

รายการอ้างอิง



ภาษาไทย

- ควบคุมมลพิษ, กรม. สารพิษตกค้างในทะเล บริเวณชายฝั่งทะเลตะวันออก. กรุงเทพมหานคร : กระทรวงวิทยาศาสตร์ เทคโนโลยีและสิ่งแวดล้อม, 2535.
- คณะกรรมการสิ่งแวดล้อมแห่งชาติ, สำนักงาน. รายงานฝึกอบรม เรื่อง "มลพิษทางน้ำ" 19-22 สิงหาคม 2529. กรุงเทพมหานคร : สำนักงานคณะกรรมการสิ่งแวดล้อม แห่งชาติ, 2529. (อัดสำเนา)
- คณะกรรมการวิจัยแห่งชาติ, สำนักงาน. การสัมมนาครั้งที่ 4 "การวิจัยคุณภาพน้ำและคุณภาพทรัพยากรมีชีวิตในน่านน้ำไทย" 7-9 กรกฎาคม 2530. กรุงเทพมหานคร : สำนักงานคณะกรรมการวิจัยแห่งชาติ, 2530. (อัดสำเนา)
- คณะวิทยาศาสตร์, จุฬาลงกรณ์มหาวิทยาลัย. การฝึกอบรมทางวิชาการสมุทรกรรม 3-21 ธันวาคม 2533. กรุงเทพมหานคร: โรงพิมพ์จุฬาลงกรณ์มหาวิทยาลัย, 2533. (อัดสำเนา)
- จงโปรด คชภูมิ. ผลกระทบของภาคอุตสาหกรรมที่มีต่อสิ่งแวดล้อมทางทะเล. วารสารสห. ฉบับเทคโนโลยี 19. (ตุลาคม-พฤศจิกายน 2535) : 49-56.
- จตุพร วงศ์ทองสวรรค์. กำบรรยายวิชากฎหมายระหว่างประเทศว่าด้วยทะเล. กรุงเทพมหานคร : โรงพิมพ์มหาวิทยาลัยรามคำแหง, 2520.
- จุมพต สายสุนทร. ดร. กำอธิบายกฎหมายระหว่างประเทศ อาณาเขตทางทะเล. กรุงเทพมหานคร : สำนักพิมพ์นิติธรรม, 2536.
- _____ . การทำเหมืองแร่ใต้ทะเลลึก : ความขัดแย้งระหว่างสหรัฐอเมริกาและกลุ่มประเทศกำลังพัฒนา. วารสารนิติศาสตร์ 16 (ธันวาคม 2529) : 55-70.
- ชรัตน์ รุ่งเรืองศิลป์. ทำเรือแหลมฉบัง : การติดตามตรวจสอบคุณภาพสิ่งแวดล้อมระหว่างการขุดลอกและถมที่. วารสารสิ่งแวดล้อมฉบับนำกับการพัฒนาประเทศ 1 (2535) : 120-126.

ณรงค์ ณ เชียงใหม่. มลพิษสิ่งแวดล้อม. กรุงเทพมหานคร : สำนักพิมพ์โอเคียนสโตร์,
2525.

ทวีศักดิ์ ปิยะกาญจน์ ดร. ภาวะสิ่งแวดล้อมชายฝั่งของประเทศไทย และแนวโน้มของผลกระทบ
ต่อการประมง. วารสารการพาณิชย์ 12 (มกราคม 2536) : 1-17.

เปี่ยมศักดิ์ เมนะเสวด. ดร. แหล่งน้ำกับปัญหามลพิษ. กรุงเทพมหานคร : ภาควิชา
วิทยาศาสตร์ทางทะเล คณะวิทยาศาสตร์ จุฬาลงกรณ์มหาวิทยาลัย, 2534.

มัลลิกา พิณจันทร์. ดร. กฎหมายระหว่างประเทศว่าด้วยทะเล. กรุงเทพมหานคร :
โรงพิมพ์สำนักพิมพ์มหาวิทยาลัยรามคำแหง, 2535.

วิจารณ์ สิมฉายา และสมใจ สิมฉายา. การพัฒนาอุตสาหกรรมชายฝั่งทะเลกับปัญหามลพิษทางน้ำ
วารสาร สสท. ฉบับเทคโนโลยี 19 (ตุลาคม - พฤศจิกายน 2535) : 45-48.

สนธิ วรรณแสง. มาบตาพุด : แหล่งอุตสาหกรรมหลักแห่งใหม่ของประเทศ วารสาร
สิ่งแวดล้อม 6 (เมษายน 2527) : 64-75.

สมพรพรรณ พุทธิพงษ์ธนกุล. การควบคุมการป้องกันและการแก้ไขภาวะมลพิษทางทะเลอัน
เนื่องมาจากน้ำมัน ในทัศนะกฎหมายระหว่างประเทศ. วิทยานิพนธ์ปริญญาโทมหาบัณฑิต
จุฬาลงกรณ์มหาวิทยาลัย, 2534.

สุธาบดี สัตตบุศย์. ดร. กฎหมายทะเล. กรุงเทพมหานคร : โรงพิมพ์มหาวิทยาลัยรามคำแหง,
2524.

สุรณี โรจน์อารยานนท์. สภาวะแวดล้อมของเรา ตอน มลพิษสภาวะแวดล้อม.
กรุงเทพมหานคร : สถาบันวิจัยสภาวะแวดล้อม, 2526.

สุโขทัยธรรมมาราช, มหาวิทยาลัย สาขานิติศาสตร์. เอกสารการสอนชุดกฎหมายสิ่งแวดล้อม.
ชุดที่ 8-15. พิมพ์ครั้งที่ 4 กรุงเทพมหานคร : มหาวิทยาลัยสุโขทัยธรรมมาราช,
2529.

อำนาจ วงศ์บัณฑิต. หลัก FREEDOM OF THE SEA ขัดกับหลัก COMMON HERITAGE OF
MANKIND หรือไม่. วารสารนิติศาสตร์ 15 (มีนาคม 2528) : 125-165.

อุ่แก้ว ประกอบไวยาทกิจ บีเวอร์. มนุษย์และระบบนิเวศน์ และสภาพนิเวศน์ในไทย.
กรุงเทพมหานคร : สำนักพิมพ์ไทยวัฒนาพานิช, 2531.

อัจฉรา มโนเวชพันธ์. ปัจจัยสิ่งแวดล้อมที่มีผลต่อการกระจายของสกุลง และปริมาณแพลงตอนพืช
ในอ่าวไทย. วิทยานิพนธ์ปริญญาโทมหาบัณฑิต จุฬาลงกรณ์มหาวิทยาลัย, 2528.

อุมา ประมาดผล. มาตรการทางกฎหมายในการควบคุม ป้องกัน และแก้ไขภาวะมลพิษทางทะเล
จากการทิ้งของเสีย. วิทยานิพนธ์ปริญญาโทมหาบัณฑิต จุฬาลงกรณ์มหาวิทยาลัย, 2532.

ภาษาอังกฤษ

Birnie, Patricia W. And Boyle, Alan E. International Law and Environment.
Oxford : Oxford University Press, 1992.

Boyle, Alan E. Marine Pollution under The Law of the Sea Convention
American Journal of International Law 79 (January 1985) :
347-372.

Dempsey, Stephen. Compliance and Enforcement in International Law-Oil
Pollution of the Marine Environment by Ocean Vessels.
Northwestern Journal of International Law and Business 6 (1984)
: 459-561.

