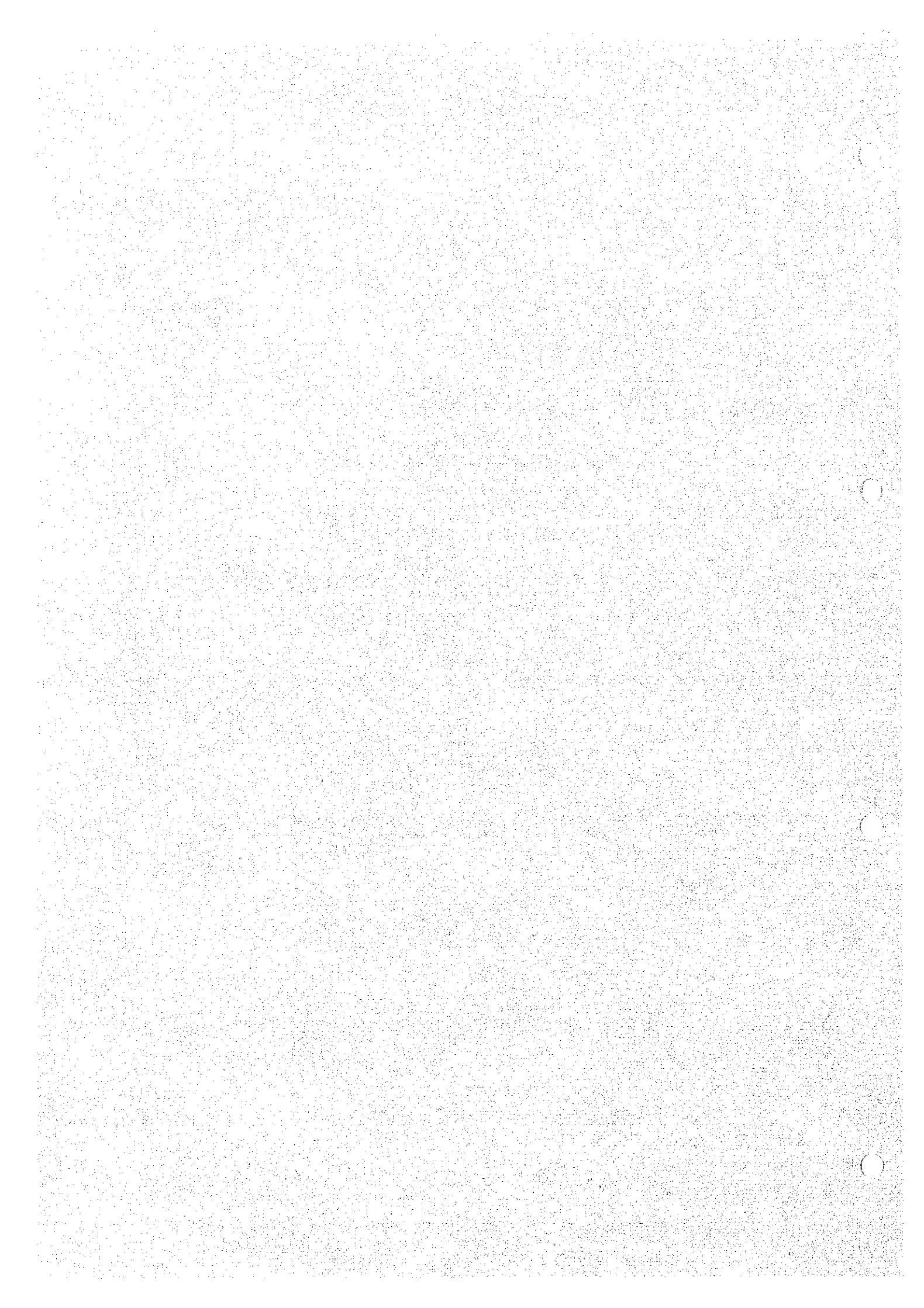


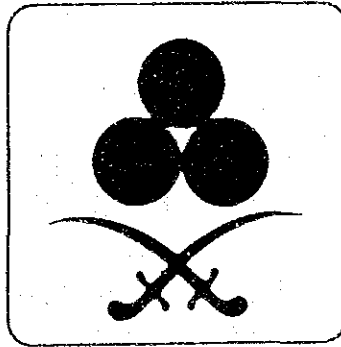
APPENDIX R 3 - 6



APPENDIX R3-6 Environmental Protection Standard
(General Standard Document No. 1409-01,
Saudi Arabia).....

المملكة العربية السعودية
وزارة الدفاع والطيران
مصلحة الارصاد وحماية البيئة

ENVIRONMENTAL PROTECTION STANDARDS
(GENERAL STANDARDS)
DOCUMENT NO. 1409 - 01



Kingdom of Saudi Arabia
Ministry of Defence & Aviation
**METEOROLOGY & ENVIRONMENTAL
PROTECTION ADMINISTRATION (MEPA)**

TRANSLATED FROM THE OFFICIAL ARABIC VERSION

**ENVIRONMENTAL PROTECTION
STANDARDS IN THE KINGDOM
OF SAUDI ARABIA**

(GENERAL STANDARDS)

DOCUMENT NO. 1409 - 01

**Meteorology and Environmental Protection
Administration**

Jeddah

Kingdom of Saudi Arabia

Translated from the official Arabic version

Article		Page
1.	TITLE	05
2.	PURPOSE	05
3.	EFFECTIVE DATE	05
4.	DEFINITIONS	05
5.	APPLICABILITY	07
6.	SCOPE AND INTERPRETATION	07
7.	GENERAL ENVIRONMENTAL STANDARDS APPLICABLE TO NEW FACILITIES	07
8.	GENERAL ENVIRONMENTAL STANDARDS APPLICABLE TO EXISTING FACILITIES	07
9.	EXCEPTIONS	07
10.	AMBIENT AIR QUALITY STANDARDS	08
10-A	Sulfur Dioxide	08
10-A-1	Purpose	08
10-A-2	Standards	08
10-A-3	Measurement Method	08
10-B	Inhalable Particulates (IP)	08
10-B-1	Purpose	08
10-B-2	Standards	08
10-B-3	Measurement Method	08
10-C	Photochemical Oxidants Defined as Ozone (O ₃)	08
10-C-1	Purpose	08
10-C-2	Standard	08
10-C-3	Measurement Method	08
10-D	Nitrogen Oxides Defined as Nitrogen Dioxide (NO ₂)	08
10-D-1	Purpose	08
10-D-2	Standards	09
10-D-3	Measurement Method	09
10-E	Carbon Monoxide (CO)	09
10-E-1	Purpose	09
10-E-2	Standards	09
10-E-3	Measurement Method	09
10-F	Hydrogen Sulfide (H ₂ S)	09
10-F-1	Purpose	09
10-F-2	Standards	09
10-F-3	Measurement Method	09
10-G	Fluorides (F ⁻)	09
10-G-1	Purpose	09
10-G-2	Standards	09
10-G-3	Measurement Method	09
11	AIR POLLUTION SOURCE STANDARDS	10
11-A	Combustion Facilities	10
11-B	Petroleum and Petrochemical Facilities	10
11-B-1	Storage Vessels for Petroleum Liquids	10
11-B-2	FCC Unit Catalyst Regenerators	10
11-B-3	Fuel Gas Combustion Processes	10
11-B-4	Claus Sulfur Recovery Plants	10
11-B-5	Fugitive Emissions	10

Article		Page
11—C	Fertilizer Plants	10
11—D	Cement Plants	11
11—D—1	Cement Kilns	11
11—D—2	Clinker Coolers	11
11—E	Primary Aluminum Reduction Plants	11
11—E—1	Pot Lines	11
11—E—2	Anode Bake Plants	11
11—F	Iron and Steel Plants: Electric Arc Furnaces	11
11—G	Lime Manufacturing Plants: Rotary Kilns	11
11—H	Visible Emission Resulting from Industrial Activities	11
12.	RECEIVING WATER GUIDELINES	11
12—A	Purpose	11
12—B	Guidelines	11
12—B—1	Physio-Chemical Pollutants	12
12—B—2	Organic Pollutants	12
12—B—3	Non-Organic Pollutants	12
12—B—4	Biological Pollutants	13
13.	PERFORMANCE STANDARDS FOR DIRECT DISCHARGE	13
13—A	Purpose	13
13—B	Scope	13
13—C	General Performance Standards	13
13—D	Specific Performance Standards	13
13—D—1	Physio-Chemical Pollutants	13
13—D—2	Organic Pollutants	14
13—D—3	Non-organic Pollutants	14
13—D—4	Biological Pollutants	15
13—E	Mixing Zone	15
14.	PRETREATMENT GUIDELINES FOR DISCHARGE TO CENTRAL TREATMENT FACILITIES	15
14—A	Purpose	15
14—B	Scope	15
14—C	General Pretreatment Guidelines	15
14—D	Specific Pretreatment Guidelines	15
14—D—1	Physio-chemical Pollutants	15
14—D—2	Organic Pollutants	16
14—D—3	Non-organic Pollutants	16
15.	IMPLEMENTATION OBLIGATIONS	16
16.	ENFORCEMENT	16

KINGDOM OF SAUDI ARABIA
MINISTRY OF DEFENCE & AVIATION

METEOROLOGICAL & ENVIRONMENTAL PROTECTION ADMINISTRATION

Pursuant to the Royal Decree No. 7/M/8903 dated 21/4/1401 which assigned the Meteorology and Environmental Protection Administration for the control of pollution and protection of environment in accordance with the arrangement set forth in the decision of the Supreme Commission for administrative reform No. 86 dated 20/8/1399; MEPA has established the following standards.

1 — Title

These standards shall be referred to as the Environmental Protection Standards.

2 — Purpose

The purpose of these standards is to provide appropriate bases for the evaluation and regulation of industrial and urban activities that currently exist in the Kingdom and to help in the planning, design, execution and operation of facilities that will be established in a manner which shall not adversely affect the health, safety and welfare of the people and which shall help in promoting their overall economic and social well-being and in protecting the Kingdom's environment in general.

3 — Effective Date

These standards shall come into force as of the first of D. Qa'dah 1402.

4 — Definitions

Unless the context otherwise requires, terms and expressions stated hereinafter shall have the meanings as defined below.

- 1 — The Administration
means the Meteorological and Environmental Protection Administration established under the Royal Decree No. 7/M/8903 dated 21/4/1401.
- 2 — The General Standards of Environmental Protection
means the standards which express the general policy for pollution control in the Kingdom and apply to the design and operation of facilities.
- 3 — Environmental Quality Standards
means the limits of air, water and land pollution that should not be exceeded.
- 4 — Source Standards
means pollution control technologies and operational practices which reduce pollution from a facility and include as well the standards for discharge of pollutants from their sources.
- 5 — Guidelines
they are not standards and are adopted for cases where baseline information is not sufficient for the issuance of specific standards at the respective time.
- 6 — Facility
means any plant or activity which is expected to be a source of pollution or environmental deterioration.
- 7 — Major Facility
means a facility with sufficient capacity to cause a substantial impact on the quality of ambient air or water.

- 8 — **Public Facility**
means any facility owned or operated by any ministry, department, governmental or semi-governmental unit regardless of its size or function.
- 9 — **Private Facility**
means any facility owned or operated by any natural or artificial organization whether corporate or not.
- 10 — **Modification (i.e. of Facilities)**
means a change in the design or operation of a facility which has the potential to result in increased pollution from the facility. For the purpose of this definition, any replacement of equivalent kind and capacity is not considered a modification.
- 11 — **Major Modification**
means a change in the design or operation of an existing facility with a reasonable likelihood of causing a substantial impact on the quality of air or water. For the purpose of this definition any replacement of equivalent kind and capacity is not considered a modification.
- 12 — **Substantial Impact**
means any impact with a reasonable likelihood of causing exceedance of the applicable standards alone or in combination with the impact of other sources.
- 13 — **Moderate Impact**
an impact which is likely to cause exceedance of the applicable standards only in combination with the impact of other sources.
- 14 — **Minor Impact**
any impact which is not likely to cause exceedance of the applicable standards whether alone or in combination with the impact of other sources.
- 15 — **Toxic Substance**
means any substance which causes death, disability or discomfort for man or animal whenever available in sufficient quantities, either by touch, inhaling or entering through the mouth, taking into consideration the possibility of the concentration of this material in the food chain, or such substance that may cause damage or destruction for plants or animal on touch or when entering into its food.
- 16 — **Inhalable Particulates**
for the purpose of these standards the inhalable particulates shall be considered as any substance dispersed in the atmosphere in the form of individual solid and liquid particles each of which is less than 15 micron in diameter.
- 17 — **Photochemical Oxidants**
are substances produced in the atmosphere where certain active chemical compounds, principally the hydrocarbons and nitrogen oxides, are exposed to sun light. For the purpose of these standards the photochemical oxidants shall include ozone, peroxyacyl, nitrates, organic peroxides and other oxidants which contribute to the increase of the oxidants quantity as measured by the method specified in paragraph C of Article 11.
- 18 — **Receiving Water**
means a surface water body into which pollutants are or may be directly discharged.
- 19 — **Waste Water**
means any contaminated water resulting from the industrial or agricultural processes, or other activities which are of equivalent environmental effect including sanitary sewage.
- 20 — **Mixing Zone**
it is a defined area of water directly adjacent to the area of discharge of contaminants where receiving water quality standards may be exceeded and such area is determined pursuant to paragraph E of Article 13.

- 21 — Pretreatment
means the stage of application of controls to waste water in the industrial areas prior to its discharge to a central treatment facility.
- 22 — Discharge
means addition of contaminants to the ambient air, receiving water or to a central treatment facility.
- 23 — Direct Discharge
means a discharge to receiving waters and not to a central treatment facility.
- 24 — The Best available Technology
means the best available level for controlling pollution in comparison to practices in similar facilities in the Kingdom and other countries.

5 — Applicability

These standards shall apply to all facilities in the Kingdom, existing and newly designed, public and private, except for facilities specifically exempted by MEPA.

6 — Scope and Interpretation

- 1 — These standards consist of the rules appearing herein, including any detailed description of the environmental protection standards and methods of application as issued by MEPA from time to time.
- 2 — MEPA shall be the only authority to interpret and determine the meaning and scope of these standards.
- 3 — MEPA may from time to time amend or supplement these standards as the need arises.

7 — General Environmental Standards Applicable to New Facilities

- 1 — All major new facilities, or major modifications to existing facilities, shall be designed, operated and maintained so as to avoid exceedances of the ambient environmental standards as promulgated for the Kingdom at the time of approval of the design.
- 2 — Each major new facility or major modification to an existing facility shall incorporate the best available technology for control of pollutant discharges, and for the disposal of wastes associated with the operation of the facility.
- 3 — All new facilities and modifications to existing facilities shall be designed and operated so as to avoid the discharge of any toxic substance, whether specifically regulated or not, in quantities sufficient to be harmful to the public health.

