

#### 4. 関連新聞記事等



# Chatichai calls for more Japanese investments

THE NATION 9 Apr. 1990

## Especially for Eastern and Southern seaboard

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Tokyo

PRIME Minister Chatichai Choonhavan will today urge Japanese businessmen to seriously consider investing in Thailand's two giant industrial projects, the Eastern and Southern seaboard, and in the construction of a "land bridge" linking the Pacific and the Indian oceans.

Chatichai plans to make the appeal in a keynote speech at the luncheon meeting to be hosted jointly by *Keizaijin* [Federation of Japanese Industries] and Japan's Chamber of Commerce at the Tokyo Hall in downtown Tokyo.

In earlier talks with Japanese leaders, including Prime Minister Toshiki Kaifu, Chatichai had sought assistance from the Japanese government for the building and expanding of infrastructure to cope with the rapid industrialization in Thailand.

The Eastern Seaboard Project in the East, which is equipped with a deep-sea port, is nearing completion and will become one of the country's most important industrial zones. The Chatichai government has also adopted a major project to develop the Southern seaboard and has been calling for foreign investment and assistance for both.

The influx of foreign investments in the past several years has put a strain on the country's infrastructure.

Chatichai's aides told *The Nation* that premier will reiterate his call for Thailand to be used as "springboard" for trade and investment between Asean and Indochina and Burma.

They said Chatichai will stress his desire to see Japan as Thailand's partner in exploring untapped business opportunity in the region while at the same time boosting economic cooperation between them.

Chatichai has made his plan to turn the battlefield in Indochina into a marketplace a milestone in his foreign policy.

In his speech today, Chatichai will also stress the investment opportunity in Thailand, pointing out the country's political stability and how it is offering a "safe haven" for Japanese investments and commercial undertakings.

Chatichai is on a week-long official

visit to Japan where he also met Japanese business community.

He will end his visit of Tokyo today and leave for the Kansai area for a tour of hi-tech factories in Hakone, and Osaka.

Chatichai's aides said Thailand and Japan should work together in promoting closer economic cooperation in the Asian and Pacific region.

They said Chatichai is stressing that the objective of Asia-Pacific cooperation is not the establishment of a trade bloc, but to promote a free and fair trade on a global basis.

In order to set an example for the future Asia-Pacific cooperation, Chatichai is urging Japan to bring about a more balanced bilateral trade by buying more from Thailand, they said.

In talks with Japanese leaders, Chatichai repeatedly called for the opening of Japan's protected market to Thai products.

Thailand and Japan have signed a cooperation agreement in the field of environmental protection with a plan to build a research and training centre in Thailand, the Japanese government

announced over the weekend.

The announcement was made as Industry Minister Pramarn Adireksam is scheduled to arrive here today to begin talks on cooperation with Japan in preserving Thailand's environment.

PM's Office Minister Anuwat Watanapongsiri, who is accompanying Chatichai here, said Thailand needs outside help to stop the worsening pollution problem.

According to the agreement, Japan will provide facilities and technical know-how in tackling the pollution problem.

The centre will conduct studies of air, water and noise pollution, waste problems, toxic substance problems, environmental administration, environmental assessment, information processing and education.

The project is financed by Japan's ODA [Overseas Development Aid]. It is the first application of the governmental aid for environmental protection.

**TRADE TALK**

Science, Technology and Energy Minister Prachuab Chalyasarn recently joined the signing ceremony of the Record of Discussion on technical cooperation for the Environment Research and Training Centre between the Japan International Cooperation Agency (JICA) and the Office of the National Environment Board (ONEB) at the Imperial Hotel.

Photo shows from left: Kazuo Matsushita, Head of JICA mission team; Mr Prachuab; and Arthorn Suphapodok, secretary general of ONEB.