Hardquist, Myron H. United Nations Convention on the Law of the Sea
1982 A Commentary. Netherlands : Martinus Niphoff Publishers,
1991.

Kindt, John Warren. Marine Pollution and Hydrocarbons : The Goal of
Minimizing Damage to the Marine Environment. California
Western International Law Journal 14 (winter 1984) 233-288.

Kittichaisaree, Kriangsak. Identification of Critical Issues/
Priorities: Conflict and Cooperation in the Gulf. SEAPOL
Overview Workshop on the Gulf of Thailand (1994) : 57.

Kwiatkowska, Barbara. Marine Pollution From Land - Based Sources :
Current Problems and Prospects. Ocean Development and
International Law 14 (1984) : 315-335.

Johnston, Douglas M. The Environmental Law of the Sea. Switzerland :
Daemich Mohr Gmhl, 1981.

- _____. Regionalization of the Law of the Sea. Massachusetts :
Ballinger Publishing Co., 1978.
- Johnston, Douglas M, and Gold, Edgar, and Tangsubkul Phiphat.
International Symposium on the New Law of the Sea in Southeast
Asia : Developmental Effects and Regional approaches. Canada :
Dalhousie Ocean Studies Programme, 1983.
- Malviya R.A. Marine Pollution under The 1982 Law of the Sea Convention
: Trends and Issues. International Review of Contemporary Law
(1988-1989) : 40-55.
- O'Connell. The International Law of the Sea. Oxford : Clarendon
Press, 1984.
- Ramakrishna, K. Environmental Concerns and the New Law Of the Sea.
Journal of Maritime law Commerce 16 (January 1985) 1-19.
- SEAPOL. The United Nations Convention on the Law of the Sea in
Southeast Asia : Problems of Implementation. Bangkok :
Innomedia Co., 1991.
- _____. Overview Workshop on the Gulf of Thailand. Bangkok :
Innomedia Co., 1994.
- _____. International Conference on the Implementation on the
Law of the Sea Convention in the 1990's : Marine Environmental
Protection and other Issues. Indonesia : Center for Archipelago,
Law and Development Studies, 1992.
- UN Convention on the Law of the Sea, 1982



ภาคผนวก



ศูนย์วิทยทรัพยากร
จุฬาลงกรณ์มหาวิทยาลัย

ภาคผนวก ก



UN Convention on the Law of the Sea, 1982.

PART XII

PROTECTION AND PRESERVATION OF THE

MARINE ENVIRONMENT

SECTION 1. GENERAL PROVISIONS

Article 192

General obligation

States have the obligation to protect and preserve the marine environment.

Article 193

Sovereign right of States to Exploit their natural resources

States have the sovereign right to exploit their natural resources pursuant to their environmental policies and in accordance with their duty to protect and preserve the marine environment.

Article 194

*Measures to prevent, reduce and control pollution of the
marine environment*

1. States shall take, individually or jointly as appropriate, all measures consistent with this Convention that are necessary to prevent, reduce and control pollution of the marine environment from

any source, using for this purpose the best practicable means at their disposal and in accordance with their capabilities, and they shall endeavour to harmonize their policies in this connection.

2. States shall take all measures necessary to ensure that activities under their jurisdiction or control are so conducted as not to cause damage by pollution to other States and their environment, and that pollution arising from incidents or activities under their jurisdiction or control does not spread beyond the areas where they exercise sovereign rights in accordance with this Convention.

3. The measures taken pursuant to this Part shall deal with all sources of pollution of the marine environment. These measures shall include, inter alia, those designed to minimize to the fullest possible extent:

- (a) the release of toxic, harmful or noxious substances, especially those which are persistent, from land-based sources, from or through the atmosphere or by dumping;
- (b) pollution from vessels, in particular measures for preventing accidents and dealing with emergencies, ensuring the safety of operations at sea, preventing intentional and unintentional discharges, and regulating the design, construction, equipment, operation and manning of vessels;
- (c) pollution from installations and devices used in exploration or exploitation of the natural resources of

the sea-bed and subsoil, in particular measures for preventing accidents and dealing with emergencies, ensuring the safety of operations at sea, and regulating the design, construction, equipment, operation and manning of such installations or devices;

- (d) pollution from other installations and devices operating in the marine environment, in particular measures for preventing accidents and dealing with emergencies, ensuring the safety of operations at sea, and regulating the design, construction, equipment, operation and manning of such installations or devices.

4. In taking measures to prevent, reduce or control pollution of the marine environment, States shall refrain from unjustifiable interference with activities carried out by other States in the exercise of their rights and in pursuance of their duties in conformity with this Convention.

5. The measures taken in accordance with this Part shall include those necessary to protect and preserve rare or fragile ecosystems as well as the habitat of depleted, threatened or endangered species and other forms of marine life.

Article 195

*Duty not to transfer damage or hazards or transform one type
of pollution into another*

In taking measures to prevent, reduce and control pollution of the marine environment, States shall act so as not to transfer, directly or indirectly, damage or hazards from one area to another or transform one type of pollution into another.

Article 196

Use of technologies or introduction of alien or new species

1. States shall take all measures necessary to prevent, reduce and control pollution of the marine environment resulting from the use of technologies under their jurisdiction or control, or the intentional or accidental introduction of species, alien or new, to a particular part of the marine environment, which may cause significant and harmful changes thereto.

2. This article does not affect the application of this Convention regarding the prevention, reduction and control of pollution of the marine environment.

SECTION 2. GLOBAL AND REGIONAL CO-OPERATION

Article 197

Co-operation on a global or regional basis

State shall co-operate on a global basis and, as appropriate, on a regional basis, directly or through competent international

organizations, in formulating and elaborating international rules, standards and recommended practices and procedures consistent with this Convention, for the protection and preservation of the marine environment, taking into account characteristic regional features.

Article 198

Notification of imminent or actual damage

When a State becomes aware of cases in which the marine environment is in imminent danger of being damaged or has been damaged by pollution, it shall immediately notify other States it deems likely to be affected by such damage, as well as the competent international organizations.

Article 199

Contingency plans against pollution

In the cases referred to in article 198, States in the area affected, in accordance with their capabilities, and the competent international organizations shall co-operate, to the extent possible, in eliminating the effects of pollution and preventing or minimizing the damage. To this end, States shall jointly develop and promote contingency plans for responding to pollution incidents in the marine environment.

Article 200

*Studies, research programmes and exchange of
information and data*

States shall co-operate, directly or through competent international organizations, for the purpose of promoting studies, undertaking programmes of scientific research and encouraging the exchange of information and data acquired about pollution of the marine environment. They shall endeavour to participate actively in regional and global programmes to acquire knowledge for the assessment of the nature and extent of pollution, exposure to it, and its pathways, risks and remedies.

Article 201

Scientific criteria for regulations

In the light of the information and data acquired pursuant to article 200, States shall co-operate, directly or through competent international organizations, in establishing appropriate scientific criteria for the formulation and elaboration of rules, standards and recommended practices and procedures for the prevention, reduction and control of pollution of the marine environment.