8 — General Environmental Standards Applicable to Existing Facilities

- 1 — All major existing facilities shall be operated and maintained so as to avoid exceedances of the ambient environmental standards promulgated for the Kingdom. Additional control technology shall be installed at major existing facilities where necessary so as to avoid exceedance of the ambient environmental standards.
- 2 — Each existing facility shall be operated and maintained so as to avoid the discharge of any toxic substance, whether specifically regulated or not, in quantities sufficient to be harmful to the public health.

9 — Exceptions

The Department shall have the power to grant some facilities, under special circumstances, an exception from the application of some sources or performance standards. MEPA shall evaluate the application submitted by the owner of any facility for obtaining an exception from the application of any special standard. MEPA shall make its decision with respect to each case separately after the owner submits all the required information related to said matter and after making sure that such exception shall not result in exceeding the environmental quality standards and is not detrimental to the public health.

10 — Ambient Air Quality Standards

A — Sulfur Dioxide (SO₂)

A-1 Purpose: The purpose of these standards is to prevent adverse health effects and adverse effects upon vegetation.

A-2 Standards:

- (a) During any 30 day period, the one-hour average SO₂ concentration shall not exceed 730 µg/m³ (0.28 ppm) more than twice at any location.
- (b) During any 12-month period, the 24-hour average SO₂ concentration shall not exceed 365 µg/m³ (0.14 ppm) more than once at any location.
- (c) During any 12-month period, the annual average SO₂ concentration shall not exceed 80 µg/m³ (ppm) at any location.

A-3 Measurement Method: The Pararosaniline Method (WHO 1976) shall be the reference method of measurement of SO₂ concentrations. MEPA shall be responsible for approving equivalent measurement methods.

10 — B Inhalable Particulates (IP)

B-1 Purpose: The purpose of these standards is to protect susceptible populations from adverse health effects, taking into account the synergistic effects associated with the presence of other contaminants.

B-2 Standards:

- (a) During any 12-month period, the 24-hour maximum inhalable particulate concentration shall not exceed 340 µg/m³ more than once at any location.
- (b) During any 12-month period, the annual average inhalable particulate concentration shall not exceed 80 µg/m³ at any location.
(Note: The exceedance of the 24-hour or annual inhalable particulate standard as a result of abnormal natural background concentrations shall not be considered as a violation of the standard.)

B-3 Measurement Method: The concentration of inhalable particulates shall be determined by the use of a size selective high volume sampler. Specifications for equipment and filter media shall conform to standards acceptable to MEPA.

10 — C Photochemical Oxidants Defined as Ozone (O₃)

C-1 Purpose: The purpose of this standard is to prevent significant human discomfort or damage to vegetation and materials.

C-2 Standard: During any 30-day period, the one-hour average concentration of photochemical oxidants shall not exceed 295 µg/m³ (0.15 ppm) more than twice at any location.

C-3 Measurement Method: The chemiluminescence method (WHO 1976) shall be the reference method for measurement of photochemical oxidants as ozone. MEPA will be responsible for approving equivalent measurement methods.

10 — D Nitrogen Oxides Defined as Nitrogen Dioxide (NO₂)

D-1 Purpose: The purpose of these standards is to prevent the development of nitrogen dioxide concentrations which could produce adverse health effects or lead to the production of significant concentrations of photochemical oxidants.

D-2 Standards:

- (a) During any 30 day period, the one-hour average NO_2 concentration shall not exceed $660 \mu\text{g}/\text{m}^3$ (0.35 ppm) more than twice at any location.
- (b) During any 12-month period, the annual average NO_2 concentration shall not exceed $100 \mu\text{g}/\text{m}^3$ at any location.

D-3 Measurement Method: An NO_2 analyzer based on the gas phase chemiluminescence measurement principle of NO with O_3 is designated as the reference method. Specifications for measurement equipment shall conform to standards acceptable to MEPA.

10 — E Carbon Monoxide (CO)

E-1 Purpose: The purpose of these standards is to prevent short-term adverse health effects in sensitive population groups and in normal exercising population groups.

E-2 Standards:

- (a) During any 30-day period, the one-hour average CO concentration shall not exceed $40 \text{ mg}/\text{m}^3$ (35 ppm) more than twice at any location.
- (b) During any 30-day period, the 8-hour average CO concentration shall not exceed $10 \text{ mg}/\text{m}^3$ (9 ppm) more than twice at any location.

E-3 Measurement Method: The nondispersive infrared (MDIR) technique (WHO 1972) will be the reference method for CO. MEPA will be responsible for approving equivalent measurement methods.

10 — F Hydrogen Sulfide (H_2S)

F-1 Purpose: The purpose of these standards is to protect human and animal health, and to avoid the nuisance caused by exposure to H_2S . (These standards will not completely prevent materials damage; therefore, special materials preservation step should be taken in regions where elevated H_2S levels are expected.)

F-2 Standards:

- (a) During any 12 month period, the one-hour average H_2S concentration shall not exceed $200 \mu\text{g}/\text{m}^3$ (0.14 ppm) more than once at any location.
- (b) During any 12-month period, the 24-hour average H_2S concentration shall not exceed $40 \mu\text{g}/\text{m}^3$ (0.03 ppm) more than once at any location.

F-3 Measurement Method: The Gas Bubbler-Methylene Blue method (APHA 1972) shall be the reference method for H_2S . MEPA will be responsible for approving equivalent measurement methods.

10 — G Fluorides (F-)

G-1 Purpose: The purpose of this standard is to protect against adverse effects on vegetation and grazing animals.

G-2 Standards: During any 30-day period, the monthly average fluoride concentration shall not exceed $1.0 \mu\text{g}/\text{m}^3$ (0.001 ppm) at any location.

G-3 Measurement Method: The specific ion electrode (Thompson et al. 1971) method shall be the reference method for fluoride measurement. MEPA will be responsible for approving equivalent measurement methods.

11. Air Pollution Source Standards

11 — A Combustion Facilities: All fossil fuel fired boilers and furnaces having a heat input capacity equal to or greater than 30 megawatts (100 MBTU/hr.) shall utilize appropriate gas cleaning equipment to limit emissions to the following rates:

- (1) 43 ng/j (0.1 lb/MBTU) of total particulates
- (2) 1 μ g/j (2.3 lb/MBTU) of SO₂
- (3) 130 ng/j (0.3 lb/MBTU) of NO_x for oil fired facilities
- (4) 86 ng/j (0.2 lb/MBTU) of NO_x for gas fired facilities

11 — B Petroleum and Petrochemical Facilities

B-1 Storage Vessels for Petroleum Liquids Storage vessels for volatile organic compounds (VOC) which have a capacity greater than 1000 barrels (5614 cubic feet) shall be equipped for vapor emission control as follows:

- (a) Vapor recovery or equivalent systems are required for VOC having a vapor pressure in excess of 570 mm Hg. Floating roof tanks shall be considered adequate for storage of crude oil providing a consistent seal inspection and reporting program is implemented by owner.
- (b) Floating roof with double boot seal or equivalent systems are required for VOC having a vapor pressure in excess of 78 mm Hg (1.5 psi) but less than 570 mm Hg (11 psi)

B-2 FCC Unit Catalyst Regenerators

FCC unit catalyst regenerators shall utilize:

- (a) CO boilers or high temperature regeneration to limit CO emissions to 500 ppm and
- (b) appropriate air cleaners to limit particulate emissions to 1.0 kg per metric ton of coke burn-off.

B-3 Fuel Gas Combustion Process

Fuel gas combustion process shall utilize amine scrubbing or other appropriate gas cleaning process to limit H₂S content of fuel gases to 230 mg per dry standard cubic meters (150 ppm).

B-4 Claus Sulfur Recovery Plants

Sulfur recovery plants shall utilize a two-or three-stage Claus process to achieve at least 95% recovery of total sulfur.

B-5 Fugitive Emission

Fugitive emission of VOC from Petroleum and Petrochemical process shall be limited through the utilization of good maintenance and inspection procedures as well as monitoring of potential VOC emission points.

11 — C Fertilizer Plants

Fertilizer plant purge gases shall be controlled by incineration or other acceptable cleaning method to ensure 99 percent removal of volatile organic compounds.

11 — D Cement Plants

D-1 Cement Kilns

Emissions from cement kilns shall be controlled by electrostatic precipitators, fabric filters or other suitable means to limit the emission of particulates to no more than 0.15 kg/metric ton.

D-2 Clinker Coolers

Emissions from clinker coolers shall be controlled by fabric filters or other suitable means to limit the emission of particulates to no more than 0.05 kg/metric ton.

11 — E Primary Aluminum Reduction Plants

E-1 Pot Lines

Emission from aluminum reduction pot lines shall be controlled by suitable air cleaning equipment to limit the emission of total fluorides to no more than 1.25 kg/metric ton.

E-2 Anode Bake Plants (plus Pole Heating Plants)

Emissions from anode bake plants (plus pole heating plants) shall be controlled by suitable air cleaning equipment to limit the emission of total fluorides to no more than 0.05 kg/metric ton.

11 — F Iron and Steel Plants: Electric Arc Furnaces

Emissions from electric arc furnaces shall be controlled by suitable gas cleaning equipment to limit the emission of particulates to 12 mg/dscm.

11 — G Lime Manufacturing Plants: Rotary Kilns

Emissions from rotary kilns shall be controlled by suitable gas cleaning equipment to limit the emission of particulates to no more than 0.2 kg/metric ton of limestone feed material.

11 — H Visible Emissions from Industrial Activities

Visible emissions from all industrial activities (except for water vapor) shall be controlled to 20% maximum capacity except for three-minutes during any continuous sixty-minute period.

12. Receiving Water Guidelines

12 — A Purpose: These guidelines for receiving water quality are intended to provide guidance for the location, design and operation of new facilities and modifications to existing facilities, and for the operation of existing facilities, pending development of receiving water standards.

12 — B Guidelines: The following guidelines for receiving water quality apply at the edge of the mixing zone and beyond for the discharge from any facility to the coastal waters. Unless otherwise stated, each interim guideline refers to a thirty-day average.

B — 1 Physio-chemical Pollutants

<u>(Pollutants)</u>	<u>(Guidelines at edge of mixing zone)</u>
(a) Floatables	Non attributable to the discharge
(b) PH	0.1 PH units (maximum change from typical local baseline conditions)
(c) Total suspended solids (TSS)	5% (all references to percentage are maximum changes from typical local baseline conditions) (in this and following paragraphs)
(d) Temperature	1°C (maximum change from typical local baseline conditions)
(e) Oil and grease	Management measures required*
(f) Dissolved Oxygen (DO)	5%
(g) Turbidity	5%

* Facilities using, transferring or storing oil and petroleum hydrocarbons are required to prepare, maintain and update a spill prevention, control and clean-up plan.

B — 2 Organic Pollutants

<u>(Pollutants)</u>	<u>(Guidelines at edge of mixing zone)</u>
(a) Chemical Oxygen demand (COD)	5%
(b) Total organic carbon (TOC)	5%
(c) Total kjeldahl nitrogen (TKN)	5%
(d) Chlorinated Hydrocarbons	5%
(e) Oil and Grease	5%
(f) Phenolics	5%

B — 3 Non-organic Pollutants

<u>(Pollutants)</u>	<u>(Guidelines at edge of mixing zone)</u>
(a) Ammonia	5%
(b) Arsenic	5%
(c) Cadmium	5%
(d) Chloride	5%

(e)	Residual Chlorine	5%
(f)	Total Chromium	5%
(g)	Copper	5%
(h)	Total Cyanide	5%
(i)	Lead	5%
(j)	Mercury	5%
(k)	Nickel	5%
(l)	Total Phosphate	5%
(m)	Zink	5%
(n)	Dissolved Oxygen	5%

B — 4 Biological Pollutants

<u>(Pollutants)</u>	<u>(Guidelines at edge of mixing zone)</u>
(a) Total Coliform	70 most probable number per 100 ML (average for 30 day period).

13. Performance Standards for Direct Discharge

A — Purpose: Performance standards for direct discharge are intended to require waste water source to adopt best practical controls.

B — Scope: Performance standards for direct discharge apply to sanitary sewage, surface runoff (including fire control waters), cooling water discharges, boiler water conditioning blowdown, process wastewaters, and any other wastewater.

C — General Performance Standards: Wastewaters of different character shall be segregated to the maximum extent possible. Uncontaminated surface runoff and once-through cooling waters may be discharged to receiving waters without treatment.

D — Specific Performance Standards: The following performance standards apply to wastewaters at the end of the outfall and before discharge to coastal waters or to any channel of wastewater.

D — 1 Physio-Chemical Pollutants

<u>(Pollutants)</u>	<u>(Allowable effluent Level)</u>
(a) Floatables	None
(b) PH	6-9 pH units
(c) Total Suspended solids (TSS)	15 mg/l (max.)

- (d) Temperature MEPA determines the thermal properties of discharged water to fit the properties of receiving water and such properties are determined on a case by case basis.
- (e) Turbidity 75 NTU (max.)

D — 2 Organic Pollutants

<u>(Pollutants)</u>	<u>(Allowable Effluent Level)</u>
(a) Biochemical Oxygen Demand	25 mg/l
(b) Chemical Oxygen Demand	150 mg/l
(c) Total Organic Carbon (TOC)	50 mg/l
(d) Total kjeldahl nitrogen (TKN)	5 mg/l
(e) Total Chlorinated Hydrocarbons	0.1 mg/l
(f) Oil and Grease	8 mg/l (not to exceed 15 mg/l in any individual discharge)
(g) Phenols	0.1 mg/l

D — 3 Non-organic Pollutants

<u>(Pollutants)</u>	<u>(Allowable Effluent Level)</u> <u>30-day Average)</u>
(a) Ammonia (as nitrogen)	1.0 mg/l
(b) Arsenic	0.1 mg/l
(c) Cadmium	0.02 mg/l
(d) Chlorine (residual)	0.5 mg/l
(e) Chromium (total)	0.1 mg/l
(f) Copper	0.2 mg/l
(g) Cyanide	0.05 mg/l
(h) Lead	0.1 mg/l
(i) Mercury	0.001 mg/l
(j) Nickel	0.2 mg/l
(k) Phosphate (Total) (as Phosphorous)	1.0 mg/l
(l) Zinc	1.0 mg/l

D — 4 Biological Pollutants

<u>(Pollutant)</u>	<u>(Allowable Effluent Level — 30-day Average)</u>
(a) Total Coliform	1000 MPN per 100 ml

E — Mixing Zone

Each direct discharge shall be adequately dispersed and mixed with the receiving waters. A mixing zone shall be designed to minimize adverse effects to designated beneficial uses. Adequacy of the mixing zone shall be determined on a case-by-case basis.