Signing Ceremony of R/D on Technical Cooperation for ERTC between ONEB and JICA at the New Imperial Hotel on 29 Mar. 1990

## FUTURE PLAN

The projects/activities on research and development, technology transfer, manpower development in the fields of environment, nuclear technology, metallurgy and material technology, etc., will further be developed by using the existing natural resources. The research center, training center, laboratory, pilot plant and plot of land for demonstration of strain of high economic value such as Rare Earth Research and Development Center, Environmental Research and Training Center, Technology Exhibition Museum, etc., will be established. The Central Office, which consists of computer room, exhibition hall, operation room, auditorium and offices, will serve as coordinating center. The public utilities like road, garbage disposal system, waste water treatment, telephone, etc., will then be improved and expanded in order to build up the infrastructure of "TECHNOPOLIS" and make it become the perfect science and technology complex in the near future.

# TECHNOPOLIS

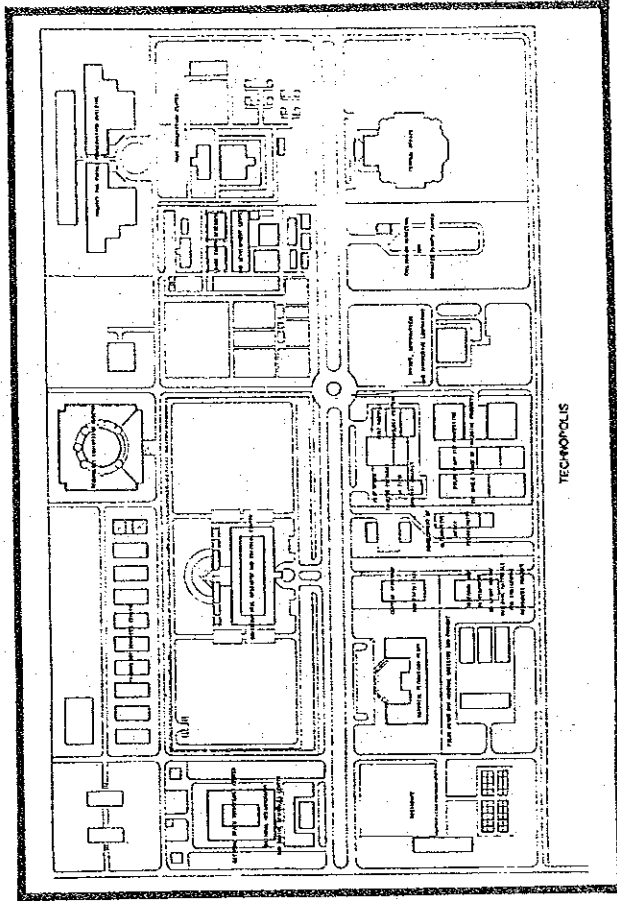
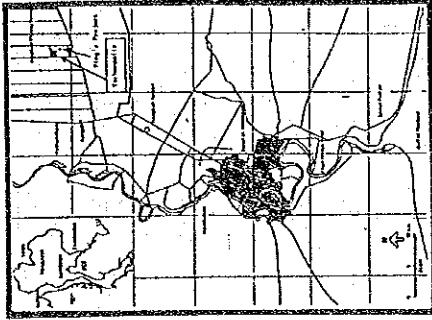
Ministry of Science,  
Technology and Energy

## BACKGROUND

Due to rapid population growth and economic development over the last several decades, Thailand has made large-scale investments in community, industrial and other infrastructural developments in addition to the developments in traditional agriculture. These developments, however, need the use of appropriate technology.

As the necessity of research employing modern technology has increased, the project entitled "TECHNOPOLIS" was formulated by the Ministry of Science, Technology and Energy since 1982.

LOCATION MAP AND PERSPECTIVE



# TECHNOPOLIS MINISTRY OF SCIENCE, TECHNOLOGY AND ENERGY

## OBJECTIVES AND GOALS

"TECHNOPOLIS" was established as a science and technology complex which gathers a number of significant technological activities along the national policy including the activities on research and development, technology transfer, manpower development in the areas of genetic engineering and biotechnology, metallurgy and material technology, electronics and computer technology, as well as energy and environment.