SECTION 3. TECHNICAL ASSISTANCE*Article 202**Scientific and technical assistance to developing States*

States shall, directly or through competent international organizations:

(a) promote programmes of scientific, educational, technical and other assistance to developing States for the protection and preservation of the marine environment and the prevention, reduction and control of marine pollution. Such assistance shall include, inter alia:

(i) training of their scientific and technical personnel;

(ii) facilitating their participation in relevant international programmes;

(iii) supplying them with necessary equipment and facilities;

(iv) enhancing their capacity to manufacture such equipment;

(v) advice on and developing facilities for research, monitoring, educational and other programmes;

(b) provide appropriate assistance, especially to developing States, for the minimization of the effects of major incidents which may cause serious pollution of the marine environment;

(c) provide appropriate assistance, especially to developing States, concerning the preparation of environmental assessments.

Article 203

Preferential treatment for developing States

Developing States shall, for the purposes of prevention, reduction and control of pollution of the marine environment or minimization of its effects, be granted preference by international organizations in:

- (a) the allocation of appropriate funds and technical assistance; and
- (b) the utilization of their specialized services.

SECTION 4. MONITORING AND ENVIRONMENTAL

ASSESSMENT

Article 204

Monitoring of the risks or effects of pollution

1. States shall, consistent with the rights of other States, endeavour, as far as practicable, directly or through the competent international organizations, to observe, measure, evaluate and analyse, by recognized scientific methods, the risks or effects of pollution of the marine environment.

2. In particular, States shall keep under surveillance the effects of any activities which they permit or in which they engage in order to determine whether these activities are likely to pollute the marine environment.

*Article 205**Publication of reports*

States shall publish reports of the results obtained pursuant to article 204 or provide such reports at appropriate intervals to the competent international organizations, which should make them available to all States.

*Article 206**Assessment of potential effects of activities*

When States have reasonable grounds for believing that planned activities under their jurisdiction or control may cause substantial pollution of or significant and harmful changes to the marine environment, they shall, as far as practicable, assess the potential effects of such activities on the marine environment and shall communicate reports of the results of such assessments in the manner provided in article 205.

**SECTION 5. INTERNATIONAL RULES AND
NATIONAL LEGISLATION TO PREVENT,
REDUCE AND CONTROL POLLUTION OF THE
MARINE ENVIRONMENT**

*Article 207**Pollution from land-based sources*

1. states shall adopt laws and regulations to prevent, reduce and control pollution of the marine environment from land-based

sources, including rivers, estuaries, pipelines and outfall structures, taking into account internationally agreed rules, standards and recommended practices and procedures.

2. States shall take other measures as may be necessary to prevent, reduce and control such pollution.

3. States shall endeavour to harmonize their policies in this connection at the appropriate regional level.

4. States, acting especially through competent international organizations or diplomatic conference, shall endeavour to establish global and regional rules, standards and recommended practices and procedures to prevent, reduce and control pollution of the marine environment from land-based sources, taking into account characteristic regional features, the economic capacity of developing States and their need for economic development. Such rules, standards and recommended practices and procedures shall be reexamined from time to time as necessary.

5. Laws, regulations, measures, rules, standards and recommended practices and procedures referred to in paragraphs 1, 2 and 4 shall include those designed to minimize, to the fullest extent possible, the release of toxic, harmful or noxious substances, especially those which are persistent, into the marine environment.

*Article 208**Pollution from sea-bed activities subject to
national jurisdiction*

1. Coastal states shall adopt laws and regulations to prevent, reduce and control pollution of the marine environment arising from or in connection with sea-bed activities subject to their jurisdiction and from artificial islands, installations and structures under their jurisdiction, pursuant to articles 60 and 80.

2. States shall take other measures as may be necessary to prevent, reduce and control such pollution.

3. Such laws, regulations and measures shall be no less effective than international rules, standards and recommended practices and procedures.

4. States shall endeavour to harmonize their policies in this connection at the appropriate regional level.

5. States, acting especially through competent international organizations or diplomatic conference, shall establish global and regional rules, standards and recommended practices and procedures to prevent, reduce and control pollution of the marine environment referred to in paragraph I. Such rules, standards and recommended practices and procedures shall be re-examined from time to time as necessary.

*Article 209**Pollution from activities in the Area*

1. International rules, regulations and procedures shall be established in accordance with Part XI to prevent, reduce and control pollution of the marine environment from activities in the Area. Such rules, regulations and procedures shall be re-examined from time to time as necessary.

2. Subject to the relevant provisions of this section, States shall adopt laws and regulations to prevent, reduce and control pollution of the marine environment from activities in the Area undertaken by vessels, installations, structures and other devices flying their flag or of their registry or operating under their authority, as the case may be. The requirements of such laws and regulations shall be no less effective than the international rules, regulations and procedures referred to in paragraph I.

*Article 210**Pollution by dumping*

1. States shall adopt laws and regulations to prevent, reduce and control pollution of the marine environment by dumping.

2. States shall take other measures as may be necessary to prevent, reduce and control such pollution.

3. Such laws, regulations and measures shall ensure that dumping is not carried out without the permission of the competent authorities of States.

4. States, acting especially through competent international organizations or diplomatic conference, shall endeavour to establish global and regional rules, standards and recommended practices and procedures to prevent, reduce and control such pollution. Such rules, standards and recommended practices and procedures shall be re-examined from time to time as necessary.

5. Dumping within the territorial sea and the exclusive economic zone or onto the continental shelf shall not be carried out without the express prior approval of the coastal State, which has the right to permit, regulate and control such dumping after due consideration of the matter with other States which by reason of their geographical situation may be adversely affected thereby.

6. National laws, regulations and measures shall be no less effective in preventing, reducing and controlling such pollution than the global rules and standards.

Article 211

Pollution from vessels

1. States, acting through the competent international organization or general diplomatic conference, shall establish international rules and standards to prevent, reduce and control pollution of the marine environment from vessels and promote the adoption, in the same manner, wherever appropriate, of routing systems designed to minimize the threat of accidents which might cause pollution of the marine environment, including the coastline, and

pollution damage to the related interests of coastal States. Such rules and standards shall, in the same manner, be re-examined from time to time as necessary.

2. States shall adopt laws and regulations for the prevention, reduction and control of pollution of the marine environment from vessels flying their flag or of their registry. Such laws and regulations shall at least have the same effect as that of generally accepted international rules and standards established through the competent international organization or general diplomatic conference.

3. States which establish particular requirements for the prevention, reduction and control of pollution of the marine environment as a condition for the entry of foreign vessels into their ports or internal waters or for a call at their off-shore terminals shall give due publicity to such requirements and shall communicate them to the competent international organization. Whenever such requirements are established in identical form by two or more coastal States in an endeavour to harmonize policy, the communication shall indicate which States are participating in such co-operative arrangements. Every State shall require the master of a vessel flying its flag or of its registry, when navigating within the territorial sea of a State participating in such co-operative arrangements, to furnish, upon the request of that State, information to whether it is proceeding to a State of the same region participating in such co-operative arrangements as and, if so, to

indicate whether it complies with the port entry requirements of that State. This article is without prejudice to the continued exercise by a vessel of its right of innocent passage or to the application of article 25, paragraph 2.

4. Coastal States may, in the exercise of their sovereignty within their territorial sea, adopt laws and regulations for the prevention, reduction and control of marine pollution from foreign vessels, including vessels exercising the right of innocent passage. Such laws and regulations shall, in accordance with Part II, section 3, not hamper innocent passage of foreign vessels.

5. Coastal States, for the purpose of enforcement as provided for in section 6, may in respect of their exclusive economic zones adopt laws and regulations for the prevention, reduction and control of pollution from vessels conforming to and giving effect to generally accepted international rules and standards established through the competent international organization or general diplomatic conference.