14. Pretreatment Guidelines for Discharge to General Treatment Facilities.

- A — Purpose: Pretreatment guidelines are intended to provide guidance for the removal of substances that significantly effect the performance of the central treatment facilities, and substances that are not adequately controlled at central treatment facilities.
- B — Scope: Pretreatment guidelines and standards apply to all facilities and modifications covered by the environmental standards which discharge to a central industrial or municipal wastewater treatment facility.
- C — General Pretreatment Guidelines: Wastewaters of different character shall be segregated to the maximum extent possible. Sanitary wastes may be sent to a central treatment facility without pretreatment. Contaminated wastewaters other than sanitary wastes shall be treated on-site to meet applicable pretreatment requirements.
- D — Specific Pretreatment Guidelines: The following pretreatment guidelines apply to wastewater before discharge to a central treatment facility. The pretreatment guidelines provide a range for allowable levels of pollution in the effluent.

D — 1 Physio-chemical Pollutants

<u>(Pollutants)</u>	<u>(Guidelines)</u>
(a) Total suspended Solids (TSS)	2,000 mg/l (max.)
(b) pH	5-10 pH units
(c) Temperature	60° C (max.)

D — 2 Organic Pollutants

<u>(Pollutants)</u>	<u>(Guidelines)</u>
(a) Chemical Oxygen Demand	1,500 mg/l
(b) Total organic carbon	1,000 mg/l
(c) Oil and Grease	120 mg/l
(d) Phenols	150 mg/l

- (e) Total chlorinated Hydrocarbons 0.5 mg/l

D — 3 Non-organic Pollutants

<u>(Pollutants)</u>	<u>(Guidelines)</u>
(a) Arsenic	1.0 mg/l
(b) Cadmium	0.5 mg/l
(c) Chromium (Total)	2.0 mg/l
(d) Copper	1.0 mg/l
(e) Cyanide (Total)	1.0 mg/l
(f) Lead	1.0 mg/l
(g) Mercury	0.01 mg/l
(h) Nickel	2.0 mg/l
(i) Zinc	10.0 mg/l

15. Implementation Obligations

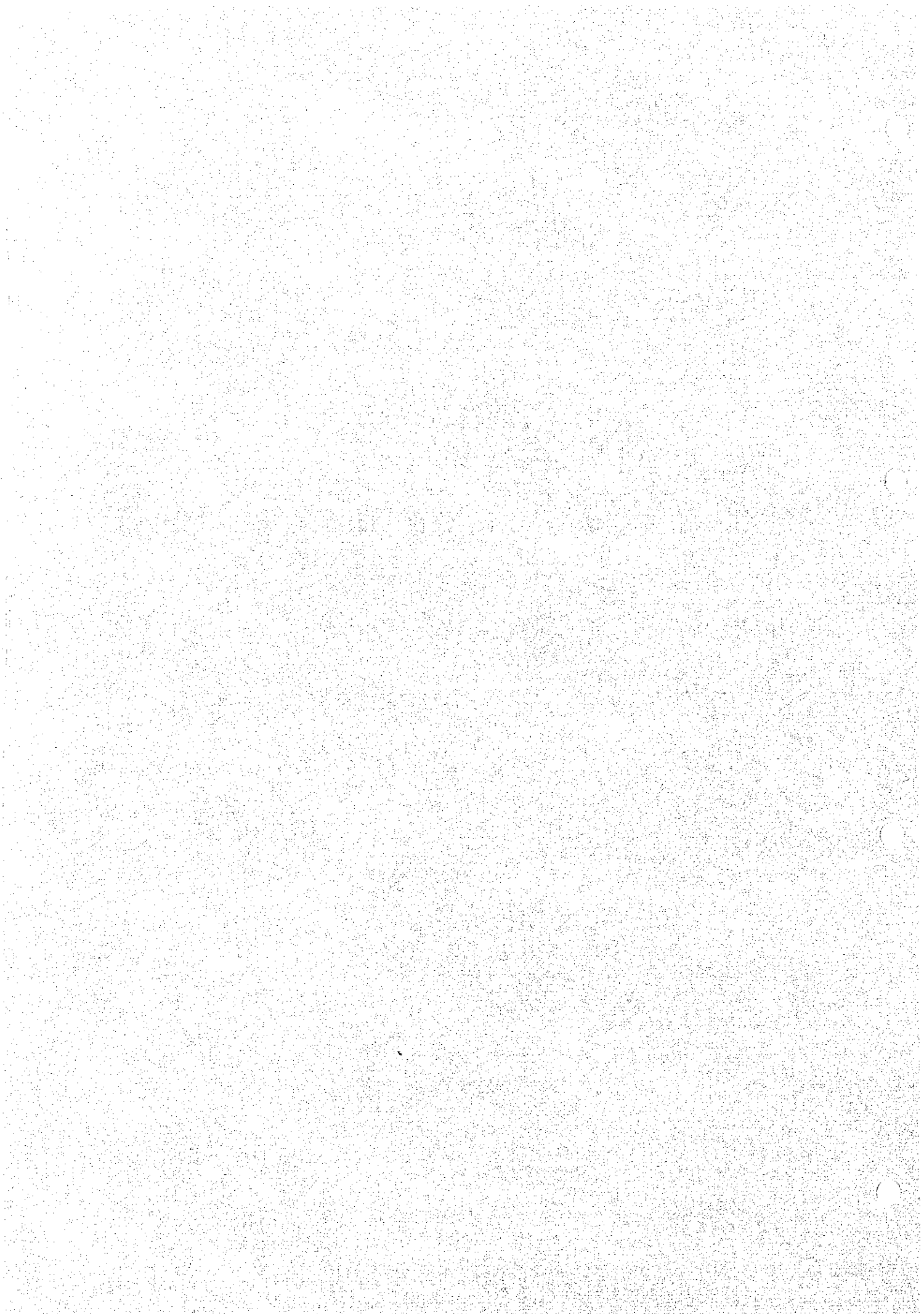
- 1 — It shall be the duty and obligation of the owners, planners and operators of new facilities and modification to existing facilities to ensure that such facilities are located, designed and operated in accordance with these standards.
- 2 — It shall be the duty and obligation of owners and operators of existing facilities to ensure that such facilities are operated in accordance with these standards.
- 3 — Subject to other official requirements, owners and operators proposing to build a new facility must contact MEPA and provide specific required data to MEPA including relevant planning and design details indicating the pollution control measures to be taken. MEPA shall review such data and grant written permit within a period not exceeding 3 months after the date of receiving such data from other departments and facilities, prior to execution of such facilities.
- 4 — Owners and operators of existing facilities are required to supply specific required data to MEPA following notification by MEPA. MEPA may request the carrying out of tests, investigations or analysis to insure compliance with the standards in any existing facility. The owners and operators of existing facilities shall be deemed responsible for submitting data relating to the existing facilities even if they don't receive notification by MEPA requesting such information.

16. Enforcement

- 1 — It shall be the responsibility of MEPA to ensure that compliance with these standards is enforced.
- 2 — Every application for a license to construct a new facility or introduce a major modification to an existing facility which is submitted to the competent authority must enclose a certificate stating that MEPA has evaluated the existing facility or the plans for the new facility and ascertained that the subject facility complies with these standards.

- 3 — In case where MEPA finds that the design of a planned new facility does not incorporate adequate control measures to comply with the standards, MEPA shall so inform the applicable licensing authority and request that a license not be issued to the facility until it rectifies the specific defects cited by MEPA. The facility owners shall also be informed.
- 4 — In case where MEPA finds that an existing facility is contravening these standards, MEPA shall so inform that facility and request that it be rectified according to a designated schedule. If the contravention continues, MEPA may address a final warning to the facility. If the warning fails to produce positive results, MEPA shall inform the licensing authority concerned and request that the license of the facility be suspended or withdrawn.
- 5 — MEPA shall carry out spot inspection of any facility to assess compliance with these standards without prior notice or warning.

APPENDIX R3-7



APPENDIX R3-7 Public Nuisance Countermeasures Basic Law
(Law No. 132, Aug. 3, 1967, Japan)

PUBLIC NUISANCE
COUNTERMEASURES
BASIC LAW

(Law No. 132, Aug. 3, 1967)

EHS LAW BULLETIN SERIES

EHS Vol. VII

YA

AMENDMENTS:

- ① Law No. 132, Dec. 25, 1970
- ② Law No. 88, May 31, 1971
- ③ Law No. 111, Oct. 5, 1973
- ④ Law No. 84, Jun. 11, 1974

Note: Circled numbers after title of each Article indicate the amendments thereto, the amending laws being referred to above as well as in Supplementary Provisions with the same circled numbers.

**□ PUBLIC NUISANCE COUNTERMEASURES
BASIC LAW**

(Law No. 132, Aug. 3, 1967)

CONTENTS

CHAPTER I	GENERAL PROVISIONS	(Articles 1-8)
CHAPTER II	BASIC POLICIES AND MEASURES CONCERNING PREVENTION OF PUBLIC NUISANCE	
Section 1	Environmental Standards	(Article 9)
Section 2	Policies and Measures of the Country	(Articles 10-17-2)
Section 3	Policies and Measures of Local Public Entity	(Article 18)
Section 4	Prevention of Public Nuisance in Specified Area	(Articles 19, 20)
Section 5	Disposal of Disputes Pertaining to Public Nuisance and Rescue of Damages	(Article 21)
CHAPTER III	BEARING OF EXPENSES AND FINANCIAL MEASURES, ETC.	(Articles 22-24)
CHAPTER IV	PUBLIC NUISANCE COUNTERMEASURES CONFERENCE AND PUBLIC NUISANCE COUNTERMEASURES COUNCIL	
Section 1	Public Nuisance Countermeasures Conference	(Article 25, 26)
Section 2	Public Nuisance Countermeasures Council	(Articles 27-30)
SUPPLEMENTARY PROVISIONS		

CHAPTER 1

GENERAL PROVISIONS

(Purpose) ①

Article 1. The purpose of this Law shall, in view of the extreme importance of prevention of public nuisance for assuring wholesome and cultured living of the nationals, be to plan the all-round promotion of public nuisance policies, and to preserve the living environment together to protect the health of the nationals, by means of making clear the responsibilities of the enterprisers, the State and the local public entities concerning prevention of public nuisance, as well as of prescribing the basic matters of policies and measures concerning prevention of public nuisance.

(Definitions) ①

Article 2. "Public nuisance" in this Law shall mean the occurrence of damages pertaining to human health or living environment due to contamination of atmosphere in considerable scope caused incidentally to human activities, such as business activities, pollution of water quality (including deterioration of water condition other than water quality or of bottom quality of water bottom; hereinafter the same excluding Article 9 paragraph 1), contamination of soil, noise, vibration, subsidence of ground (excluding those due to excavation of ground for digging minerals; hereinafter the same), and malodor.

2. "Living environment" in this Law shall include the property having intimate relation to human living, as well as the animals and plants having intimate relation to human living, and the growing environment thereof.

(Responsibility of enterpriser) ①

Article 3. The enterpriser shall have the responsibility to cooperate with the policies and measures concerning prevention of public nuisance executed by the State or local public entities, together with taking the necessary measures for preventing public nuisance, such as disposition of the smoke, sanitary waste, or the solid waste, etc. accrued incidentally to the business activities thereof.

2. The enterpriser must, in manufacture, process, etc. of

articles, endeavor to contribute to prevent the occurrence of public nuisance caused by using the products pertaining to the manufacture, process, etc.

(Responsibility of the State)

Article 4. The State shall, in view of its mission to protect the health of the nationals and to preserve the living environment, have the responsibility of preparing and executing the fundamental and all-round policies and measures concerning prevention of public nuisance.

(Responsibility of local public entity)

Article 5. The local public entity shall, for protecting the health of the residents and preserving the living environment thereof, have the responsibility of preparing and executing the policies and measures concerning prevention of public nuisance in compliance with the natural and social conditions of said area, together with taking the policies and measures in a similar way to the policies and measures of the State.

(Responsibility of residents)

Article 6. The residents must endeavor to contribute to prevent public nuisance by cooperating to the policies concerning prevention of public nuisance executed by the State or the local public entities.

(Annual report, etc.)

Article 7. The Government must every year submit to the Diet the report concerning the circumstances of public nuisance and the policies and measures having been taken by the Government in relation to prevention of public nuisance.

2. The Government must every year prepare the documents clarifying the policies and measures to be taken in consideration of the circumstances of public nuisance pertaining to the report under the preceding paragraph, and submit them to the Diet.

(Prevention of contamination of atmosphere, etc. caused by radioactive materials) ①

Article 8. The measures for preventing contamination of atmosphere, pollution of water quality, and contamination of soil shall be prescribed by the Atomic Energy Basic Law (Law No. 186 of 1955) and other related laws.

CHAPTER II
BASIC POLICIES AND MEASURES CONCERNING
PREVENTION OF PUBLIC NUISANCE

Section 1

Environmental Standards

(Environmental Standards) ①

Article 9. The Government shall, with respect to the environmental conditions pertaining to contamination of atmosphere, pollution of water quality, contamination of soil, and noise, prescribe the standards desirable to be maintained for protecting human health and preserving living environment.

2. In the case where the standards under the preceding paragraph are prescribed in establishing two or more categories, and further as those in designating the land area or water area applicable of respective categories, the Government may entrust the designation of the land area or water area to the Prefectural Governor.

3. The standards under paragraph 1 must always be given proper scientific judgment, and given necessary amendments.

4. The Government must endeavor so that the standards under paragraph 1 are maintained, by taking the policies and measures concerning prevention of public nuisance all-roundly and effectively and well-directedly.

Section 2

Policies and Measures of the State

(Control concerning discharge, etc.) ①

Article 10. The Government must, for preventing public nuisance, take the measures of control concerning discharge, etc. of the materials causable of contamination of atmosphere, pollution of water quality, or contamination of soil, by prescription, etc. of the standards to be abided by enterprisers, etc.

2. The Government must, for preventing public nuisance, endeavor to take necessary measures in a similar way to the preceding paragraph, with respect to noise, vibration, subsidence of ground, and malodor.

(Control concerning land-utilization and facility-establishment)

VII (YA 4)

Article 11. The Government must, for preventing public nuisance, take the measures to control establishment of the facilities causable of public nuisance with respect to the areas in which public nuisance is extreme or feared to become extreme, together with taking the measures of necessary control in relation to land-utilization.