## AREA AND LOCATION

The total area of "TECHNOPOLIS" is 227 acres and located at 47 km., north of Bangkok in the Khlong Luang District of Pathum Thani Province.

## ADMINISTRATION

"TECHNOPOLIS" is under the administration of "TECHNOPOLIS COMMITTEE" chaired by the Permanent Secretary for Science, Technology and Energy.

## BUDGET

The budget comes from the Royal Thai Government and the foreign government supports.

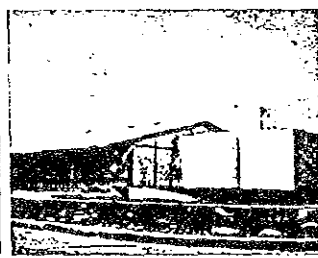
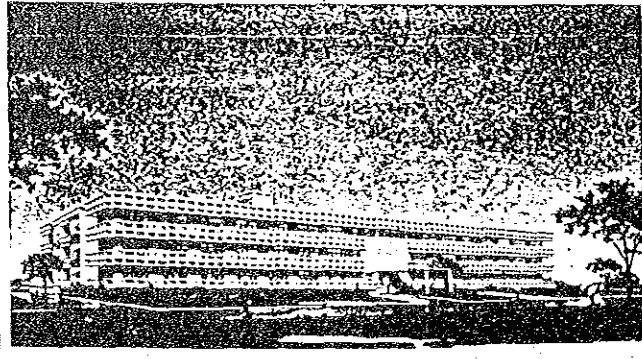
## ORGANIZATION STRUCTURE

"TECHNOPOLIS" embraces important projects / activities of various agencies under the Ministry of Science, Technology and Energy as follows:

1. Office of the Permanent Secretary.
  - Central Office
  - Material Technology (fiber glass) Plant
2. Office of the Atomic Energy for Peace.
  - Thai Irradiation Center  
(This center is one of the King's celebration projects, and got financial support from the Government of Canada amounting 96 million bahts for the irradiation machineries and equipments including its installation, technology transfer as well as its operation)
    - Rare Earth Research and Development Center
3. Office of the National Environment Board.
  - Environmental Research and Training Center  
(This center got financial support from the government of Japan

amounted 500 million bahts for building construction and durable articles)

4. Office of the National Research Council.
  - National Space Technology Center
  - National Oceanography and Marine Resources Center
5. Thailand Institute of Scientific and Technological Research.
  - Development of Alternatives Energy Technologies
    - Research and Development on Light Weight Building Materials for Indigenous Resources Project
      - Pilot Plant for Mineral Dressing and Foundry
      - Pilot Plant for Processing the Whole Range of Tanagerine Products
      - Twin Screw Cooking Extruder for Food Industry Project
      - Post Harvest Technology Center
      - Rocket, Aeronautical and Automotive Laboratory
        - Central Workshop and Facilities
6. Department of Science Service.
  - Technology Services Center including Technology Exhibition Museum
7. Office of the National Energy Administration.
  - Project for Energy-Conservation Building



**NEB'S ROLE IN ENVIRONMENTAL PROTECTION IN THAILAND**



prepared by

**INTERNATIONAL AFFAIRS SECTION  
INFORMATION AND ENVIRONMENTAL QUALITY PROMOTION DIVISION  
OFFICE OF THE NATIONAL ENVIRONMENT BOARD**

**BANGKOK, THAILAND  
1989**

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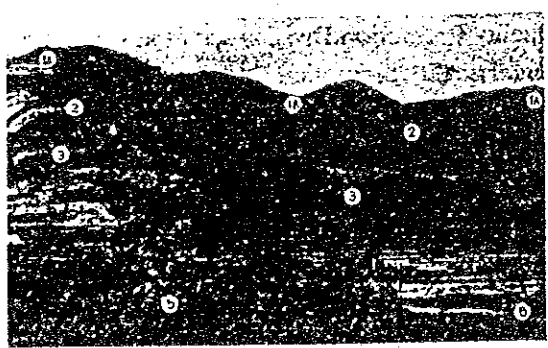
# 1. Introduction

In recent years the requirement for careful planning concerning environmental protection has become recognized by both government and the public as a critical need so that further development activities will give due attention to ensure proper use of our precious natural resources and maintenance of sustainable development as well as an acceptable level of environment in our communities.

