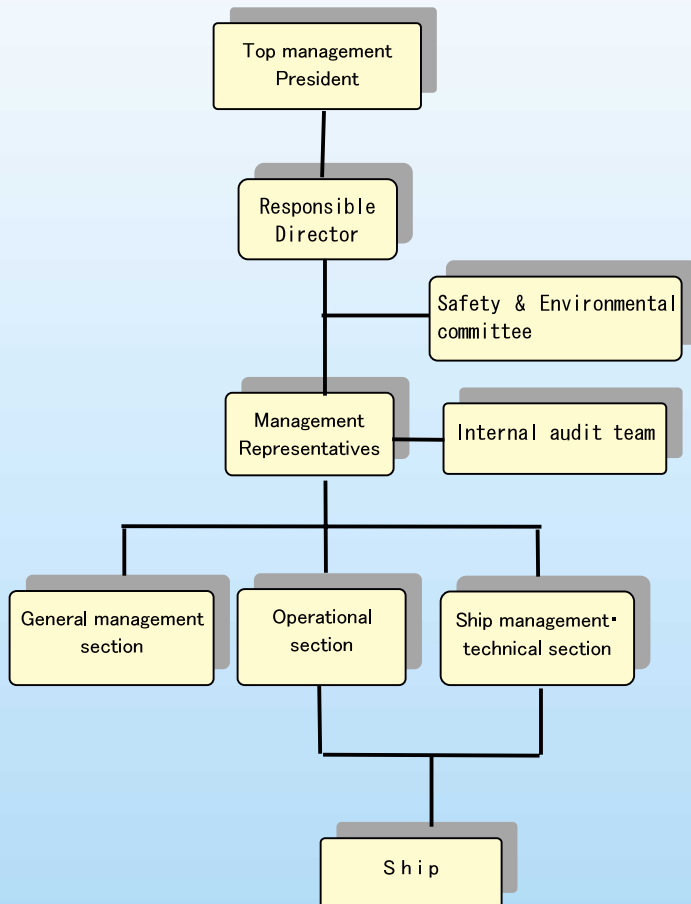
Promote resource saving in all corporate activities, including those in land offices, as well as reducing the amount of waste generated by all facilities.

6 Raising Employees’ Awareness of Environmental Issues

Raise employees’ awareness of environmental issues through environmental education and in-house promotional activities.

Established on Oct .26th 2001

Organization Chart of EMS





Acquisition of Certificate of Approval ISO 14001

The Environment Charter of the Shinwa Kaiun Group was established in October 2001, and our motto of Plan-Do-Check-Action has been in operation continually. In appreciation of our integrated efforts to improve the environment in accordance with the Environmental Management System, a Certificate of Approval of ISO 14001 (International Standards for Environment) was issued to our company by an accreditation organization of Nippon Kaiji Kyokai in April 21, 2003.

The EMS of the Shinwa Kaiun Group has been established for the marine transport services, and covers not only ships, but also shore offices of group companies.

＝Outline of Certificate of Approval＝

International Standard concerned

ISO14001 : 1996

Japanese Industrial Standard concerned

JIS Q 14001 : 1996

Scope of application Marine transport service

Related 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

Yoshikazu Sumi, President assumes the Top Management for EMS, Nobuyuki Daigo, Managing Director is the Responsible Director for EMS, and the person in charge of shore office and the other person in charge of ships are the management Representatives (two persons) for EMS. In addition, the Environment protection working Group is organized by the persons in charge of the environment of the head office and those of group companies.



The certificate was presented by Mr. Tsudo (left), Executive Vice president of NIPPON KAIJI KYOKAI.