(Promotion of adjustment, etc. of facilities concerning prevention of public nuisance) ①

Article 12. The Government must take the measures of promoting the enterprises necessary for preventing public nuisance, such as establishment, etc. of buffer zone, and the enterprises for adjusting sewerage, public facilities of disposing wastes, and other public facilities contributable to prevent public nuisance.

(Adjustment of system for watching, measuring, etc.)

Article 13. The Government must endeavor to adjust the systems of watching, measuring, examining and inspecting necessary for properly enforcing the control for grasping the circumstances of public nuisance and preventing public nuisance.

(Enforcement of investigation)

Article 14. The Government must enforce the investigation concerning preestimate of public nuisance, and other investigation necessary for preparing the policies and measures for preventing public nuisance.

(Promotion of scientific technique)

Article 15. The Government must, for the purpose of promoting the scientific technique contributable to prevent public nuisance, take necessary measures, such as adjustment of the system of examination and research, promotion of research and development, dissemination of the results, and education of researchers, etc.

(Dissemination, etc. of knowledge)

Article 16. The Government must endeavor to elevate the idea of preventing public nuisance, together with disseminating the knowledge concerning public nuisance.

(Consideration to prevention of public nuisance in area development policies and measures, etc.)

Article 17. The Government must give consideration to prevention of public nuisance, in preparing and enforcing the poli-

cies and measures concerning development of cities, development and adjustment of inducement, etc. areas of enterprises.

(Protection of natural environment) ㊦

Article 17-2. The Government must endeavor to preserve the open spaces or otherwise protect the natural environments so as to contribute to prevent public nuisance, in cooperation with other policies and measures as prescribed in this Section.

Section 3

Policies and Measures of Local Public Entity

(Policies and measures of local public entity)

Article 18. The local public entity shall, within the limit of not violating laws and ordinances, enforce, in addition to taking the policies and measures similar to the policies and measures of the State as prescribed in the preceding Section, other policies and measures necessary for preventing public nuisance in compliance with the natural and social conditions of said area. In this case, the To, Do, Fu or Prefecture shall mainly adjust all-roundly the policies and measures in great-sphere and the policies and measures executed by a city, town or village.

Section 4

Prevention of Public Nuisance in Specified Area

(Preparation of public nuisance prevention plan)

Article 19. The Prime Minister shall, with respect to the area coming under any of the following, indicate the fundamental principle of the plan pertaining to the policies and measures concerning prevention of public nuisance (hereinafter referred to as the "public nuisance prevention plan") to be enforced in said area, and instruct the concerned Prefectural Governor to prepare said plan:

- (1) Area where public nuisance is extreme, and further is recognized to become remarkably difficult to be prevented if the policies and measures concerning prevention of public nuisance are not all-roundly taken;
- (2) Area where public nuisance is feared to become extreme due to rapid concentration, etc. of population and industry, and further is recognized to become remarkably difficult to be

prevented if the policies and measures concerning prevention of public nuisance are not all-roundly taken.

2. The concerned Prefectural Governor shall, on receiving the instruction under the preceding paragraph, prepare the public nuisance prevention plan based on the fundamental principle under said paragraph, and obtain the approval of the Prime Minister.

3. The Prime Minister must, on effecting the instruction under paragraph 1 and the approval under the preceding paragraph, in advance refer to the Public Nuisance Countermeasures Council.

4. The Prime Minister must, on effecting the instruction under paragraph 1, in advance hear the opinion of the concerned Prefectural Governor.

(Promotion to achieve public nuisance prevention plan)

Article 20. The State and local public entity shall endeavor to take the measures necessary for achieving the public nuisance prevention plan.

Section 5

Disposal of Disputes Pertaining to Public Nuisance and Rescue of Damages

(Disposal of disputes pertaining to public nuisance and rescue of damages) ④

Article 21. The Government must take necessary measures for establishing the dispute disposal system, such as intermediation or conciliation, etc. in the event that the dispute pertaining to public nuisance should occur.

2. The Government must take necessary measures for establishing the system for smoothly enforcing the rescue concerning the damages pertaining to public nuisance.

CHAPTER III
BEARING OF EXPENSES AND
FINANCIAL MEASURES, ETC.

(Bearing of expenses)

Article 22. The enterpriser shall, with respect to the scheme enforced by the State or the local public entity for preventing the public nuisance due to the business activities, bear the whole or a part of the expenses needed for said scheme.

2. The scope of expenses to be the object of bearing in the case where the expenses under the preceding paragraph shall be borne by the enterprisers in accordance with the provision of said paragraph, the scope of the enterprisers to bear the expenses, the calculation method of the amounts to be borne by respective enterprisers, and other necessary matters concerning the bearing shall be prescribed by law separately.

(Financial measures toward local public entity)

Article 23. The State must, with respect to the expenses needed for being taken the policies and measures for preventing public nuisance by the local public entity, endeavor to take necessary financial measures and other measures.

(Aid toward enterprisers)

Article 24. The State or local public entity must, with respect to equipping the facilities for preventing public nuisance by the enterprisers, endeavor to take necessary financial and taxation measures or other measures.

2. In taking the measures under the preceding paragraph, a special consideration must be give to middle and small enterprisers.

CHAPTER IV
PUBLIC NUISANCE COUNTERMEASURES
CONFERENCE AND PUBLIC NUISANCE
COUNTERMEASURES COUNCIL

Section 1

Public Nuisance Countermeasures Conference

(Establishment and jurisdiction)

Article 25. The Prime Minister's Office shall have the Public Nuisance Countermeasures Conference (hereinafter referred to as the "Conference") as its subordinate organ.

2. The Conference shall be in charge of the business as mentioned in the following:

- (1) To dispose of the matters under the provision of Article 19 paragraph 3, in relation to the public nuisance prevention plan;
- (2) In addition to those mentioned in the preceding paragraph, to deliberate in relation to planning the fundamental and all-round policies and measures concerning prevention of public nuisance, and to promote enforcement of the policies and measures;
- (3) In addition to those mentioned in the preceding two paragraphs, the business belonging to its power by virtue of the provisions of laws and ordinances.

(Organization, etc.) ①②

Article 26. The Conference shall be composed of the chairman and the members.

2. The Prime Minister shall be the chairman.

3. The members shall be appointed by the Prime Minister from among the Chiefs of the concerned administrative agencies.

4. The Conference shall have the executive secretaries.

5. The executive secretaries shall be appointed by the Prime Minister from among the personnel of the concerned administrative agencies.

6. The executive secretaries shall assist the chairman and the members, with respect to the business under charge of the Conference.

7. The miscellaneous business of the Conference shall be disposed by the Director-General's Secretariat of the Environmental Agency.

8. In addition to those prescribed by the preceding respective items, necessary matters concerning organization and management of the Conference shall be prescribed by Cabinet Order.

Section 2

Public Nuisance Countermeasures Council

(Central Public Nuisance Countermeasures Council) ㊟

Article 27. The Environmental Agency shall have the Central Public Nuisance Countermeasures Council (hereinafter referred to as the "Council") as its subordinate organ.

2. The Council shall be in charge of the business as mentioned in the following:

- (1) To investigate and deliberate on the fundamental matters concerning the countermeasures to public nuisance, in compliance to the inquiries of the Prime Minister;
- (2) To investigate and deliberate on the important matters concerning the countermeasures to public nuisance, in compliance to the inquiries of the Director-General of the Environmental Agency or the concerned Ministers;
- (3) In addition to those mentioned in the preceding two items, the business belonging to its power by virtue of the provisions of laws and ordinances.

3. The Council may, concerning the matters as provided for in the preceding paragraph, state its opinion to the Prime Minister, the Director-General of the Environmental Agency, or the concerned Ministers.

(Ditto) ㊟㊟㊟

Article 28. The Council shall be composed of the members of not more than ninety.

2. The members shall be appointed by the Prime Minister from among persons of knowledge and experience concerning public nuisance countermeasures.

3. The members shall be on part-time service.

4. The miscellaneous business of the Council shall be disposed by the Director-General's Secretariat of the Environmental

Agency.

5. In addition to those as prescribed by the preceding respective items, the necessary matters concerning organization and management of the Council shall be prescribed by Cabinet Order.

(Prefectural Public Nuisance Countermeasures Council)

Article 29. To, Do, Fu or Prefecture shall have the Prefectural Public Nuisance Countermeasures Council, for having it investigate and deliberate on the fundamental matters concerning the countermeasures to public nuisance in the concerning To, Do, Fu or Prefecture.

2. The necessary matters concerning organization and management of the Prefectural Public Nuisance Countermeasures Council shall be prescribed by the statutes of the concerned To, Do, Fu or Prefecture.

(City, Town or Village Public Nuisance Countermeasures Council) ①

Article 30. A city, town or village may, as prescribed by the statute, have the City, Town or Village Public Nuisance Countermeasures Council, for having it investigate and deliberate on the fundamental matters concerning the countermeasures to public nuisance in the concerned city, town or village.

SUPPLEMENTARY PROVISIONS

1. This Law shall come into force as from the day of its promulgation.

SUPPLEMENTARY PROVISIONS (Law No. 132, Dec. 25, 1970): ①

1. This Law shall come into force as from the day of its promulgation.

SUPPLEMENTARY PROVISIONS (Law No. 88, May 31, 1971):

②

(Enforcement date)

Article 1. This Law shall come into force as from July 1, 1971.

SUPPLEMENTARY PROVISIONS (Law No. 111, Oct. 5, 1973) ③

(Enforcement date)

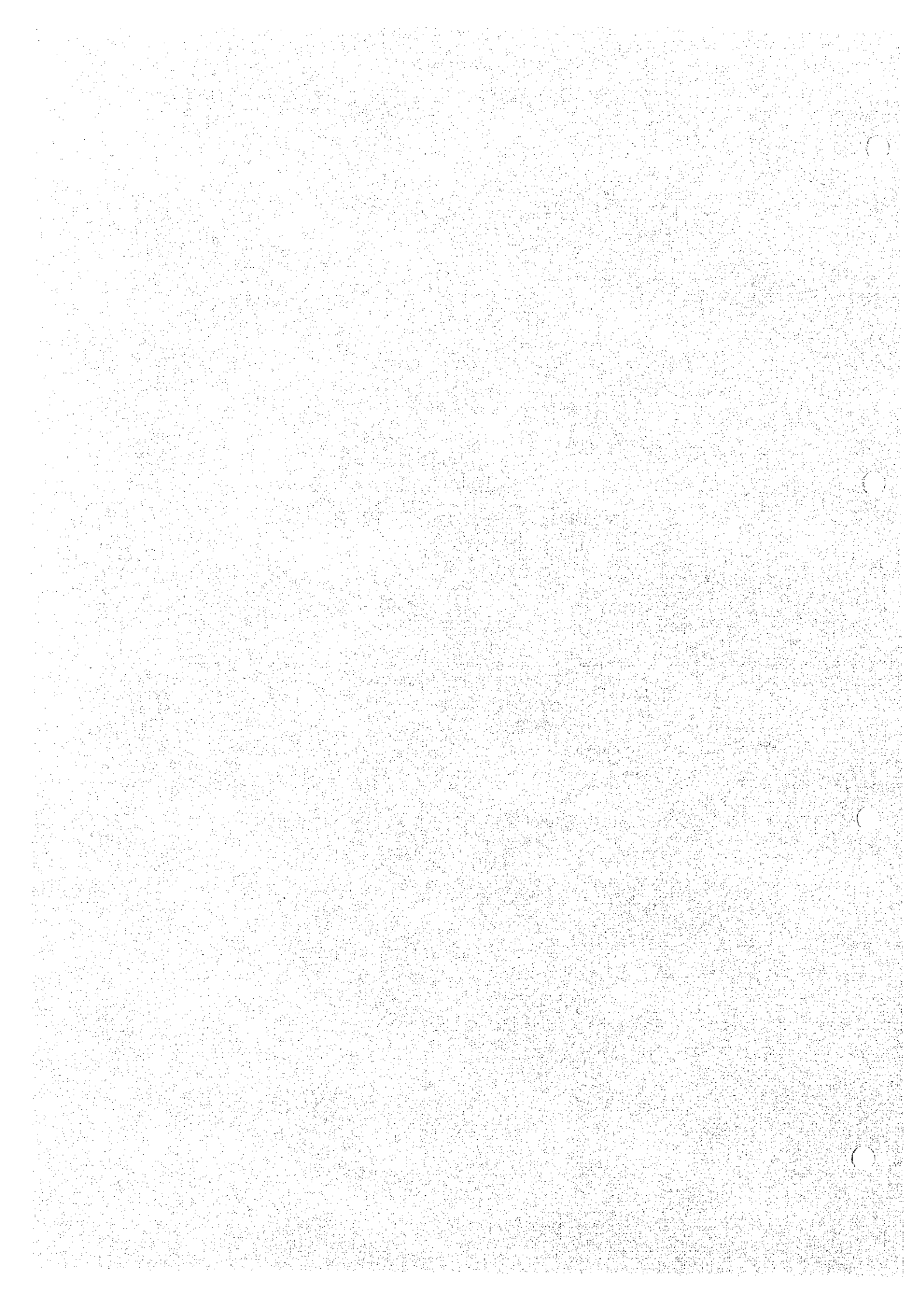
Article 1. Provided that, the provisions of Article 20 of Supplementary Provisions shall come into force as from the day prescribed by Cabinet Order within the scope not exceeding nine months counting from the day of its promulgation (enforced as from May 1, 1979 by Cabinet Order No. 144 of 1974).

SUPPLEMENTARY PROVISIONS (Law No. 84, Jun. 11, 1974): ④

(Enforcement date)

1. This Law shall come into force as from the day prescribed by Cabinet Order within the scope not exceeding six months counting from the day of its promulgation (enforced as from November 1, 1974 by Cabinet Order No. 318 of 1974).