6. (a) Where the international rules and standards referred to in paragraph 1 are inadequate to meet special circumstances and coastal States have reasonable grounds for believing that a particular, clearly defined area of their respective exclusive economic zones is an area where the adoption of special mandatory measures for the prevention of pollution from vessels is required for recognized technical reasons in relation to its oceanographical and ecological conditions, as well as its utilization or the protection

of its resources and the particular character of its traffic, the coastal States, after appropriate consultations through the competent international organization with any other States concerned, may, for that area, direct a communication to that organization, submitting scientific and technical evidence in support and information on necessary reception facilities. Within 12 months after receiving such a communication, the organization shall determine whether the conditions in that area correspond to the requirements set out above. If the organization so determines, the coastal States may, for that area, adopt laws and regulations for the prevention, reduction and control of pollution from vessels implementing such international rules and standards or navigational practices as are made applicable, through the organization, for special areas. These laws and regulations shall not become applicable to foreign vessels until 15 months after the submission of the communication to the organization.

(b) the coastal States shall publish the limits of any such particular, clearly defined area.

(c) If the coastal States intend to adopt additional laws and regulations for the same area for the prevention, reduction and control of pollution from vessels, they shall, when submitting the aforesaid communication, at the same time notify the organization thereof. Such additional laws and regulations may relate to discharges or navigational practices but shall not require foreign vessels to observe design, construction, manning or equipment standards other than generally accepted international rules and

standards; they shall become applicable to foreign vessels 15 months after the submission of the communication to the organization, provided that the organization agrees within 12 months after the submission of the communication.

7. The international rules and standards referred to in this article should include inter alia those relating to prompt notification to coastal States, whose coastline or related interests may be affected by incidents, including maritime casualties, which involve discharges or probability of discharges.

Article 212

Pollution from or through the atmosphere

1. States shall adopt laws and regulations to prevent, reduce and control pollution of the marine environment from or through the atmosphere, applicable to the air space under their sovereignty and to vessels flying their flag or vessels or aircraft of their registry, taking into account internationally agreed rules, standards and recommended practices and procedures and the safety of air navigation.

2. States shall take other measures as may be necessary to prevent, reduce and control such pollution.

3. States, acting especially through competent international organizations or diplomatic conference, shall endeavour to establish global and regional rules, standards and recommended practices and procedures to prevent, reduce and control such pollution.

SECTION 6. ENFORCEMENT*Article 213**Enforcement with respect to pollution from land-based sources*

States shall enforce their laws and regulations adopted in accordance with article 207 and shall adopt laws and regulations and take other measures necessary to implement applicable international rules and standards established through competent international organizations or diplomatic conference to prevent, reduce and control pollution of the marine environment from land-based sources.

*Article 214**Enforcement with respect to pollution from
sea-bed activities*

States shall enforce their laws and regulations adopted in accordance with article 208 and shall adopt laws and regulations and take other measures necessary to implement applicable international rules and standards established through competent international organizations or diplomatic conference to prevent, reduce and control pollution of the marine environment arising from or in connection with sea-bed activities subject to their jurisdiction and from artificial islands, installations and structures under their jurisdiction, pursuant to articles 60 and 80.

Article 215

Enforcement with respect to pollution from activities in the Area

Enforcement of international rules, regulations and procedures established in accordance with Part XI to prevent, reduce and control pollution of the marine environment from activities in the Area shall be governed by that Part.

Article 216

Enforcement with respect to pollution by dumping

1. Laws and regulations adopted in accordance with this Convention and applicable international rules and standards established through competent international organizations or diplomatic conference for the prevention, reduction and control of pollution of the marine environment by dumping shall be enforced:

(a) by the coastal State with regard to dumping within its territorial sea or its exclusive economic zone or onto its continental shelf;

(b) by the flag State with regard to vessels flying its flag or vessels or aircraft of its registry;

(c) by any State with regard to acts of loading of wastes or other matter occurring within its territory or at its off-shore terminals.

2. No State shall be obliged by virtue of this article to institute proceedings when another State has already instituted proceedings in accordance with this article.

*Article 217**Enforcement by flag States*

1. States shall ensure compliance by vessels flying their flag or of their registry with applicable international rules and standards, established through the competent international organization or general diplomatic conference, and with their laws and regulations adopted in accordance with this Convention for the prevention, reduction and control of pollution of the marine environment from vessels and shall accordingly adopt laws and regulations and take other measures necessary for their implementation. Flag States shall provide for the effective enforcement of such rules, standards, laws and regulations, irrespective of where a violation occurs.

2. States shall, in particular, take appropriate measures in order to ensure that vessels sailing their flag or of their registry are prohibited from sailing, until they can proceed to sea in compliance with the requirements of the international rules and standards referred to in paragraph I, including requirements in respect of design, construction, equipment and manning of vessels.

3. States shall ensure that vessels flying their flag or of their registry carry on board certificates required by and issued pursuant to international rules and standards referred to in paragraph I. States shall ensure that vessels flying their flag are periodically inspected in order to verify that such certificates are in conformity with the actual condition of the vessels. These

certificates shall be accepted by other States as evidence of the condition of the vessels and shall be regarded as having the same force as certificates issued by them, unless there are clear grounds for believing that the condition of the vessel does not correspond substantially with the particulars of the certificates.

4. If a vessel commits a violation of rules and standards established through the competent international organization or general diplomatic conference, the flag State, without prejudice to articles 218, 220 and 228, shall provide for immediate investigation and where appropriate institute proceedings in respect of the alleged violation irrespective of where the violation occurred or where the pollution caused by such violation has occurred or has been spotted.

5. Flag States conducting an investigation of the violation may request the assistance of any other State whose co-operation could be useful in clarifying the circumstances of the case. States shall endeavour to meet appropriate requests of flag States.

6. States shall, at the written request of any State, investigate any violation alleged to have been committed by vessels flying their flag. If satisfied that sufficient evidence is available to enable proceedings to be brought in respect of the alleged violation, flag States shall without delay institute such proceedings in accordance with their laws.

7. Flag States shall promptly inform the requesting State and the competent international organization of the action taken and its outcome. Such information shall be available to all States.

8. Penalties provided for by the laws and regulations of States for vessels flying their flag shall be adequate in severity to discourage violations wherever they occur.

Article 218

Enforcement by port States

1. When a vessel is voluntarily within a port or at an off-shore terminal of a State, that State may undertake investigations and, where the evidence so warrants, institute proceedings in respect of any discharge from that vessel outside the internal waters, territorial sea or exclusive economic zone of that State in violation of applicable international rules and standards established through the competent international organization or general diplomatic conference.

2. No proceedings pursuant to paragraph 1 shall be instituted in respect of a discharge violation in the internal waters, territorial sea or exclusive economic zone of another State unless requested by that State, the flag State, or a State damaged or threatened by the discharge violation, or unless the violation has caused or is likely to cause pollution in the internal waters, territorial sea or exclusive economic zone of the State instituting the proceedings.

3. When a vessel is voluntarily within a port or at an off-shore terminal of a State, that State shall, as far as practicable, comply with requests from any State for investigation of a discharge

violation referred to in paragraph I, believed to have occurred in, caused, or threatened damage to the internal waters, territorial sea or exclusive economic zone of the requesting State. It shall likewise, as far as practicable, comply with requests from the flag State for investigation of such a violation, irrespective of where the violation occurred.