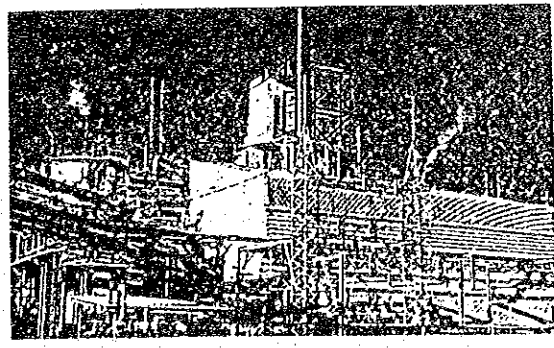
The establishment of the Office of the National Environment Board in 1975 is obviously evidence of the government's concern about the environmental problem and awareness of environmental values and the need for rational use of natural resources. Under the Improvement and Conservation of the National Environmental Quality Act, B.E. 2518 (1975), the ONEB is charged with developing a national program for environmental protection, including creating public awareness of the need for maintaining an appropriate balance between socio-economic development and protection of essential environmental resources.

The environmental development policy and measures formulated by ONEB provide a guideline for all governmental agencies concerned with environmental management. The policy and measures deal with :-

- management of natural resources, i.e. forest, soil, land, water, minerals, marine resources and mangrove forest in order to control and minimize impact to the environment and ecosystem.
- formulation of general policy and strategies of short and long term measures aiming to strike a balance of economic development and conservation of natural resources and cultural heritages.
- development of appropriate strategies to achieve environmental protection objectives based on the use of environmental impact assessment (EIA), which is ONEB's the most effective tool to guide the preparation and implementation of future project development.
- establishment of environmental quality standards and monitoring for the prevention and control of environmental pollution, including water, air and land pollution, noise and vibration, and management of solid wastes and toxic substances.
- promotion of environmental education and training designed to encourage public awareness and public participation with the efforts to enhance environmental quality and quality of life.



*The concept of watershed management should be applied for sustainable-natural resources management*



*Carefully planned industrialization will benefit people*

## 2. Organization and Responsibilities of NEB and ONEB

In 1975 the Royal Thai Government promulgated the Improvement and Conservation of National Environmental Quality Act, B.E. 2518 (1975). This Act, among other things, created the National Environment Board (NEB), and the Office of the National Environment Board (ONEB) as the Executive Secretariat and the operational arm of the Board.

The National Environment Board (NEB) appointed by the Cabinet comprises 20 members and includes the Deputy Prime Minister as Chairman and the Secretary - General of the Office of the National Environment Board as Secretary. The other board members are Permanent Secretaries of the Ministries of Defence; Agriculture and Cooperatives; Transport and Communications; Interior; Science, Technology and Energy; Public Health; Industry; and the Secretary-General of the Office of the National Economic and Social Development Board. The other ten members include experts on the environment from academic institutions and the private sector.

The Office of the National Environment Board (ONEB) is headed by the Secretary-General with two deputies. The ONEB has a professional staff representing different technical disciplines which is capable of undertaking study, research and operational activities, integrated planning, monitoring, and other evaluations in various environmental fields. Its administrative organization consists of:

- Office of Administration
- Information and Environmental Quality Promotion Division
- Environmental Policy and Planning Division
- Environmental Impact Evaluation Division
- Environmental Quality Standards Division.

### Office of Administration

The Office of Administration is responsible for policy matters including official correspondence, personnel administration and management, finance, supplies and equipment. The Office provides secretarial services for meetings of the NEB and its ad hoc committees. One of its duties is responsibility for compilation and amendment of environmental laws and regulations.