APPENDIX R3-8



APPENDIX R3-8 Water Quality Pollution Prevention Law
(Law No. 138, Dec. 25, 1970, Japan)

WATER QUALITY POLLUTION
PREVENTION LAW

(Law No. 138, Dec. 25, 1970)

EHS LAW BULLETIN SERIES

EHS Vol. VII

YD

AMENDMENTS:

- (1) Law No. 88, May 31, 1971
- (2) Law No. 84, Jun. 22, 1972
- (3) Law No. 47, Jun. 1, 1976
- (4) Law No. 68, Jun. 13, 1978
- (5) Law No. 41, May 7, 1980
- (6) Law No. 58, May 26, 1983
- (7) Law No. 61, Jul. 27, 1984

WATER QUALITY POLLUTION
PREVENTION LAW

(Law No. 138, Dec. 25, 1970)

CONTENTS

CHAPTER I	GENERAL PROVISIONS	(Articles 1, 2)
CHAPTER II	CONTROL, ETC. OF DISCHARGE OF DISCHARGED WATER (4)	(Articles 3 - 14)
CHAPTER III	WATCHING, ETC. OF CONDITIONS OF WATER QUALITY POLLUTION	(Articles 15 - 18)
CHAPTER IV	COMPENSATION FOR DAMAGES	(1)(2) (Articles 19 - 20-5)
CHAPTER V	MISCELLANEOUS PROVISIONS	(Articles 21 - 29)
CHAPTER VI	PENAL PROVISIONS	(Articles 30 - 35)
SUPPLEMENTARY PROVISIONS		

CHAPTER I
GENERAL PROVISIONS

(Purpose)

Article 1. The purpose of this Law shall be to preserve the living environment, as well as to plan to protect the sufferers by means of providing for the liability of compensation for damages of the enterprisers in the case where the damages pertaining to human health have been caused in relation to sanitary waste and waste liquid discharged from factories and working places, together with protecting the health of the nationals, by preventing pollution of water quality (including aggravation of water conditions other than water quality; hereinafter the same) in the public water basin by means of controlling, etc. discharge of the water discharged into the public water basin from factories and working places.

(Definitions) (4)

Article 2. "Public water basin" in this Law shall mean rivers, lakes and ponds, harbors, coast sea areas, and other water basins offered to public use, and the public ditches conjoined thereto, irrigation waterways, and other waterways offered to public use (excluding the public sewerages and the drainage basin sewerages under the provisions of Article 2 item (3) and item (4) of the Sewerage Law (Law No. 79 of 1958), installing the terminal disposal place under the provision of item (6) of said Article (including the public sewerages conjoining to the drainage basin sewerage)).

2. "Specified facilities" in this Law shall mean the facilities as prescribed by Cabinet Order, discharging the

sanitary waste or the waste liquid having any of the following respective requirements:

- (1) That it contains the materials as prescribed by Cabinet Order, feared to injure the human health, such as cadmium;
- (2) That it is of the degree feared to injure living environment, concerning the items as prescribed by Cabinet Order to be the items showing the contamination conditions (including those due to heat, and excluding those due to the materials as provided for in the preceding item) of water, such as chemical oxygen demand.

3. "Discharged water" in this Law shall mean the water discharged into the public water basin from the factory or the working place installing the specified facilities (hereinafter referred to as the "specified working place").

CHAPTER II

CONTROL, ETC. OF DISCHARGE OF DISCHARGED WATER (4)

(Waste water standards)

Article 3. The waste water standards shall be prescribed by Prime Minister's Office Ordinance, with respect to the contamination conditions (including those due to heat; hereinafter the same) of the discharged water.

2. The waste water standards under the preceding paragraph shall, with respect to the contamination conditions due to the materials under the provision of paragraph 2 item (1) of the preceding Article (hereinafter referred to as the "noxious materials"), be the admissible limit fixed for every kind of the noxious materials, as to the quantity of noxious materials contained in the discharged water; and shall, with respect to other contamination conditions, be the admissible limit fixed for every item, as to the items under the provision of item (2) of said Article.

3. A prefecture may, if there is, in the public water basin belonging to the areas of said prefecture, an area recognized to be insufficient to protect human health or to preserve living environment by the waste water standards of paragraph 1, judging from the natural and social conditions, prescribe, by the Statute according to the standards as prescribed by Cabinet Order, the waste water standards fixing an admissible limit severer than the admissible limit fixed by the waste water standards of said paragraph in place of the waste water standards of said paragraph, with respect to the contamination conditions of the discharged water dis-

VII (YD 4)

charged in the area.

4. In the Statute of the preceding paragraph, the scope of said area shall also be made clear.

5. In the case where a prefecture prescribes the waste water standards in accordance with the provision of paragraph 3, said prefecture governor shall in advance inform the Director-General of Environmental Agency and the prefectural governor concerned thereof.

(Advice concerning waste water standards) (1)

Article 4. The Director-General of Environmental Agency may, if he recognizes especially necessary for preventing pollution of the water quality of the public water basin, advise the prefecture to prescribe the waste water standards in accordance with the provision of paragraph 3 of the preceding Article, or to change the waste water standards having been prescribed in accordance with the provision of said paragraph.

(Total amount reduction basic policy) (4) (7)

Article 4-2. For the purpose of preventing water quality pollution pertaining to the items prescribed by Cabinet Order such as chemical oxygen demand (hereinafter referred to as the "designated item") in those water basins prescribed by Cabinet Order for every designated item among the items in Article 2 paragraph 2 item (2) (hereinafter referred to as the "designated water basin"), where is the public water basin of the over-prefectural-district having inflow of a large quantity of water discharged by daily life or industrial activities upon the concentration of population or industry (limited to a sea area almost surrounded with a shore line), and where recognized to be difficult to secure

VII (YD 5)

the standards of the environmental conditions pertaining to the pollution of water quality under the provision of Article 9 paragraph 1 of the Public Nuisance Countermeasures Basic Law (Law No. 132 of 1967) only by the waste water standards of Article 3 paragraph 1 or 3, the Prime Minister shall set up the basic policy concerning reduction of the total amount of pollution load indicated by the designated items (hereinafter referred to only as the "pollution load amount") (hereinafter referred to as the "total amount reduction basic policy") with respect to the areas prescribed by Cabinet Order for every designated water basin as the area relevant to water quality pollution of the designated water basin (hereinafter referred to as the "designated area").

2. In the total amount reduction basic policy, the objective of reduction, the goal year or other basic matters concerning reduction of the total amount of pollution load shall be fixed. In this case, regarding the objective of reduction, the reduction objective amount of item (3) shall be fixed in such a way that the total amount mentioned in item (1) is to be the total amount mentioned in item (2) in the goal year with the purpose of securing the water quality environment standards pertaining to said designated item for said designated water basin;

- (1) The total amount of pollution load of water flow in said designated water basin;
- (2) The total amount in the case where the promotion of reduction has been determined within the enforceable limit with respect to the total amount mentioned

VII (YD 6)

in the preceding item considering the movement of population and industry, the technical level of treating sanitary waste or waste liquid, the outlook for preparation of sewerage and so on in said designated area in accordance with Cabinet Order;

- (3) The reduction objective amount classified by each source and prefecture for the pollution load amount of water discharged to the public water basin in said designated area (in the case of fixing the reduction objective amount as an interim objective, including such reduction objective amount).

3. The Prime Minister shall, if he intends to draft the enactment, amendment, or abrogation of Cabinet Order fixing the water basin in paragraph 1 or Cabinet Order fixing the area in the same paragraph, hear the opinion of the prefectural governor concerned.

4. The Prime Minister shall, if he intends to set up or alter the total amount reduction basic policy, hear the opinion of the prefectural governor concerned and obtain the sanction of Public Nuisance Countermeasures Conference.

5. The Prime Minister shall, when he has set up or altered the total amount reduction basic policy, notify the prefectural governor concerned thereof.

(Total amount reduction program) (4)

Article 4-3. The prefectural governor shall, regarding the designated area, set up the program for attaining the reduction objective amount under paragraph 2 item (3) of the preceding Article (hereinafter referred to as the "total amount reduction program") on the basis of the total amount

reduction basic policy.

2. In the total amount reduction program, the matters mentioned in the following respective items shall be fixed:

- (1) The reduction objective amount to the pollution load amount by each source;
- (2) The means to attain the reduction objective amount under the preceding item;
- (3) Other matters necessary for reducing the total amount of pollution load.

3. The prefectural governor shall, if he intends to set up the total amount reduction program, hear the opinion of the mayor of city, town, or village concerned and the approval of the Prime Minister.

4. The Prime Minister shall, if he intends to give the approval under the preceding paragraph, obtain the sanction of the Public Nuisance Countermeasures Conference.

5. The prefectural governor shall, when he has set up the total amount reduction program, give public notice to such contents.

6. The provisions of the preceding three paragraphs shall be applied mutatis mutandis to the alteration of the total amount reduction program.

(Furthering attainment of total amount reduction program) (4)

Article 4-4. The State and local public entity shall make an effort to take measures necessary for attaining the total amount reduction program.

(Total amount regulation standards) (4)

Article 4-5. With respect to the pollution load amount

of discharged water discharged from the specified working place whose scale is larger than the one prescribed by Prime Minister's Office Ordinance within the designated area (hereinafter referred to as the "working place within the designated area"), in the designated area, the prefectural governor shall set up the total amount reduction standards based on the total amount reduction program in accordance with Prime Minister's Office Ordinance.

2. With respect to the working place within the designated area having been newly installed the specified facilities (including the factory or working place having newly become the working place within the designated area by installing the specified facilities or altering the structure, etc.) and the working place within the designated area having been newly established, the prefectural governor shall set up other total amount regulation standards to be applied respectively in place of the total amount regulation standards under the preceding paragraph based on the total amount reduction program in accordance with Prime Minister's Office Ordinance.

3. The total amount regulation standards under paragraph 1 or the preceding paragraph shall, with respect to the working place within the designated area, be the maximum permissible limit fixed upon the pollution load amount of discharged water discharged from said working place within the designated area.

4. The prefectural governor shall, if he intends to set up the total amount regulation standards under paragraph 1 or 2, make public. The same shall apply to the case of

VII (YD 9)

alteration or abrogation thereof.

(Notification of installation of specified facilities)

(1)(4)

Article 5. A person discharging water into the public water basin from a factory or working place shall, if he intends to install the specified facilities, notify the prefectural governor of the following matters, as prescribed by Prime Minister's Office Ordinance:

- (1) The full name or appellation and the address, as well as the full name of the representative in the case of a corporation;
- (2) The appellation and location of the factory or working place;
- (3) The kind of the specified facilities;
- (4) The structure of the specified facilities;
- (5) The method of using the specified facilities;
- (6) The method of treating the sanitary waste or waste liquid (hereinafter referred to as the "sanitary waste, etc.") discharged from the specified facilities;
- (7) The contamination conditions and quality of the discharged water (including the contamination conditions and quality by each drainage course in the case pertaining to the factory or working place within the designated area);
- (8) Other matters prescribed by Prime Minister's Office Ordinance.

(Transitional measures) (1)(4)

Article 6. A person installing the facilities actually at the time when one facility has become the specified facility

VII (YD 10)

(including a person effecting the installing work) who discharges the discharged water shall, as prescribed by Prime Minister's Office Ordinance, notify the prefectural governor of the matters mentioned in respective items of the preceding Article, within thirty days from the day on which said facility became the specified facility.

2. A person installing the specified facilities in said area actually at the time of enforcement of the Cabinet Order fixing the areas under Article 4-2 paragraph 1 (including those who are working for installation, and those who have effected the notification under the provision of the preceding Article and have not yet started the installation work), and discharging the discharged water, shall notify the prefectural governor of the contamination conditions and quantity of the discharged water by each drainage course within sixty days from the enforcement date of said Cabinet Order in accordance with Prime Minister's Office Ordinance.

(Notification of change of structure, etc. of specified facilities) (1)(4)

Article 7. A person having effected the notification under the provision of Article 5 or the preceding Article shall, if he intends to change the matters mentioned in Article 5 item (4) through item (8), notify the prefectural governor to that effect in accordance with Prime Minister's Office Ordinance.

(Plan changing order, etc.) (4)

Article 8. The prefectural governor may, if, in the case where the notification under the provision of Article

5 or the preceding Article has been made, he recognizes that the contamination conditions of the discharged water are not in conformity with the waste water standards (meaning the waste water standards under Article 3 paragraph 1 (in the event that the waste water standards are fixed in accordance with the provision of paragraph 3 of said Article, including that waste water standards); hereinafter referred to simply as the "waste water standards") pertaining to the discharged water at the water outlet (meaning the place discharging the discharged water; hereinafter the same) of said specified working place, order the person thus having effected the notification to change the plan concerning the structure, method of using of the specified facilities pertaining to the notification, or the method of treating the sanitary waste (including to abolish the plan pertaining to the notification under the provision of the preceding Article), or to abolish the plan concerning installation of the specified facilities pertaining to the notification under the provision of Article 5, only within sixty days from the day of receiving the notification.

(Ditto) (4)

Article 8-2. In the case where the notification under the provision of Article 5 or 7 has been made, with respect to the working place within the designated area where is to be installed the specified facilities pertaining to said notification (including the factory or working place which is newly to become the working place within the designated area by installing said specified facilities or changing the structure, etc.), the prefectural governor may, if he recognizes

VII (YD 12)

)

that the pollution load amount of discharged water discharged from said working place within the designated area is not conformity with the total amount regulation standards, order the person who installs said working place within the designated area to take necessary measures such as improvement of method of treating the sanitary waste or waste water therein only within sixty days from the receiving date of such notification.

(Restriction of enforcement)

Article 9. The person having effected the notification under the provision of Article 5 or the person having effected the notification under the provision of Article 7 shall not, unless elapsing sixty days from the day of having received the notification, install the specified facilities pertaining to the notification, or change the structure, method of using of the specified facilities pertaining to the notification, or the method of treating the sanitary waste, etc., respectively.

2. The prefectural governor may, if he recognizes that the contents of the matters pertaining to the notification of Article 5 or Article 7 are reasonable, shorten the period as provided for in the preceding paragraph.

(Notification of change, etc. of full name) (4)

Article 10. The person having effected the notification under the provision of Article 5 or Article 6 paragraph 1 shall, if there has been made any change in the matters mentioned in Article 5 item (1) or item (2) pertaining to the notification, or if he has abolished to use the specified facilities pertaining to the notification, notify the pre-

fectural governor to that effect within thirty days from that day.

(Succession) (4)

Article 11. A person having been transferred or lent the specified facilities pertaining to the notification from the person having effected the notification under the provision of Article 5 or Article 6 paragraph 1 shall succeed to the position of the person having effected said notification pertaining to said specified facilities.

2. If there occurred inheritance or amalgamation with respect to the person having effected the notification under the provision of Article 5 or Article 6 paragraph 1, the inheritor or the juridical person continuing to exist after amalgamation or the juridical person incorporated by amalgamation shall succeed to the position of the person having effected said notification.

3. The person having succeeded to the position of the person having effected the notification under the provision of Article 5 or Article 6 paragraph 1 in accordance with the provisions of the preceding two paragraphs shall, within thirty days from the day of succession, notify the prefectural governor to that effect.

4. A person having been transferred or lent the working place within the designated area or having obtained it by inheritance or amalgamation shall succeed the position of the person who installs said working place within the designated area regarding the application of the provisions of Article 8-2, Article 13 paragraph 3 or Article 14 paragraph 3.