Verification of Environment Program 2002

PLAN →		Do →	CHECK	
Enviromental Objectives	Targets for 2002	Contents of activities	Verification result	Evaluati
Preservation of Marine Environment	“Zero” Accidental Oil Spill from Ship	<ul style="list-style-type: none"> On The Job Training Enhanced inspection of sealing device of stern tube during dry docking 	Oil Spill accident “Zero”	○
	Proper Management of Engine bilge & Waste oil	<ul style="list-style-type: none"> On The Job Training 	Illegal waste-disposal “Zero”	○
	Hull Damage “Zero”	<ul style="list-style-type: none"> Accurate calculation of Hull strength Acquisition of CAP Strict inspection of Ballast tank 	No marine pollution due to Hull Damage	○
	25% of Oil Tankers to be Double Hull Construction	<ul style="list-style-type: none"> Promotion Oil tanker of Double hull construction 	Accomplishment	○
	Complete Exchange of Ballast water by Bulk Carriers	<ul style="list-style-type: none"> On The Job Training Compliance with SMS Procedure 	One ship violated SMS Procedure	×
	Adoption of TBT-free paint after 1,Jan 2003	<ul style="list-style-type: none"> Change over from TBT paint to TBT-free paint 	Not Enter Dry-dock between 1,Jan and 31,Mar 2003	-
Reduction of Consumption of Natural Resources	5% Reduction of F.O Consumption as compared with 1990 (per cargo Trunported)	<ul style="list-style-type: none"> On The Job Training 	Reduction of Fuel Oil Consumption “20%” as compared with 1990	○
	5% Reduction of Lub oil consumption over the Previous Year	<ul style="list-style-type: none"> Adoption of Energy-Saving Machineries on new ship 	Reduction of Lub oil consumption “5.5%” over the previous year	○
	1% Reduction of Annual Power Consumption in the office over the Previous Year	<ul style="list-style-type: none"> Make conscious effort. Post notice on bulletin board system in Inter-Office Network Saving of unnecessary lighting. 	4% reduction over the previous year	○
	Promotion of the Recycled Consumables in the office	<ul style="list-style-type: none"> Make conscious effort. 	Achieved the 10 items	○
Reduction of Waste Generation	5% Reduction of Shipboard Waste Generation over the Previous Year	<ul style="list-style-type: none"> Make conscious effort. Waste segregated completely Compliance with SMS Procedure 	16% Increase over previous fiscal year	×
	Abolishment of conventional trash box and separating trash.	<ul style="list-style-type: none"> Separating trash completely 	Trash box was using the conventional stile	×
Reduction of Air Pollutant	Curb of Dioxin	<ul style="list-style-type: none"> Incinerator as IMO standard to be adopted to New Ship 	Incinerator as IMO standard to be adopted to New Ship	—
	5% Reduction of NOx Emission as compared with 1990	<ul style="list-style-type: none"> Installation of New type Engine on new vessel 	Reducible 20% from 1990 fiscal year	○
	5% Reduction of CO2 Emission as compared with 1990	<ul style="list-style-type: none"> Installation of New type Engine on new vessel 	Reducible 20% from 1990 fiscal year	○
	Supply Low-Sulfer Fuel	<ul style="list-style-type: none"> Selection and analysis of Fuel oil. 	<ul style="list-style-type: none"> Fuel oil suited the international standard. 	△
	Consideration on the Ammount of Emission.		<ul style="list-style-type: none"> Not grasp Ammount of Emission 	
	Grasp of figure of CFC Emission.	<ul style="list-style-type: none"> Change to Alternative of CFC Education of crew members 	Not grasp of figure	×
	Curb of Halon (Extinguishant) Discharge	<ul style="list-style-type: none"> Adoption of CO2 Extinguisher or Form Extinguisher for New Ship 	CO2 Extinguisher or Form Extinguisher to be Adopted to New Ship	—

⇒		ACTION ⇒		PLAN	
on	Cause for un-achieved items	The improvement method	Targets for 2003	Contents of activities	
			Zero Accidental Oil Spill from Ship	<ul style="list-style-type: none">• Provide awareness education of Crewmembers• Enhanced inspection of sealing device of stern tube during Dry-docking.• Regular maintenance and calibration of the Oil Detecting Equipment	
	Failure to realize SMS procedure	<ul style="list-style-type: none">• Invite crew's attention by Marine notice• Educate crew on pre-onboard seminar	Complete Exchange of Ballast water by Bulk Carriers	<ul style="list-style-type: none">• Provide awareness Education of Crewmembers• Compliance with SMS Procedure	
	Not Enter Dry-dock in intended period		50% of TBT-free paint adoption	<ul style="list-style-type: none">• Adoption of TBT-free Paint for docking ship and New ship	
			10% Reduction of Fuel Oil Consumption as compared 1990 (per cargo transported)	<ul style="list-style-type: none">• Provide awareness Education of Crewmembers• Information gathering of New product• 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	<ul style="list-style-type: none">• 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)	<ul style="list-style-type: none">• Education of Shore Employees	
	Previous fiscal data was inaccurate.	<ul style="list-style-type: none">• Educate crew on pre-onboard seminar	5% Reduction of Shipboard Waste Generation over the Previous Year	<ul style="list-style-type: none">• Complete segregated collection and retention• Promotion of Recovery and Recycling of Lashing materials	
	Insufficient Preparation	<ul style="list-style-type: none">• Separating trash completely in office• Grasp waste methods in office	Separating trash completely in office(100%)	<ul style="list-style-type: none">• Complete Separation of Recyclables, Combustibles and Noncombustible	
	Not deliver New ship in previous fiscal year.		Curb of Dioxin	<ul style="list-style-type: none">• Incinerator as IMO standard to be adopted to New Ship	
			10% Reduction of NOx Emission per Transport unit over the Year of 1990	<ul style="list-style-type: none">• Installation of New type Engine on new ship	
			10% Reduction of CO2 Emission per Transport unit over the Year of 1990	<ul style="list-style-type: none">• Installation of New type Engine on new ship	
	Fuel analysis is inapplicable to all operating ship. Not grasp content of sulfur in fuel oil.	<ul style="list-style-type: none">• Approximation content to be calculate from results of Management vessels	Supply Low-Sulfur Fuel Consideration on the Ammount of Emission.	<ul style="list-style-type: none">• Selection and analysis of Fuel oil	
	Not nominated person incharge clearly	<ul style="list-style-type: none">• Nominate person in charge clearly	Grasp of figure of CFC Emission.	<ul style="list-style-type: none">• Confirm onboarded figure of CFC• Grasp of figure of CFC Emission.	
	Not deliver New ship in previous fiscal year.		Curb of Halon (Extinguishant) Discharge	<ul style="list-style-type: none">• Adoption of CO2 Extinguisher or Form Extinguisher for New Ship	