### Information and Environmental Quality Promotion Division

The Information and Environmental Quality Promotion Division serves as the center for coordination and public relations on environmental quality promotion. It prepares, publishes and distributes the NEB journals and newsletter, promotional documents and other information materials. Public awareness is encouraged through campaigns, exhibition and the use of mass media.

The Division maintains liaison with the environmental agencies of other countries and with the international agencies. In collaboration with other divisions, it has recently established a computer-based information system to provide information on various environmental fields.

Another main concern of this division is with environmental education and training programmes carried out in Thailand and internationally which are of interest to ONEB operations,

including planning and arranging for participation in these programmes by the ONEB staff. This division is also charged with liaison with the environmental agencies of other countries and with the international agencies in planning and conducting programmes for foreign guests and distinguished visitors. It serves as the Thailand's national focal point for UNEP's INFOTERRA Programme, which represents networks of national and international information centers engaged in collecting, collating, and disseminating information in the field of the environment.

### **Environmental Policy and Planning Division**

The Environmental Policy and Planning Division formulates Environmental policies, plans and strategies to be considered by the National Economic and Social Development Board for incorporation into the National Economic and Social Development Plans prepared by NESDB. These policies, plans and strategies are in the fields of human settlements, natural and water resources management, industrial, energy and mineral resources development as well as nature and cultural heritages conservation. The Division also prepares annual reports on the State of the Environment in Thailand. Its other major function is to apply remote sensing technique for environmental management planning, land use mapping and natural resources surveys.

### **Environmental Impact Evaluation Division**

The Environmental Impact Evaluation Division is responsible for the Environmental Impact Assessment (EIA) process as required by law. This task is mainly in the form of preparing requirements for preparation of EIA by project proponents and for critical review of EIA reports submitted by the project proponents. The Division also provides technical advice such as guidelines and terms of reference for compiling EIA reports as well as recommending mitigation measures and monitoring methods.

In addition, the Division has carried out studies and research for the improvement of EIA procedures for regional development projects conducted by the Government. It is also in charge of issuing and renewing licences to private sector firms which prepare EIA reports as well as recommending types and sizes of development projects for which legal EIA reports will be required.

### **Environmental Quality Standards Division**

The Environmental Quality Standards Division is responsible for establishment of criteria and standards needed for assuring acceptable protection of environmental resources including water, land, air and aesthetic values.

The Division develops monitoring programmes and conducts studies and research on appropriate technology for pollution control and management. It also provides technical services when complaints are received to solve particular pollution problems. To liaise with the International Register of Potentially Toxic Chemicals (IRPTC), the Division serves as the national focal point in conducting chemical information exchange and dissemination.

### **Responsibilities of NEB and ONEB**

Under the "Improvement and Conservation of National Environmental Quality Act, B.E. 2518 (1975) revised in 1978, the NEB is charged with :

- submitting policy and opinion concerning the improvement and conservation of environmental quality to the Cabinet;
- considering guidelines for the implementation of policy in respect of the schemes or projects concerning environmental quality;
- considering and submitting opinion on projects of Government agencies, State enterprises and private organizations, which may have adverse effects on the environmental quality, to the Cabinet or Government agencies concerned;
- submitting plans for the development, improvement and conservation of environmental quality to the Cabinet;
- giving advice to the Prime Minister on matters to be prescribed in the Notification issued under section 17 or the Order issued under section 20 of the Act;
- recommending standards of environmental quality to Government agencies having the statutory power to prescribe them as well as recommending measures for the prevention and conservation of environmental quality in various respects to the Government agencies concerned;
- recommending amendments and improvements to the law concerning the prevention and conservation of environmental quality to the Cabinet;
- coordinating works between Government agencies, State enterprises and private organizations on matters concerning environmental quality;
- submitting opinion to the Prime Minister for consideration in cases where any Government agency or State enterprise violates or does not comply with the laws, rules or regulations concerning the conservation of environmental quality which may cause unacceptable levels of damage;
- submitting reports on the national state of environmental quality to the Cabinet at least once a year;
- considering any other matters concerning the environmental quality as the Cabinet or the Prime Minister may request; and
- performing other functions as may be designated by law to be those of the National Environment Board.