(Restriction on discharge of discharged water)

VII (YD 14)

Article 12. A person who discharges the discharged water shall not discharge the discharged water whose contamination conditions does not conform at the discharge outlet of said specified working place to the waste water standards.

2. The provision of the preceding paragraph shall not, with respect to the water discharged from the factory or working place installing said facilities of the person who actually installs the facilities (including a person who is engaging in construction of installation) at the time when one facility became the specified facility, apply for six months (one year, in the case where said facilities are the facilities as prescribed by Cabinet Order) from the day of on which said facilities became the specified facilities. Provided that, this shall not apply if said factory or working place was already the specified facilities at the time when said facilities became the specified facilities, and if there exists, in the provisions of the statutes of the local public entity applicable to the person, any stipulations corresponding to the provision of the preceding paragraph (excluding the case where there exists no penal provision on the violative act of said provision).

(Obligation to observe total amount regulation standards)

(4)

Article 12-2. The person who installs the working place within the designated area shall observe the total amount regulation standards pertaining to said working place within the designated area.

(Improving order, etc.) (4)

VII (YD 15)

Article 13. The prefectural governor may, if he recognizes that the person discharging the discharged water is feared to discharge the discharging water those contamination conditions are not in conformity with the waste water standards at the water discharging outlet of said specified working place, order such person to improve, in fixing the time limit, the structure or method of using of the specified facilities or the method of treating the sanitary waste, etc., or to temporarily suspend to use the specified facilities or to discharge the discharged water.

2. The provision of Article 12 paragraph 2 shall apply mutatis mutandis to the order under the provision of the preceding paragraph.

3. The prefectural governor shall, if he recognizes that there is a fear of discharging the discharged water whose pollution load amount is not in conformity with the total amount regulation standards, order the person installing the working place within the designated area pertaining to said discharged water to take necessary measures such as improvement of method of treating the sanitary waste or waste water in said working place within the designated area for a fixed period.

4. The provision of the preceding paragraph shall not, regarding the factory or working place which has newly become the working place within the designated area by the amendments of the Cabinet Order fixing the facilities under Article 2 paragraph 2, of the Cabinet Order fixing the areas under Article 4-2 paragraph 1, or of the Prime Minister's Office Ordinance fixing the scale under Article 4-5 paragraph 1,

apply for six months from the day on which said factory or working place has become the working place within the designated area.

(Guidance, etc.) (4)

Article 13-2. The prefectural governor may make and give guidance, advice, and recommendation necessary for attaining the total amount reduction plan to the person other than those discharging the discharged water from the working place within the designated area, who is discharging the substances which cause the increase of pollution load amount of sanitary waste, waste water, or others to the public water basin in the designated area.

(Measurement, etc. of contamination conditions of discharged water) (1)(4)

Article 14. A person discharging the discharged water shall, as prescribed by Prime Minister's Office Ordinance, measure the contamination conditions of said discharged water and record the results thereof.

2. A person discharging the discharged water from the working place within the designated area where the total amount regulation standards is applied shall measure the pollution load amount of said discharging water and record the results thereof in accordance with Prime Minister's Office Ordinance.

3. A person installing the working place within the designated area under the preceding paragraph shall in advance notify to the prefectural governor of the method of measurement for the pollution load amount in accordance with Prime Minister's Office Ordinance. The same shall apply to

VII (YD 17)

the case of altering the method of measurement pertaining to the notification.

4. A person discharging the discharged water shall, taking in consideration of the conditions of contamination of water quality in said public water basin, make appropriate the method of discharging the discharged water, such as the location of water discharging outlet of said specified working place.

5. A person discharging the discharged water shall take appropriate measures lest the sanitary waste, etc. containing noxious materials (including those having treated them) should infiltrate into the ground.

CHAPTER III
WATCHING, ETC. OF CONDITIONS OF
WATER QUALITY POLLUTION

(Constant watching)

Article 15. The prefectural governor shall constantly watch the pollution conditions of the water quality in the public water basin.

(Measurement plan) (4)

Article 16. The prefectural governor shall, every year, prepare, in deliberation with the chiefs of the local administrative organs of the State, the plan concerning measurement of the water quality in the public water basin (hereinafter referred to as the "measurement plan") belonging to the area of said prefecture.

2. The measurement plan shall, with respect to the measurement of the water quality in said public water basin performed by the State and the local public entity, stipulate the measurable matters, measurable spots and the method of measurement, and other necessary matters.

3. The Director-General of the Environmental Agency may instruct the matters to which the prefectural governor should conform in making measurement plan for each designated water basin in order to know the pollution load total amount of the water flowing in said designated water basin.

4. The State and the local public entity shall perform the measurement of the water quality in said public water basin according to the measurement plan, and send the results thereof to the prefectural governor.

VII (YD 19)

(Public announcement)

Article 17. The prefectural governor shall publicly announce the contamination conditions of the water quality in the public water basin belonging to the area of said prefecture.

(Measures at urgent time) (1)

Article 18. The prefectural governor may, if there broke out the circumstance falling under the cases as prescribed by Cabinet Order as the cases feared to be causable of damages pertaining to human health or living environment owing to remarkableness of pollution of water quality in the public water basin due to unusual dearth of water or other similar cause, with respect to a partial area of the public water basin belonging to the area of said prefecture, order, as prescribed by Prime Minister's Office Ordinance, the persons who discharge the discharged water in said partial area having broken out the circumstance to decrease the quantity of the discharged water or to take other necessary measures by fixing the period, together with disseminating the circumstances to general public.

CHAPTER IV

COMPENSATION FOR DAMAGES (1)(2)

(Liability without fault) (1)(2)

Article 19. If human life or body was injured due to discharge (including permeation into soil; hereinafter the same in this Chapter) of noxious materials in the condition soaked in sanitary waste or waste liquid incidental to business activities in a factory or a working place, the enterpriser pertaining to said discharge shall be liable to compensate the damages accrued thereby.

2. In the case where a material has newly become a noxious material, the provision of the preceding paragraph shall apply to the damages due to discharge of said material on and after the day on which the material became the noxious material.

(Ditto) (1)(2)

Article 20. If, in the case where the damages under the provision of paragraph 1 of the preceding Article were caused due to discharge of noxious materials in the condition soaked in sanitary waste or waste liquid by two or more enterprisers, and the provision of Article 719 paragraph 1 of the Civil Code (Law No. 89 of 1969) is applicable with respect to the liabilities of said compensation for damages, there is an enterpriser whose degree to be the cause in relation to accruing said damages is recognized remarkably small, the court may take into consideration the circumstances with respect to deciding the amount of compensation for damages of the person.

(Consideration with respect to compensation) (2)

Article 20-2. If vis major such as natural disaster concurs in relation to accruing the damages under the provision of Article 19 paragraph 1, the court may take it into consideration in deciding the liability and the amount of compensation for damages of the person.

(Extinctive prescription) (2)

Article 20-3. The claimable right of compensation for damages under the provision of Article 19 paragraph 1 shall lapse if not exercised for three years from the time when the sufferer or the legal representative thereof has come to know the damages and liable person of compensation. The same shall apply when twenty years have elapsed from the time of accrument.

(Application of other laws) (2)

Article 20-4. The liability of compensation for damages under the provision of Article 19 paragraph 1 shall, if the Mining Law (Law No. 289 of 1950) or the Law concerning Washing Coal Business (Law No. 134 of 1958) is applicable, be as prescribed by said respective Laws.

(Exclusion of application) (2)

Article 20-5. The provisions of this Chapter shall not apply with respect to the injury, disease or death while on duty of those engaged by the enterprise performed by the enterpriser.

CHAPTER V

MISCELLANEOUS PROVISIONS

(Prefectural water quality council)

Article 21. A prefecture shall have the prefectural water quality council (hereinafter referred to as the "prefectural council").

2. The prefectural council shall, in response to the request of the prefectural governor, investigate and deliberate on important matters concerning prevention of pollution of water quality in the public water basin belonging to the area of said prefecture.

3. The prefectural council may state its opinion to the prefectural governor, concerning the important matters as provided for in the preceding paragraph.

4. The necessary matters concerning the organization and management of the prefectural council shall, according to the standards as prescribed by Cabinet Order, be stipulated by prefectural statutes.

(Report and inspection) (4)

Article 22. The prefectural governor may, as prescribed by Cabinet Order, within the limit necessary for enforcing this Law, request the person discharging the discharged water to present reports concerning the conditions of the specified facilities, the method of treating the sanitary waste, etc., and other necessary matters, or make his personnel enter the specified working place of the person, and inspect the articles such as the specified facilities.

2. The prefectural governor may, within the limit necessary for enforcing this Law, request the report concerning

the method of treating the sanitary waste or waste water, etc. or other necessary matters from the person, who is prescribed by Cabinet Order, discharging the substances which cause the increase of pollution load amount of sanitary waste, waste water, or others to the public water basin in the designated area on industrial activities (excluding those discharging the discharged water).

3. The personnel who effects the spot inspection in accordance with the provision of paragraph 1 shall carry with him the certificate showing his status, and show it to the person concerned.

4. The power of effecting the spot inspection under the provision of paragraph 1 shall not be construed to have been recognized for searching crimes.

(Exemption from application, etc.) (2)(3)(4) (5)(6)

Article 23. The provisions of this Law shall not apply to the pollution of water quality due to radioactive materials and the prevention thereof.

2. In relation to the person discharging the discharged water from the mine under the provision of the main clause of Article 2 paragraph 2 of the Mine Safety Law (Law No. 70 of 1949) installing the specified facilities which are the facilities, such as the buildings or equipments under the provision of Article 8 paragraph 1 of said Law, with respect to said mine, and in relation to the person discharging the discharged water from the factory or working place installing the specified facilities which are the electric facilities under the provision of Article 2 paragraph 7 of the Electric Utility Law (Law No. 170 of 1964) or which are the waste oil

treatment facilities under the provision of Article 3 item (14) of the Law concerning the Prevention of Marine Pollution and Marine Disasters (Law No. 136 of 1970), with respect to said specified facilities, the provisions of Article 5 through Article 11, Article 13 paragraphs 1 and 3 as well as Article 14 paragraph 3 shall not apply, and the corresponding provisions of the Mine Safety Law, the Electric Utility Law, or the Ocean Contamination Prevention Law shall apply.

3. The chief of the administrative organ of the State having the power based on the Laws under the provision of the preceding paragraph (hereinafter referred to simply as the "chief of administrative organ" in this Article) shall, if there has been made the application for permission or approval, or the notification pertaining to the specified facilities as provided for in the preceding paragraph under the provisions of the Mine Safety Law or the Electric Utility Law corresponding to Article 5, Article 7, Article 10, Article 11 paragraph 3, or Article 14 paragraph 3 inform the prefectural governor having jurisdiction over the location of the factory or working place installing said specified facilities of the matters, among the matters pertaining to the permission, approval, or the notification, corresponding to the notification matters under those provisions.

4. The prefectural governor may, if he recognizes that there is the fear to cause damages pertaining to human health or living environment due to pollution of water quality in the public water basin caused by the discharged water pertaining to the specified facilities prescribed in paragraph 2, request the chief of administrative organ to take the

measures under the provisions of the Mine Safety Law or the Electric Utility Law, corresponding to the provisions of Article 8, Article 8-2, or Article 13 paragraph 1 or 3 (in the case of the Law concerning Prevention of Ocean Contamination and Marine Disasters, the provision of said Law corresponding to the provision of Article 8 or Article 8-2).

5. The chief of administrative organ shall inform said prefectural governor of the measures having been taken in the case of being requested in accordance with the provision of the preceding paragraph.

(Demand to submit materials, etc.) (1)

Article 24. The Director-General of the Environmental Agency may, if he recognizes necessary for attaining the purpose of this Law, demand the chiefs of local public entities concerned to submit necessary materials and explanation thereof.

2. The prefectural governor may, if he recognizes necessary for attaining the purpose of this Law, demand the chiefs of administrative organs concerned or the chiefs of local public entities concerned to give cooperation, such as sending necessary materials, or state his opinion concerning prevention of pollution of water quality in the public water basin.

3. The river administrator (meaning the river administrator under the provision of Article 7 of the River Law (Law No. 167 of 1964)), the harbor administrator (meaning the harbor administrator under the provision of Article 2 paragraph 1 of the Port and Harbor Law (Law No. 218 of 1950), or others as prescribed by Cabinet Order who administers the

public water basin may, if they recognize necessary in administering said public water basin concerning enforcement of this Law, state their opinion concerning prevention of pollution of water quality in said public water basin to the prefectural governor.

(Assistance by State)

Article 25. The State shall, for contributing to prevention of the water quality pollution in the public basin, endeavor to give assistance, such as raising necessary funds for installing or improving the treatment facilities of sanitary waste, etc. in the specified working place, or offering technical advices.

2. On taking the measures under the preceding paragraph, special consideration to medium and small enterprisers shall be given.

(Promotion, etc. of research)

Article 26. The State shall endeavor to promote the research of the technique concerning treatment of sanitary waste, etc., research of the influence to human health or living environment by sanitary waste, etc., and other research concerning prevention of pollution of water quality in the public water basin.

(Transitional measures)

Article 27. In the event of enacting, amending or abolishing orders or ordinances based on the provisions of this Law, the necessary transitional measures (including the transitional measures concerning penal provision) may, within the cope reasonably judged necessary incidentally to the enactment, amendment or abolishment, be prescribed by said orders or ordinances.

VII (YD 27)

(Delegation, etc. of business) (4)

Article 28. The business belonging to the power of the prefectural governor in accordance with the provisions of this Law (excluding the business under the provisions of Article 4-3 paragraph 1, Article 4-5 paragraphs 1 and 2 as well as Article 16 paragraph 1) may as prescribed by Cabinet Order, be delegated to the mayor of the city in accordance with Cabinet Order.

2. The mayor of the city prescribed by Cabinet Order in the preceding paragraph shall notify the prefectural governor of the matters necessary for enforcing this Law, which are prescribed by Prime Minister's Office Ordinance.

(Relation to prefectural statute)

Article 29. The provisions of this Law shall not preclude a local public entity to prescribe by the prefectural statute necessary control, concerning contaminated condition (excluding contamination caused by noxious materials) of water other than the contaminated condition of water indicated by the items under the provision of Article 2 paragraph 2 item (2), with respect to the discharged water, as well as concerning noxious materials and contaminated condition of water indicated by the items under the provision of said item, with respect to the water discharged into the public water basin from factories or working places other than the specified working places.

CHAPTER VI

PENAL PROVISIONS

(Penal provision) (4)

Article 30. A person who has violated the order under the provision of Article 8, Article 8-2, or Article 13 paragraph 1 or 3 shall be punished with penal servitude not exceeding one year or a fine not exceeding 500,000 yen.