4. The records of the investigation carried out by a port State pursuant to this article shall be transmitted upon request to the flag State or to the coastal State. Any proceedings instituted by the port State on the basis of such an investigation may, subject to section 7, be suspended at the request of the coastal State when the violation has occurred within its internal waters, territorial sea or exclusive economic zone. The evidence and records of the case, together with any bond or other financial security posted with the authorities of the port State, shall in that event be transmitted to the coastal State. Such transmittal shall preclude the continuation of proceedings in the port State.

Article 219

*Measures relating to seaworthiness of vessels to avoid
pollution*

Subject to section 7, States which, upon request or on their own initiative, have ascertained that a vessel within one of their ports or at one of their off shore terminals is in violation of applicable international rules and standards relating to

seaworthiness of vessels and thereby threatens damage to the marine environment shall, as far as practicable, take administrative measures to prevent the vessel from sailing. Such States may permit the vessel to proceed only to the nearest appropriate repair yard and, upon removal of the causes of the violation, shall permit the vessel to continue immediately.

Article 220

Enforcement by coastal States

1. When a vessel is voluntarily within a port or at an off-shore terminal of a State, that State may, subject to section 7, institute proceedings in respect of any violation of its laws and regulations adopted in accordance with this Convention or applicable international rules and standards for the prevention, reduction and control of pollution from vessels when the violation has occurred within the territorial sea or the exclusive economic zone of that State.

2. Where there are clear grounds for believing that a vessel navigating in the territorial sea of a State has, during its passage therein, violated laws and regulations of that State adopted in accordance with this Convention or applicable international rules and standards for the prevention, reduction and control of pollution from vessels, that State, without prejudice to the application of the relevant provisions of Part II, section 3, may undertake physical inspection of the vessel relating to the violation and may, where the

evidence so warrants, institute proceedings, including detention of the vessel, in accordance with its laws, subject to the provisions of section 7.

3. Where there are clear grounds for believing that a vessel navigating in the exclusive economic zone or the territorial sea of a State has, in the exclusive economic zone, committed a violation of applicable international rules and standards for the prevention, reduction and control of pollution from vessels or laws and regulations of that State conforming and giving effect to such rules and standards, that State may require the vessel to give information regarding its identity and port of registry, its last and its next port of call and other relevant information required to establish whether a violation has occurred.

4. State shall adopt laws and regulations and take other measures so that vessels flying their flag comply with requests for information pursuant to paragraph 3.

5. Where there are clear grounds for believing that a vessel navigating in the exclusive economic zone or the territorial sea of a State has, in the exclusive economic zone, committed a violation referred to in paragraph 3 resulting in a substantial discharge causing or threatening significant pollution of the marine environment, that State may undertake physical inspection of the vessel for matters relating to the violation if the vessel has refused to give information or if the information supplied by the vessel is manifestly at variance with the evident factual situation

and if the circumstances of the case justify such inspection.

6. Where there is clear objective evidence that a vessel navigating in the exclusive economic zone or the territorial sea of a State has, in the exclusive economic zone, committed a violation referred to in paragraph 3 resulting in a discharge causing major damage or threat of major damage to the coastline or related interests of the coastal State, or to any resources of its territorial sea or exclusive economic zone, that State may, subject to section 7, provided that the evidence so warrants, institute proceedings, including detention of the vessel, in accordance with its laws.

7. Notwithstanding the provisions of paragraph 6, whenever appropriate procedures have been established, either through the competent international organization or as otherwise agreed, whereby compliance with requirements for bonding or other appropriate financial security has been assured, the coastal State if bound by such procedures shall allow the vessel to proceed.

8. The provisions of paragraphs 3, 4, 5, 6 and 7 also apply in respect of national laws and regulations adopted pursuant to article 211, paragraph 6.

Article 221

Measures to avoid pollution arising from maritime casualties

1. Nothing in this Part shall prejudice the right of States, pursuant to international law, both customary and conventional, to

take and enforce measures beyond the territorial sea proportionate to the actual or threatened damage to protect their coastline or related interests, including fishing, from pollution or threat of pollution following upon a maritime casualty or acts relating to such a casualty, which may reasonably be expected to result in major harmful consequences.

2. For the purposes of this article, "maritime casualty" means a collision of vessels, stranding or other incident of navigation, or other occurrence on board a vessel or external to it resulting in material damage or imminent threat of material damage to a vessel or cargo.

Article 222

Enforcement with respect to pollution from or through the atmosphere

States shall enforce, within the air space under their sovereignty or with regard to vessels flying their flag or vessels or aircraft of their registry, their laws and regulations adopted in accordance with article 212, paragraph 1, and with other provisions of this Convention and shall adopt laws and regulations and take other measures necessary to implement applicable international rules and standards established through competent international organizations or diplomatic conference to prevent, reduce and control pollution of the marine environment from or through the atmosphere, in conformity with all relevant international rules and standards

concerning the safety of air navigation.

SECTION 7. SAFEGUARDS

Article 223

Measures to facilitate proceedings

In proceedings instituted pursuant to this Part, States shall take measures to facilitate the hearing of witnesses and the admission of evidence submitted by authorities of another State, or by the competent international organization, and shall facilitate the attendance at such proceedings of official representatives of the competent international organization, the flag State and any State affected by pollution arising out of any violation. The official representatives attending such proceedings shall have such rights and duties as may be provided under national laws and regulations or international law.

Article 224

Exercise of powers of enforcement

The powers of enforcement against foreign vessels under this Part may only be exercised by officials or by warships, military aircraft, or other ships or aircraft clearly marked and identifiable as being on government service and authorized to that effect.

Article 225

*Duty to avoid adverse consequences in the exercise of the
powers of enforcement*

In the exercise under this Convention of their powers of enforcement against foreign vessels. States shall not endanger the safety of navigation or otherwise create any hazard to a vessel, or bring it to an unsafe port or anchorage, or expose the marine environment to an unreasonable risk.

Article 226

Investigation of foreign vessels

1. (a) State shall not delay a foreign vessel longer than is essential for purposes of the investigations provided for in articles 216, 218 and 220. Any physical inspection of a foreign vessel shall be limited to an examination of such certificates, records or other documents as the vessel is required to carry by generally accepted international rules and standards or of any similar documents which it is carrying ; further physical inspection of the vessel may be undertaken only after such an examination and only when:

(i) there are clear grounds for believing that the condition of the vessel or its equipment does not correspond substantially with the particulars of those documents;

(ii) the contents of such documents are not sufficient to confirm or verify a suspected violation; or

(iii) the vessel is not carrying valid certificates and records.

(b) If the investigation indicates a violation of applicable laws and regulations or international rules and standards for the protection and preservation of the marine environment, release shall be made promptly subject to reasonable procedures such as bonding or other appropriate financial security.

(c) Without prejudice to applicable international rules and standards relating to the seaworthiness of vessels, the release of a vessel may, whenever it would present an unreasonable threat of damage to the marine environment, be refused or made conditional upon proceeding to the nearest appropriate repair yard. Where release has been refused or made conditional, the flag State of the vessel must be promptly notified, and may seek release of the vessel in accordance with Part XV.

2. State shall co-operate to develop procedures for the avoidance of unnecessary physical inspection of vessels at sea.

Article 227

Non-discrimination with respect to foreign vessels

In exercising their rights and performing their duties under this Part, States shall not discriminate in form or in fact against vessels of any other State.