Preservation of Marine Environment

Ship operations are inevitably associated with marine environmental loads. Marine environmental loads are not confined to oil spill accidents involving oil tankers, but there are several other significant factors.

In this connection, we give some explanatory notes below on the corporate tasks being addressed to preserve the marine environment.

Bilge Management

The waste water produced in the engine room is called “bilge.” “Bilge” is a mixture of water and oil.

Before discharging overboard the bilge generated, it is processed by special filtering equipment so that only water without any oil contents can be discharged overboard.

This equipment is called an oily-water separator. The water discharged overboard is continuously monitored, and if any oil content is detected, discharging is automatically stopped.

The oily-water separator and monitoring equipment are regularly inspected and well-maintained. The oil contents removed are called waste oil, which is incinerated onboard the ship.



Oily water separator



Oil content monitor

Ballast Water Management

It has been the focus of attention that some marine organisms contained in a large amount of ballast water discharged in foreign waters adversely affect the ecosystem of a region.

Our company had experienced difficulties in ballast water management before introducing the Environmental Management Program. However, we took steps immediately with all ships under our management. Since then, not a single case of a ballast water management problem has been reported.

Hull Painting

Fouling of the ship's hull with barnacles and other marine organisms can decrease ship speed and increase fuel consumption. The application of hull paints containing organotin compounds once proved to be highly effective for preventing such fouling, and a number of ships were coated with anti-fouling paints containing this organic chemical compound.

However, the discovery of detrimental effects upon human bodies of the anti-fouling paint containing organotin compounds resulted in a resolution of IMO to prohibit the use of ship's bottom paints containing organotin compounds on and after January 2003, and further, a finalized draft of the proposed International Convention for the Control and Management of Ships' Ballast Water and Sediments setting requirements for leaching rate of TBT per day before January 2008 was adopted. In our company, hull paints that do not contain organotin compounds have been used for ships during dry-docking surveys and repairs.



Hull Painting at Dry-dock

Ensuring Safety Navigation

To forestall ship casualties, Ship Inspection for Maintenance (once every six months) and Ship Inspection for Safety (once a year) have been enforced for ships under management. In addition, the regular ship inspection system has been applied in a positive manner to chartered ships as well. As a result, safe ship operations and environmental protection have been extensively pursued.

Reduction of Consumption of Natural Resources

Our company achieves efficient ship operations by reducing fuel consumption. In this connection, business activities are being addressed to increase ships engaging in the tramp ship market and select optimum sailing routes for ships under management.

Reduction of Waste Generation

Unfortunately, we failed to achieve the target for controlling shipboard waste discharges. Enhancing the morale of crew members of ships under management is a task for the future.

Discriminating wastes at shore offices has also failed. In the future, Using bulletin-board system in Inter-office Network, we will call the attention of shore employees to the need for achieving the target of discriminating wastes with 100% certainty.

Reduction of Air Pollutant

Incinerator

To prevent the generation of dioxin, incinerators designed to be capable of controlling exhaust gas temperature at the outlet to less than 200°C in a short time are planned to be placed onboard new ships.

Exhaust Gas

Exhaust gas emissions from ships contain air pollutants such as NO_x, which causes acid rain and photochemical smog; SO_x, which causes acid rain; and CO₂, which causes global warming.

To combat NO_x, we plan to build new ships equipped with engines designed and manufactured with technology capable of achieving high levels of NO_x reduction.

To combat SO_x, our task at the moment and in the future is to map out a plan to compute the entire volume of SO_x emissions from all ships under management, including sulfur contents of all fuel oil that have not been identified.

To combat CO₂, we are reducing fuel oil consumption in ships under management through efficient ship operating control.

Emission of Chlorofluorocarbon

Chlorofluorocarbon has been identified as one of the causes of the depletion of the ozone layer. Refrigerating machines to be carried onboard new ships will be selected from among those operated with refrigerants other than chlorofluorocarbon.

Although the precise volume of chlorofluorocarbon emissions (consumption) could not be identified in FY2002, we will make efforts to obtain reliable numerical data by assigning specialist personnel.