(Ditto) (4)

Article 31. A person falling under any of the following respective items shall be punished with penal servitude not exceeding six months or a fine not exceeding 300,000 yen:

- (1) Who has violated the provision of Article 12 paragraph 1;
- (2) Who has violated the order under the provision of Article 18.

2. A person who has by fault committed the crime of item (1) of the preceding paragraph shall be punished with penal servitude not exceeding three months or a fine not exceeding 200,000 yen.

(Ditto) (4)

Article 32. A person who has failed to make the notification under the provision of Article 5 or Article 7, or has made a false notification shall be punished with penal servitude not exceeding three months or a fine not exceeding 200,000 yen.

(Ditto) (4)

Article 33. A person falling under any of the following respective items shall be punished with a fine not exceeding 200,000 yen.

- (1) Who has failed to make the notification under the provision of Article 6, or has made a false notification;
- (2) Who has violated the provision of Article 9 paragraph 1;
- (3) Who has failed to make the record under the provision of Article 14 paragraph 2, or has made a false record;
- (4) Who has failed to make the report under the provision of Article 22 paragraph 1 or 2, or has made a false report, or has refused, obstructed or evaded the inspection under the provision of paragraph 1 of said Article.

(Ditto)

Article 34. If a representative of juridical person, an agent, employee, or other worker of a juridical person or natural person has, in relation to the business of the juridical person or the natural person, committed the violative act under the preceding four Articles, the juridical person or the natural person shall be punished with the fine under respective Articles, in addition to punishment of the offender.

(Ditto) (4)

Article 35. A person who failed to make the notification under the provision of Article 10 or Article 11 paragraph 3, or Article 14 paragraph 3, or has made a false notification shall be liable to pay a administrative fine not exceeding 100,000 yen.

SUPPLEMENTARY PROVISIONS

(Enforcement date)

VII (YD 30)

1. This Law shall come into force as from the day prescribed by Cabinet Order within the limit not exceeding six months counting from the day of its promulgation (enforced as from Jun. 24, 1971 by Cabinet Order No. 153 of 1971).

VII (YD 31)

SUPPLEMENTARY PROVISIONS (Law No. 88, May 31, 1971): (1)
(Enforcement date)

Article 1. This Law shall come into force as from July 1, 1971

SUPPLEMENTARY PROVISIONS (Law No. 84, Jun. 22, 1972): (2)
(Enforcement date)

1. This Law shall come into force as from October 1, 1972.

SUPPLEMENTARY PROVISIONS (Law No. 47, Jun. 1, 1976): (3)
(Enforcement date)

Article 1. This Law shall come into force as from the day prescribed by Cabinet Order within the scope of not exceeding six months counting from the day of its promulgation (enforced as from September 1, 1976 by Cabinet Order No. 217 of 1976).

SUPPLEMENTARY PROVISIONS (Law No. 68, Jun 13, 1978): (4)
(Enforcement date)

Article 1. This Law shall come into force as from the day prescribed by Cabinet Order within the scope not exceeding one year counting from the day of its promulgation (enforced as from Jun. 12, 1979 by Cabinet Order No. 131 of 1979). Provided that,, in Article 2, the amending provision adding four articles next to Article 4 of the Water Quality Pollution Prevention Law shall come into force as from the day of its promulgation.

SUPPLEMENTARY PROVISIONS (Law No. 41, May 7, 1980): (5)
(Enforcement date)

Article 1. This Law shall come into force as from the

date on which the Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter will enter into force for Japan. (The date of entry into force - November 1, 1980)

SUPPLEMENTARY PROVISIONS (Law No. 58, May 26, 1983): (6)
(Enforcement date)

Article 1. The provisions of this Law shall, according to the classification mentioned in the following respective items, come into force as from the day prescribed in said respective items:

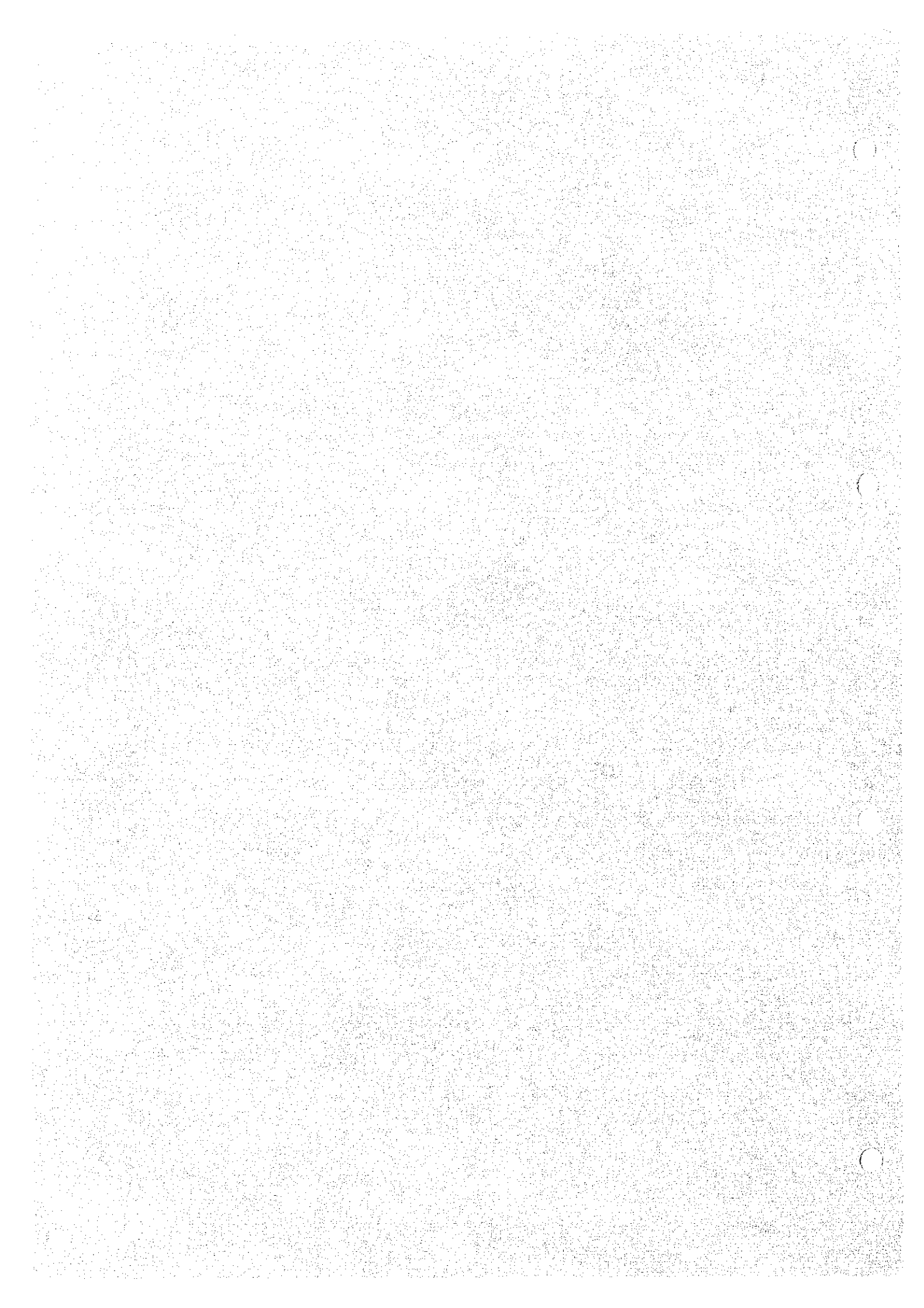
- (7) The provisions of Article 5 (excluding the provision prescribed in the preceding item) and the provisions of the Supplementary Provisions Articles 11 and 12

The effective date of Annex II of the Convention

SUPPLEMENTARY PROVISIONS (Law No. 61, Jul. 27, 1984): (7)
(Enforcement date)

1. This Law shall come into force as from the day prescribed by Cabinet Order within the limit not exceeding one year counting from the day of its promulgation (enforced as from March 21, 1985 by Cabinet Order 36 of 1985).

APPENDIX R 3 - 9



APPENDIX R3-9 Law concerning Prevention of Marine
Pollution and Marine Disasters
(Law No. 136, Dec. 25, 1970, Japan)

**LAW CONCERNING
PREVENTION OF
MARINE POLLUTION AND
MARINE DISASTERS**

(Law No. 136, Dec. 25, 1970)

EHS LAW BULLETIN SERIES

EHS Vol. VII

YE

AMENDMENTS:

- (1) Law No. 137, Dec. 25, 1970
- (2) Law No. 54, Jul. 17, 1973
- (3) Law No. 84, Sep. 20, 1973
- (4) Law No. 95, Dec. 27, 1975
- (5) Law No. 47, Jun. 1, 1976
- (6) Law No. 68, Jun. 16, 1976
- (7) Law No. 87, Jul. 5, 1978
- (8) Law No. 41, May 7, 1980
- (9) Law No. 85, Nov. 19, 1980
- (10) Law No. 58, May 26, 1983
- (11) Law No. 25, May 8, 1984

LAW CONCERNING PREVENTION OF MARINE
POLLUTION AND MARINE DISASTERS (5)
(Law No. 136, Dec. 25, 1970)

C O N T E N T S

CHAPTER I	GENERAL PROVISIONS	(Articles 1 - 3)
CHAPTER II	CONTROL OF DISCHARGE OF OIL FROM SHIP	(Articles 4 - 9)
CHAPTER II-II	CONTROL OF HARMFUL LIQUID SUB- STANCES, ETC. FROM SHIP	
Section 1	Control of Discharge of Harmful Substances, etc. from Ship	(Articles 9-2 - 9-6)
Section 2	Designated Confirming Organiza- tion	(Articles 9-7 - 9-17)
CHAPTER III	CONTROL OF DISCHARGE OF WASTES FROM SHIP	(Articles 10 - 17)
CHAPTER III-II	SURVEY AND INSPECTION OF MARINE POLLUTION PREVENTION EQUIPMENTS, ETC.	(Articles 17-2 - 17-20)
CHAPTER IV	CONTROL OF DISCHARGE OF OIL AND WASTES FROM MARINE FACILITY AND AIRCRAFT	(Articles 18, 19)
CHAPTER IV-II	CONTROL OF DISCHARGE OF OIL, HARMFUL SUBSTANCES, ETC. AND WASTES IN SHIP AND MARINE FACILITY	(Articles 19-2 - 19-11)
CHAPTER V	WASTE OIL TREATMENT BUSINESS, ETC.	(Articles 20 - 37)
CHAPTER VI	MEASURES FOR PREVENTION OF MARINE POLLUTION AND MARINE DISASTERS	(Articles 38 - 42-12)
CHAPTER VI-II	MARINE DISASTER PREVENTION CENTER	(Articles 42-13 - 42-53)
CHAPTER VII	MISCELLANEOUS PROVISIONS	(Articles 43 - 54)
CHAPTER VIII	PENAL PROVISIONS	(Articles 55 - 63)
SUPPLEMENTARY PROVISIONS		

CHAPTER I
GENERAL PROVISIONS

(Objective) (5)(8)(10)

Article 1. The objective of this Law is to control the discharge of oil, harmful liquid substance, etc. and wastes to the ocean from a ship, marine facility and aircraft, and the incineration of oil, harmful liquid substance, etc. and wastes in a ship and marine facility, to prevent marine pollution and marine disaster by taking measure for the elimination of the discharged oil, harmful liquid substance, etc., wastes or other matter, for the prevention of occurrence and spreading of marine fire, and for the prevention of danger to ship traffic incidental to marine fire, etc., together with securing appropriate disposal of waste oil, also to ensure exact enforcement of the international agreement concerning the prevention of marine pollution, and thereby to contribute to the preservation of marine environment and the protection of life, body and property of the nation.

(Prevention of marine pollution and marine disaster) (5)
(10)

Article 2. Every person shall endeavor not to pollute the ocean by the discharge of oil, harmful liquid substance, etc. or wastes and through other acts.

2. In case the discharge of oil, liquid substance, etc. or hazardous matter is made or marine fire occurs, the master or owner of a ship, the manager or establisher of a marine facility or marine hazardous matter keeping facility, or other persons concerned shall endeavor to prevent marine disaster by taking measures for the elimination of the discharged oil or harmful liquid substance, etc., the fire extinguishing, and

the prevention, etc. of fire spreading.

(Definition) (5)(8)(10)

Article 3. The meaning of the term mentioned in the following each item shall be as prescribed in each item:

1. "Ship" means watercraft used for navigation on the sea area (including the port area based on the Port Regulation Law (Law No. 174 of 1948); hereinafter the same):
2. "Oil" means crude oil, heavy oil, lubricating oil, light oil, kerosene, benzine, other oil prescribed by Ministry of Transport Ordinance, and oily mixture containing such oils (hereinafter referred to simply as "oily mixture");
3. "Harmful liquid substance" means any substance of the liquid substances (excluding liquefied petroleum gas and other substances which are not liquid in normal temperature and are designated by Cabinet Order; the same in next item) other than oil, which is prescribed by Cabinet Order as harmful substance (including its mixture) from the standpoint of preservation of marine environment and is carried by ship as bulk liquid cargo and ballast water including such cargo; cargo hold washing water; or other disused liquid substance generated in a ship (excluding liquid substance loaded on a ship for the purpose of dumping disposal at sea or incineration for disposal, or other liquid substances prescribed by the Prime Minister's Office Ordinance);
4. "Unassessed liquid substance" means substance, of the liquid substances other than oil and harmful liquid substance, which is other than the substances prescribed by Cabinet Order as harmless substances (including their mixture) from the standpoint of preservation of marine environment and is carried by ship as liquid cargo in bulk,

VII (YE 3)

and water ballast including such cargo; cargo hold washing water; or other disused liquid substances generated on board a ship (excluding liquid substances carried by ship for the purpose of dumping disposal at sea or incineration for disposal, or other liquid substances prescribed by the Prime Minister's Office Ordinance);

5. "Harmful liquid substances, etc." means harmful liquid substance and unassessed liquid substances;
6. "Wastes" means matters (excluding oil and harmful liquid substance, etc.) a person has disused;
7. "Discharge" means spilling or dumping of matter into the ocean;
8. "Incineration" means combustion of matter for disposal on the sea area;
9. "Tanker" means a ship constructed for the carriage of liquid cargo in bulk in the greater part of its cargo hold and a ship constructed for the carriage of liquid cargo in a part of its cargo hold, a capacity of a part of which is not less than the capacity as prescribed by Ministry of Transport Ordinance (excluding a ship employed solely for the carriage of cargoes other than oil in bulk in its cargo hold);
10. "Marine facility" means any structure established in the sea area (excluding such structure as persons may come and go between the structure and land through the fixed facility and other structure which is established adjacent to land exclusively for the discharge of oil or wastes from land and is designated by Cabinet Order);
11. "Aircraft" means aircraft as provided in Article 2 paragraph 1 of "Civil Aviation Law" (Law No. 231 of 1952);

12. "Bilge" means oily mixture accumulated at the bottom of a ship;
13. "Waste oil" means disused oil generated on board a ship;
14. "Waste oil treatment facility" means the whole of the equipments (hereinafter referred to as "waste oil treatment equipments" used for treatment of waste oil (excluding treatment to be made on board a ship where waste oil was generated);
15. "Waste oil treatment enterprise" means the enterprise to treat waste oil by using the waste oil treatment facility on general demand;
16. "Hazardous matter" means crude oil, liquified petroleum gas, and other material of inflammable nature as prescribed by Cabinet Order;
17. "Marine disaster" means damage to human life or body, or property caused by the discharge of oil or harmful liquid substance, etc., or by marine fire (meaning fire on the sea area; hereinafter the same).