*Article 228**Suspension and restrictions on institution of proceedings*

1. Proceedings to impose penalties in respect of any violation of applicable laws and regulations or international rules and standards relating to the prevention, reduction and control of pollution from vessels committed by a foreign vessel beyond the territorial sea of the State instituting proceedings shall be suspended upon the taking of proceedings to impose penalties in respect of corresponding charges by the flag State within six months of the date on which proceedings were first instituted, unless those proceedings relate to a case of major damage to the coastal State or the flag State in question has repeatedly disregarded its obligation to enforce effectively the applicable international rules and standards in respect of violations committed by its vessels. The flag State shall in due course make available to the State previously instituting proceedings a full dossier of the case and the records of the proceedings, whenever the flag State has requested the suspension of proceedings in accordance with this article. When proceedings instituted by the flag State have been brought to a conclusion, the suspended proceedings shall be terminated. Upon payment of costs incurred in respect of such proceedings, any bond posted or other financial security provided in connection with the suspended proceedings shall be released by the coastal State.

2. Proceedings to impose penalties on foreign vessels shall not be instituted after the expiry of three years from the date on

which the violation was committed, and shall not be taken by any State in the event of proceedings having been instituted by another State subject to provisions set out in paragraph 1.

3. The provisions of this article are without prejudice to the right of the flag State to take any measures, including proceedings to impose penalties, according to its laws irrespective of prior proceedings by another State.

Article 229

Institution of civil proceedings

Nothing in this Convention affects the institution of civil proceedings in respect of any claim for loss or damage resulting from pollution of the marine environment.

Article 230

Monetary penalties and the observance of recognized rights of the accused

1. Monetary penalties only may be imposed with respect to violations of national laws and regulations or applicable international rules and standards for the prevention, reduction and control of pollution of the marine environment, committed by foreign vessels beyond the territorial sea.

2. Monetary penalties only may be imposed with respect to violations of national laws and regulations or applicable international rules and standards for the prevention, reduction and

control of pollution of the marine environment, committed by foreign vessels in the territorial sea, except in the case of a wilful and serious act of pollution in the territorial sea.

3. In the conduct of proceedings in respect of such violations committed by a foreign vessel which may result in the imposition of penalties, recognized rights of the accused shall be observed.

Article 231

Notification to the flag State and other States concerned

States shall promptly notify the flag State and any other State concerned of any measures taken pursuant to section 6 against foreign vessels, and shall submit to the flag State all official reports concerning such measures. However, with respect to violations committed in the territorial sea, the foregoing obligations of the coastal State apply only to such measures as are taken in proceedings. The diplomatic agents or consular officers and where possible the maritime authority of the flag State, shall be immediately informed of any such measures taken pursuant to section 6 against foreign vessels.

Article 232

Liability of States arising from enforcement measures

States shall be liable for damage or loss attributable to them arising from measures taken pursuant to section 6 when such measures are unlawful or exceed those reasonably required in the

light of available information. States shall provide for recourse in their courts for actions in respect of such damage or loss.

Article 233

Safeguards with respect to straits used for international navigation

Nothing in sections 5, 6 and 7 affects the legal regime of straits used for international navigation. However, if a foreign ship other than those referred to in section 10 has committed a violation of the laws and regulations referred to in article 42, paragraph 1 (a) and (b), causing or threatening major damage to the marine environment of the straits, the States bordering the straits may take appropriate enforcement measures and if so shall respect mutatis mutandis the provisions of this section.

SECTION 8. ICE-COVERED AREAS

Article 234

Ice-covered areas

Coastal States have the right to adopt and enforce non-discriminatory laws and regulations for the prevention, reduction and control of marine pollution from vessels in ice-covered areas within the limits of the exclusive economic zone, where particularly severe climatic conditions and the presence of ice covering such areas for most of the year create obstructions or exceptional hazards to navigation, and pollution of the marine environment could cause major

harm to or irreversible disturbance of the ecological balance. Such laws and regulations shall have due regard to navigation and the protection and preservation of the marine environment based on the best available scientific evidence.

SECTION 9. RESPONSIBILITY AND LIABILITY

Article 235

Responsibility and liability

1. States are responsible for the fulfilment of their international obligations concerning the protection and preservation of the marine environment. They shall be liable in accordance with international law.

2. States shall ensure that recourse is available in accordance with their legal systems for prompt and adequate compensation or other relief in respect of damage caused by pollution of the marine environment by natural or juridical persons under their jurisdiction.

3. With the objective of assuring prompt and adequate compensation in respect of all damage caused by pollution of the marine environment, States shall co-operate in the implementation of existing international law and the further development of international law relating to responsibility and liability for the assessment of and compensation for damage and the settlement of related disputes, as well as, where appropriate, development of criteria and procedures for payment of adequate compensation, such as

compulsory insurance or compensation funds.

SECTION 10. SOVEREIGN IMMUNITY

Article 236

Sovereign immunity

The provisions of this Convention regarding the protection and preservation of the marine environment do not apply to any warship, naval auxiliary, other vessels or aircraft owned or operated by a State and used, for the time being, only on government non-commercial service. However, each State shall ensure, by the adoption of appropriate measures not impairing operations or operational capabilities of such vessels or aircraft owned or operated by it, that such vessels or aircraft act in a manner consistent, so far as is reasonable and practicable, with this Convention.

SECTION 11. OBLIGATIONS UNDER OTHER

CONVENTIONS ON THE PROTECTION AND

PRESERVATION OF THE MARINE ENVIRONMENT

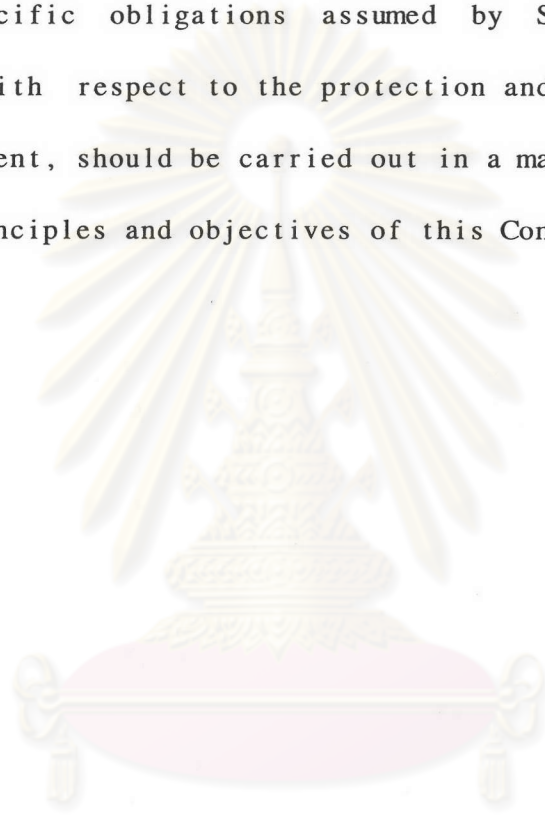
Article 237

Obligations under other conventions on the protection and preservation of the marine environment

1. The provisions of this Part are without prejudice to the specific obligations assumed by States under special conventions and

agreements concluded previously which relate to the protection and preservation of the marine environment and to agreements which may be concluded in furtherance of the general principles set forth in this Convention.

2. Specific obligations assumed by States under special conventions, with respect to the protection and preservation of the marine environment, should be carried out in a manner consistent with the general principles and objectives of this Convention.