CHAPTER II
CONTROL OF DISCHARGE OF OIL FROM SHIP

(Prohibition of discharge of oil from ship) (8)(10)

Article 4. No person shall discharge oil from a ship on the sea area. Provided that, this shall not apply to the discharge of oil falling under any of the following respective items:

- (1) The discharge of oil for the purpose of securing the safety of a ship or saving human life;
- (2) Such discharge of oil as when oil was discharged due to damage to ship or by other unavoidable cause and all the possible measures to prevent the continuous discharge of oil were taken.

2. The provision of the main clause of the preceding paragraph shall not apply such discharge from a ship of bilge or other oil (excluding water ballast of a tanker, cargo hold washing water, and bilge (hereinafter referred to as "water ballast, etc.") which includes cargo oil; referred to as "bilge etc." in paragraph 1 of next Article) as conform to the standards prescribed by Cabinet Order in connection with consistency of oil content in oil to be discharged (meaning such oil prescribed by Ministry of Transport Ordinance referred to item (2) of the preceding paragraph as to be contained in oil to be discharged; hereinafter the same), discharge sea area, and method of discharge.

3. The provision of the main clause of paragraph 1 shall not apply to such discharge from a tanker of ballast water, etc. including cargo oil as may conform to the standards prescribed by Cabinet Order in connection with gross quantity of oil content, instantaneous discharge rate of oil content

(meaning the discharge speed of oil content in liter per hour at any instant by the speed of the ship in knot at the same instant), discharge sea area, and method of discharge.

4. The provision of the main clause of paragraph 1 shall not apply to the discharge of oil from ship to be made for the purpose of examination, study or research, which is made with a prior approval of the Director-General of the Maritime Safety Board in accordance with Ministry of Transport Ordinance.

5. To the approval under the preceding paragraph, the condition may be attached and altered to the extent required for prevention of marine pollution.

(Equipments, etc. for prevention of marine pollution by oil) (10)

Article 5. The owner of a ship (in case such ship is co-owned, the ship's husband, in case such ship is chartered, the charterer of the ship; hereinafter the same) shall provide equipments for prevention of the discharge of bilge, etc. (meaning equipments for prevention of inflow to the bottom of a ship of oil existing on board, or for storage or disposal of bilge etc. on board; the same in paragraph 4) on board a ship (excluding a ship which never produces bilge, etc.)

2. In addition to that prescribed in the preceding paragraph, a tanker shall be provided with equipments for prevention of the discharge of water ballast, etc. (meaning equipments for storage or disposal on board a ship of water ballast, etc. including cargo oil; the same in paragraph 4).

3. In addition to those prescribed in the preceding two paragraphs, a tanker as prescribed by Ministry of Transport Ordinance shall be provided with a segregated ballast tank (meaning a tank which is entirely segregated from the cargo

hold of a tanker (limited to a tanker dedicated for carriage of liquid cargo in bulk; hereinafter the same) and the fuel oil tank, and is always provided for loading of water ballast; hereinafter the same) or a cargo hold crude oil washing installation (meaning installation for washing a cargo hold using crude oil; the same in next paragraph).

4. Technical standards concerning providing of equipments for prevention of the discharge of bilge, etc., equipments for prevention of the discharge of water ballast, etc., a segregated ballast tank, and a cargo hold crude oil washing installation under the provisions of the preceding three paragraphs shall be prescribed by Ministry of Transport Ordinance.

(Ditto) (10)

Article 5-2. The cargo hold of a tanker and the segregated ballast tank to be provided in accordance with the provision of paragraph 3 of the preceding Article shall, for the purpose of preventing the discharge of oil in large quantity in event of the damage to a ship caused by collision, stranding or other, be provided so as to conform to the technical standards prescribed by Ministry of Transport Ordinance.

(Restriction of carrying oil and water ballast) (10)

Article 5-3. No oil shall be loaded in the tank ahead of the forepeak bulkhead of a ship. Provided that, this shall not apply to a ship of less than the gross tonnage as prescribed by Ministry of Transport Ordinance.

2. No water ballast shall be carried in the cargo hold of a tanker which is provided with a segregated ballast tank in accordance with the provision of Article 5 paragraph 2 or in the fuel oil tank of a ship of not less than the gross tonnage as prescribed by Ministry of Transport Ordinance. Provided that, this shall not apply in such cases as being

unavoidable to secure the safety of a ship in bad weather or other cases as prescribed by Ministry of Transport Ordinance.

(Discharge method of segregated ballast) (10)

Article 5-4. The discharge of water ballast from a segregated ballast tank provided in a tanker shall be taken place according to the discharge method as prescribed by Ministry of Transport Ordinance.

(Oil pollution supervisor)

Article 6. The owner of a ship shall, for each ship prescribed by Ministry of Transport Ordinance, appoint from among ship's officers on board an oil pollution supervisor to have him assist the shipmaster (in case any person other than the master should conduct the master's duty for the master, such person: hereinafter the same) and to have him supervise over the business concerning prevention of inadequate discharge of oil from the ship.

2. The oil pollution supervisor shall be a person with experiences of operation concerning handling of oil or with other requirements prescribed by Ministry of Transport Ordinance.

(Oil pollution prevention rules) (10)

Article 7. The shipowner shall, for each ship as prescribed by Ministry of Transport Ordinance under paragraph 1 of the preceding Article, stipulate rules for the prevention of oil pollution in accordance with Ministry of Transport Ordinance with respect to the matters concerning the business of an oil pollution supervisor, the method of operation concerning the discharge of oil and other matters concerning the prevention of inadequate discharge of oil, and provide them on board the ship or post them on board.

2. The oil pollution supervisor shall keep informed of

VII (YE 9)

the matters stipulated in the oil pollution prevention rules under the preceding paragraph to the person who performs operation concerning handling of oil among those, who are crew members of said ship and other than the crew members, performing the business of said ship.

(Oil record book) (10)

Article 8. The shipmaster (in the case of a ship navigating mainly by being towed or pushed by another ship (hereinafter referred to as "towed ship, etc."), the shipowner; hereinafter the same in next paragraph and paragraph 3) shall provide the oil record book on board the ship (in the case of towed ship, etc., in the office of a shipowner who manages said ship). Provided that, this shall apply to any ship, other than a tanker, producing no bilge.

2. The oil pollution supervisor (in the case of a ship in which an oil pollution supervisor is not appointed, the shipmaster) shall, whenever the discharge of oil on board or other operation concerning handling of oil as prescribed by Ministry of Transport Ordinance is carried out, make an entry of it in the oil record book in accordance with Ministry of Transport Ordinance.

3. The shipmaster shall keep the oil record book on board for three years from the day on which the last entry was made.

4. In addition to those prescribed in the preceding three paragraphs, the form of the oil record book and other necessary matters concerning the oil record book shall be prescribed by Ministry of Transport Ordinance.

(Exemption from application) (8)(10)

Article 9. The provisions of Article 5 paragraph 1, Article 5-3 and Article 6 through the preceding Article shall

VII (YE 10)

not apply to any ship, other than a tanker, of less than a hundred tons gross tonnage.

2. The provisions of Article 5 paragraph 3 and Article 5-2 (limited to the part pertaining to a segregated ballast tank) shall not apply to a ship which is constructed for the carriage of liquid cargo in bulk in a part of its cargo hold and is provided in Article 3 item (9).

3. The provisions of Article 6 and Article 7 shall not apply to ships (hereinafter referred to as "foreign ships") other than Japanese ships (meaning the Japanese ships as provided in Article 1 of the Ship Law (Law No. 46 of 1899; hereinafter the same).

CHAPTER II-II

CONTROL OF DISCHARGE OF HARMFUL LIQUID

SUBSTANCES, ETC. FROM SHIP (10)

Section 1 Control of Discharge of Harmful Liquid Substances, etc. from Ship (10)

(Prohibition of discharge of harmful liquid substances from ship) (10)

Article 9-2. No person shall discharge the harmful liquid substances from a ship on the sea area. Provided that, this shall not apply to the discharge of harmful liquid substances falling under any of the following respective items:

- (1) The discharge of harmful liquid substances for the purpose of securing the safety of a ship or saving human life;

(2) Such discharge of harmful liquid substances as when harmful liquid substances were discharged due to damage to a ship or other unavoidable cause and all the possible measures to prevent the continuous discharge of harmful liquid substances were taken.

2. The provision of the main clause of the preceding paragraph shall not apply to the discharge of water ballast of the cargo hold (including the equipments for discharge of water ballast used for carriage of harmful liquid substances as prescribed by Ministry of Transport Ordinance, which is washed by the method of purification as prescribed by Ministry of Transport Ordinance.

3. The provision of the main clause of paragraph 1 shall not apply to such discharge of harmful liquid substances from a ship (excluding the discharge of water ballast under the provision of the preceding paragraph) as conforms to the standards as prescribed by Cabinet Order concerning the method of prior processing, discharge sea area and method of discharge.

4. If, in cases where harmful liquid substances are discharged in accordance with the provision of the preceding paragraph, the harmful liquid substances are prescribed by Cabinet Order as those requiring special care from the viewpoint of preservation of marine environment in regard to the discharge of harmful liquid substances, a person who intends to discharge said harmful liquid substances from a ship shall, with respect to the prior process to be performed which conforms to the standards prescribed by Cabinet Order referred to said paragraph, obtain a confirmation of the Commandant of the Maritime Safety Board or the person designated by the Commandant of the Maritime Safety Board (hereinafter referred to as a "designated confirming organization") (in case said prior process is

performed in the foreign country which is a contracting party (hereinafter referred to as a "Protocol contracting party") of "Protocol of 1978 Relating to the International Convention for the Prevention of Pollution from Ships, 1973" (hereinafter referred to as simply "Protocol"), the person appointed or designated by the government of the Protocol contracting party). Provided that, this shall not apply in case prior process is performed in a foreign country other than the Protocol contracting party.

5. The confirmation under the provision of the preceding paragraph shall be made upon application of a person who intends to obtain the confirmation under the provision of said paragraph.

6. In addition to those prescribed in the preceding two paragraphs, the application form for confirmation, issuance of the confirmation certificate and other matters necessary for confirmation shall be prescribed by Ministry of Transport Ordinance.

(Equipments for prevention of marine pollution by harmful liquid substances) (10)

Article 9-3. The shipowner shall, in a ship as prescribed by Ministry of Transport Ordinance carrying harmful liquid substances, provide on board the ship the equipments for storage or disposal of harmful liquid substances or other equipments for prevention of marine pollution by the discharge of harmful liquid substances (referred to as "equipments for the prevention of discharge of harmful liquid substances in next paragraph).

2. Technical standards concerning providing of equipments for the prevention of discharge of harmful liquid substances under the provision of the preceding paragraph shall

be prescribed by Ministry of Transport Ordinance.

3. A ship carrying harmful liquid substances prescribed by Ministry of Transport Ordinance shall be provided with the cargo hold so as to comply with technical standards prescribed by Ministry of Transport Ordinance for the purpose of preventing the discharge of harmful liquid substances in large quantity in the event of the damage to ship or other accident caused by collision, stranding or other reasons.

(Harmful liquid pollution supervisor, etc.) (10)

Article 9-4. The owner of a ship shall, for each ship prescribed by Ministry of Transport Ordinance for the carriage of harmful liquid substances, appoint from among ship's officers on board said ship a harmful liquid pollution supervisor to have him assist the shipmaster and supervise over the business concerning the prevention of inadequate discharge of harmful liquid substances from a ship.

2. The owner of the ship shall, for each ship as prescribed by Ministry of Transport Ordinance under the preceding paragraph, stipulate the rules for the prevention of harmful liquid pollution in accordance with Ministry of Transport Ordinance with respect to the matters concerning the business of a harmful liquid pollution supervisor, the method of operation concerning the discharge of harmful liquid substances and other matters concerning the prevention of inadequate discharge of harmful liquid substances, and provide them on board said ship or put up a notice.

3. The provisions of Article 6 paragraph 2 and Article 7 paragraph 2 shall apply mutatis mutandis to a harmful liquid pollution supervisor.

4. The provisions of the preceding three paragraphs shall not apply to foreign ships.

VII (YE 14)

(Harmful liquid substance record book)

Article 9-5. The master of a ship carrying harmful liquid substances (in the case of towed ship, etc., the shipowner; the same in next paragraph and paragraph 3) shall provide the harmful liquid substance record book on board (in the case of towed ship, etc., the office of a shipowner managing said ship; the same in paragraph 3).

2. The harmful liquid pollution supervisor (in the case of a ship in which no harmful liquid pollution supervisor is appointed, the master of the ship), in accordance with Ministry of Transport Ordinance, make entry in the harmful liquid substance record book whenever the discharge of harmful liquid substances or other operation concerning handling of harmful liquid substance on board said ship as prescribed by Ministry of Transport Ordinance was carried out.

3. The master of a ship shall keep the harmful liquid substance record book for two years on board the ship from the day on which the last entry was made.

4. In addition to those prescribed in the preceding three paragraphs, the form of the harmful liquid substance record book or other necessary matters concerning the harmful liquid substance record book shall be prescribed by Ministry of Transport Ordinance.

(Unassessed liquid substances) (10)

Article 9-6. The provision of Article 9-2 paragraph 1 shall apply mutatis mutandis to the unassessed liquid substances.

2. Any person who intends to carry unassessed liquid substance by ship shall notify beforehand that effect to the Minister of Transport in accordance with Ministry of Transport Ordinance.

3. The Minister of Transport shall, when the notification