ศูนย์วิทยทรัพยากร
จุฬาลงกรณ์มหาวิทยาลัย

ภาคผนวก ข

ประกาศกรมเจ้าท่า

ที่ 214/2537

เรื่อง กำหนดมาตรฐานคุณภาพน้ำทิ้งจากโรงงานอุตสาหกรรม

เนื่องจากการติดตามตรวจสอบคุณภาพสิ่งแวดล้อมของกรมเจ้าท่า และจากข้อมูลการศึกษาวิจัยของหน่วยงานต่างๆ พบว่า แม่น้ำสายหลักของประเทศอันได้แก่ แม่น้ำเจ้าพระยา แม่น้ำบางปะกง แม่น้ำแม่กลอง และแม่น้ำท่าจีน ได้ทวีความรุนแรงของภาวะมลพิษ และมีความเสื่อมโทรมของคุณภาพน้ำเพิ่มมากขึ้นเป็นลำดับ ซึ่งส่วนหนึ่งของสาเหตุความเสื่อมโทรมนั้น มาจากการปล่อยน้ำทิ้งสิ่งปฏิกูลลงสู่ลำน้ำ

เพื่อเป็นการแก้ไขบรรเทาความเสื่อมโทรม และภาวะมลพิษในลำน้ำอัน ได้แก่ แม่น้ำ ลำคลอง บึง อ่างเก็บน้ำ ทะเลสาบ หรือทะเลภายในน่านน้ำไทย กรมเจ้าท่าจึงกำหนดมาตรฐานน้ำทิ้งจากโรงงานอุตสาหกรรม ที่ปล่อยลงสู่แม่น้ำ ลำคลอง บึง อ่างเก็บน้ำ ทะเลสาบ หรือทะเลภายในน่านน้ำไทย โดยให้นำมาตรฐานน้ำทิ้งของกรมโรงงานอุตสาหกรรมมาใช้บังคับ ซึ่งได้กำหนดมาตรฐานไว้ดังต่อไปนี้

1. ค่าของความเป็นกรดต่าง (pH value) ระหว่าง 5 ถึง 9
2. ค่าของเปอร์มันกาเนต (Permanganate value) ไม่มากกว่า 60 มิลลิกรัมต่อลิตร
3. สารละลายที่ได้ (Dissolved Solids) ต้องมีค่าดังนี้
 - 3.1 สารละลายที่ได้ (Dissolved Solids) ต้องไม่มากกว่า 2,000 มิลลิกรัมต่อลิตร หรืออาจแตกต่างจากที่กำหนดไว้ได้ แล้วแต่ภูมิประเทศหรือลักษณะการระบายตามที่พนักงานเจ้าหน้าที่เห็นสมควร แต่ต้องไม่มากกว่า 5,000 มิลลิกรัมต่อลิตร
 - 3.2 น้ำทิ้งซึ่งจะระบายออกจากโรงงานสู่แหล่งน้ำกร่อยที่มีค่าความเค็ม (Salinity) เกิน 2,000 มิลลิกรัมต่อลิตร หรือลงสู่ทะเล ค่าสารละลายได้ในน้ำทิ้งจะมีค่ามากกว่าค่าสารละลายได้ที่มีอยู่ในแหล่งน้ำกร่อยหรือทะเลได้ไม่เกิน 5,000 มิลลิกรัมต่อลิตร
4. ซัลไฟด์ (Sulphide) คิดเทียบเป็นไฮโดรเจนซัลไฟด์ (H_2S) ไม่มากกว่า 1 มิลลิกรัมต่อลิตร

5. ไซยาไนด์ (Cyanide) คิดเทียบเป็นไฮโดรเจนไซยาไนด์ (HCN) ไม่มากกว่า 0.2 มิลลิกรัมต่อลิตร

6. โลหะหนักมีค่าดังนี้

6.1 สังกะสี (Zinc) ไม่มากกว่า 5 มิลลิกรัมต่อลิตร

6.2 โครเมียม (Chromium) ไม่มากกว่า 0.5 มิลลิกรัมต่อลิตร

6.3 อาร์เซนิก (Arsenic) ไม่มากกว่า 0.25 มิลลิกรัมต่อลิตร

6.4 ทองแดง (Copper) ไม่มากกว่า 1 มิลลิกรัมต่อลิตร

6.5ปรอท (Mercury) ไม่มากกว่า 0.005 มิลลิกรัมต่อลิตร

6.6 แคดเมียม (Cadmium) ไม่มากกว่า 0.03 มิลลิกรัมต่อลิตร

6.7 บาเรียม (Barium) ไม่มากกว่า 1 มิลลิกรัมต่อลิตร

6.8 เซเลเนียม (Selenium) ไม่มากกว่า 0.2 มิลลิกรัมต่อลิตร

6.9 ตะกั่ว (Lead) ไม่มากกว่า 0.2 มิลลิกรัมต่อลิตร

6.10 นิกเกิล (Nickel) ไม่มากกว่า 0.2 มิลลิกรัมต่อลิตร

6.11 แมงกานีส (Manganese) ไม่มากกว่า 5 มิลลิกรัมต่อลิตร

7. น้ำมันทาร์ (TAR) ไม่มีเลย

8. น้ำมันและไขมัน (Oil & Grease) ไม่มากกว่า 5 มิลลิกรัมต่อลิตร ยกเว้น โรงงานกลั่นน้ำมันและโรงงานประกอบกิจการผสมน้ำมันหล่อลื่น จาระบี ตามประเภทหรือชนิด โรงงานลำดับที่ 49,50 (4) แห่งกฎกระทรวง ฉบับที่ 1 (พ.ศ. 2512) ให้มีน้ำมันไม่มากกว่า 15 มิลลิกรัมต่อลิตร

9. ฟอร์มัลดีไฮด์ (Formaldehyde) ไม่มากกว่า 1 มิลลิกรัมต่อลิตร

10. ฟีนอลและหรือครีโซลส์ (Phenols & Cresols) ไม่มากกว่า 1 มิลลิกรัมต่อลิตร

11. คลอรีนอิสระ (Free Chlorine) ไม่มากกว่า 1 มิลลิกรัมต่อลิตร

12. ยาฆ่าแมลง (Insecticide) สารกัมมันตรังสี ไม่มีเลย

13. ถ้าอัตราส่วนระหว่างน้ำทิ้งกับน้ำในลำน้ำสาธารณะอยู่ระหว่าง 1 ต่อ 8 ถึง 1 ต่อ 150 สารที่ลอยเจือปนอยู่ต้องไม่มากกว่า 30 ส่วนใน 1,000,000 ส่วน ถ้าอัตราส่วนผสมระหว่างน้ำทิ้งกับน้ำในลำน้ำสาธารณะอยู่ระหว่าง 1 ต่อ 151 ถึง 1 ต่อ 300 สารที่ลอยเจือปนอยู่ต้องไม่มากกว่า 60 ส่วน ในอัตรา 1,000,000 ส่วน ถ้าอัตราส่วนผสมระหว่างน้ำทิ้งกับน้ำในลำน้ำสาธารณะอยู่ระหว่าง 1 ต่อ 301 ถึง 1 ต่อ 500 สารที่ลอยเจือปนอยู่ต้องไม่มากกว่า

150 ส่วนใน 1,000,000 ส่วน

14. ค่าของบี โอ ดี (B.O.D.) (5 วันที่อุณหภูมิ 20 องศาเซลเซียส) ไม่มากกว่า 20 มิลลิกรัมต่อลิตร หรืออาจแตกต่างจากที่กำหนดไว้ได้แล้วแต่ภูมิภาค หรือลักษณะการระบายตามที่พนักงานเจ้าหน้าที่เห็นสมควร แต่ต้องไม่มากกว่า 60 มิลลิกรัมต่อลิตร (บี โอ ดี หรือ B.O.D. ย่อมาจาก Biochemical Oxygen Demand) ยกเว้นเฉพาะโรงงานประเภทหรือชนิดดังต่อไปนี้

14.1 โรงงานประกอบกิจการทำอาหารจากสัตว์น้ำ และบรรจุในภาชนะที่ปิดผนึกและอากาศเข้าไม่ได้ ตามประเภทหรือชนิดของโรงงานลำดับที่ 7 (1) แห่งกฎกระทรวงฉบับที่ 1 (พ.ศ. 2512) จะต้องมีค่า บี โอ ดี (B.O.D.) ไม่มากกว่า 200 มิลลิกรัมต่อลิตร และนับตั้งแต่วันที่ 1 มกราคม 2526 เป็นต้นไป จะต้องมีค่า บี โอ ดี (B.O.D.) ไม่มากกว่า 100 มิลลิกรัมต่อลิตร

14.2 โรงงานผลิตแป้งมันสำปะหลัง ตามประเภทหรือชนิดของโรงงานลำดับที่ 9 (3) แห่งกฎกระทรวง ฉบับที่ 1 (พ.ศ. 2512) ซึ่งมีกรรมวิธีผลิตดังนี้

14.2.1 เหยือกแยกแป้งแล้วทำให้แห้งด้วยลมร้อน ต้องมีค่า บี โอ ดี (B.O.D.) ไม่มากกว่า 100 มิลลิกรัมต่อลิตร และนับตั้งแต่วันที่ 1 มกราคม 2526 เป็นต้นไป ต้องมีค่า บี โอ ดี (B.O.D.) ไม่มากกว่า 20 มิลลิกรัมต่อลิตร หรืออาจแตกต่างจากที่กำหนดไว้ได้ แล้วแต่ภูมิภาค หรือลักษณะการระบายตามที่พนักงานเจ้าหน้าที่เห็นสมควร แต่ต้องไม่มากกว่า 60 มิลลิกรัมต่อลิตร

14.2.2 แยกแป้งด้วยการตกตะกอนแล้วทำให้แห้งบนพื้นอังไฟต้องมีค่า บี โอ ดี (B.O.D.) ไม่มากกว่า 200 มิลลิกรัมต่อลิตร และนับตั้งแต่วันที่ 1 มกราคม เป็นต้นไป ต้องมีค่า บี โอ ดี (B.O.D.) ไม่มากกว่า 100 มิลลิกรัมต่อลิตร

14.3 โรงงานประกอบกิจการเกี่ยวกับทำผลิตภัณฑ์อาหารจากแป้งเป็นเส้นหรือจิ้น ตามประเภทหรือชนิดโรงงาน ลำดับที่ 10(3) แห่งกฎกระทรวงฉบับที่ 1 (พ.ศ. 2512) ชนิดทำก๋วยเตี๋ยว ขนมจีน และเส้นหมี่ที่ใช้ข้าวเป็นวัตถุดิบไม่เกิน 500 กิโลกรัมต่อวัน ต้องมีค่า บี โอ ดี (B.O.D.) ไม่มากกว่า 150 มิลลิกรัมต่อลิตร และนับตั้งแต่วันที่ 1 มกราคม 2526 เป็นต้นไป ต้องมีค่า บี โอ ดี (B.O.D.) ไม่มากกว่า 100 มิลลิกรัมต่อลิตร

14.4 โรงงานหมัก ฟอก หนังกสัตว์ ตามประเภทหรือชนิดโรงงาน ลำดับที่ 29 แห่งกฎกระทรวง ฉบับที่ 1(พ.ศ. 2512) ที่ใช้หนังกเป็นวัตถุดิบต้องมีค่า บี โอ ดี (B.O.D.)

ไม่มากกว่า 200 มิลลิกรัมต่อลิตร และนับตั้งแต่วันที่ 1 มกราคม 2536 เป็นต้นไป ต้องมีค่า บี โอ ดี (B.O.D.) ไม่มากกว่า 100 มิลลิกรัมต่อลิตร

14.5 โรงงานผลิตเยื่อกระดาษจากไม้ ชานอ้อย หญ้า เศษผ้า ฯลฯ ตามประเภทหรือชนิดโรงงาน ลำดับที่ 38(1) แห่งกฎกระทรวง ฉบับที่ 1(พ.ศ. 2512) ต้องมีค่า บี โอ ดี (B.O.D.) ไม่มากกว่า 150 มิลลิกรัมต่อลิตร และนับตั้งแต่วันที่ 1 มกราคม 2526 เป็นต้นไป ต้องมีค่า บี โอ ดี (B.O.D.) ไม่มากกว่า 100 มิลลิกรัมต่อลิตร

14.6 โรงงานห้องเย็น ตามประเภทหรือชนิดโรงงาน ลำดับที่ 92 แห่งกฎกระทรวง ฉบับที่ 1(พ.ศ. 2512) ชนิดที่มีการแกะล้างแล้วแช่เย็นสัตว์น้ำต้องมีค่า บี โอ ดี (B.O.D.) ไม่มากกว่า 200 มิลลิกรัมต่อลิตร และนับตั้งแต่วันที่ 1 มกราคม 2526 เป็นต้นไป ต้องมีค่า บี โอ ดี (B.O.D.) ไม่มากกว่า 100 มิลลิกรัมต่อลิตร

15. อุณหภูมิของน้ำทิ้งที่ระบายลงสู่แหล่งน้ำสาธารณะไม่มากกว่า 40 องศาเซลเซียส

16. สีหรือกลิ่นของน้ำทิ้ง เมื่อระบายลงสู่ลำน้ำสาธารณะแล้ว ไม่เป็นที่พึงรังเกียจ

จึงประกาศให้ทราบโดยทั่วกัน

ประกาศ ณ วันที่ 2 พฤษภาคม พ.ศ. 2537

ลงชื่อ เสถียร วงศ์วีเชียร

(นายเสถียร วงศ์วีเชียร)

อธิบดีกรมเจ้าท่า

ศูนย์วิทยทรัพยากร
จุฬาลงกรณ์มหาวิทยาลัย

ประวัติผู้เขียน



นางสาวนลิน ญาณศิริ เกิดเมื่อวันที่ 4 ตุลาคม พ.ศ. 2511 ที่กรุงเทพมหานครสำเร็จ
การศึกษาปริญญาตรีนิเทศศาสตรบัณฑิต คณะนิเทศศาสตร์ จุฬาลงกรณ์มหาวิทยาลัย ในปีการศึกษา 2532
และเข้าศึกษาต่อในหลักสูตรนิเทศศาสตรมหาบัณฑิต ที่จุฬาลงกรณ์มหาวิทยาลัยเมื่อ พ.ศ. 2533
ปัจจุบันทำงานอยู่ที่กองกฎหมาย การไฟฟ้าส่วนภูมิภาค กรุงเทพมหานคร



ศูนย์วิทยทรัพยากร
จุฬาลงกรณ์มหาวิทยาลัย