In the performance of above-mentioned duties, the National Environment Board may entrust the Office of the National Environment Board with the operation or submission of recommendations to the National Environment Board for further proceeding.

Also as required by the Act of 1975, revised in 1978, the Office of the National Environment Board (ONEB) has duties as follows :

- to perform the works as may be entrusted by the National Environment Board;
- to study and analyse the environmental conditions and quality to be used for planning and determining the standards of the national environmental quality as well as to formulate guidelines for the enhancement of the national environmental quality;
- to recommend to the National Environment Board measures to be adopted with a view to improving and enhancing the national environmental quality;
- to check and evaluate the results on compliance with or enforcement of the laws, rules and regulations concerning the prevention and conservation of environmental quality by Government agencies, State enterprises and private organizations in order to report to the National Environment Board;

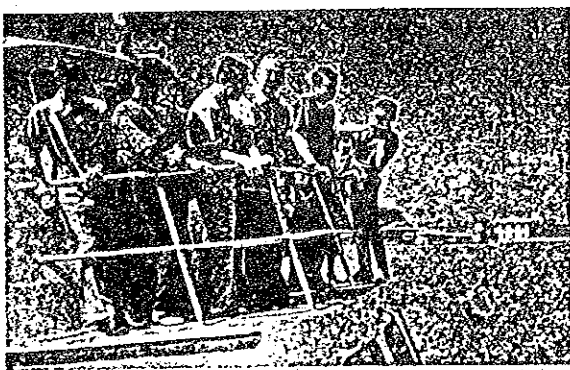
- to receive for consideration and remedy a petition from any person who has been aggrieved or damaged by an act which has adverse effects on the environmental quality;
- to perform the duty as the center of coordination and public relations in respect of the environmental quality within the country and with foreign countries;
- to encourage or carry out study, research and promulgation of information on problems of environmental quality in cooperation with educational establishments and other agencies;
- to promote and encourage the study of environmental quality at every level of education; and
- to perform other functions as may be designated by law to be those of the Office of the National Environment Board.



*Following complaints of local residents, H.E. Mr. Bhichai Rattakul the Deputy Prime Minister & Chairman of NEB had an inspection to find out counter-measures for the chemical substance fire at Khlong Thoey Port.*



*A training course on environmental issues for school teachers at the secondary level organized by the ONEB. The ONEB organizes a number of training courses not only for school teachers but also for other target-groups.*



*H.E. Mr. Bhichai Rattakul together with ONEB staff members, inspected water pollution problems in Chao Phraya River for formulation of measures to improve water quality.*

### 3. Ad Hoc Committees on the Environment

Because environmental problems are complicated and cover a wide range of issues, the NEB is empowered to establish ad hoc committees to be responsible for specific environmental problems. It may also advise the Cabinet on the need to establish ad hoc committees to deal with urgent and important environmental matters. These ad hoc committees are responsible for considering the problems and submitting opinions and recommendations to the NEB. They are as follows:

#### 1) Ad Hoc Committees appointed by NEB

- Committee on Environmental Laws
- Committee on Land Use
- Committee on Watershed Classification and Management
- Committee on Water Quality
- Committee on Population and Human Settlements
- Committee on Air and Noise Pollution
- Committee on Natural and Cultural Heritage Conservation
- Committee on Marine Environment
- Committee on Toxic Substances Management
- Committee on Industrial Pollution
- Committee on Coastal Resources Management

#### 2) Ad Hoc Committees appointed by the Cabinet

- Committee on the Krung Rattanakosin Preservation and Conservation Project
- Committee on Relocation and Site Planning of Government Offices for the Bangkok Metropolis and Major Cities
- Committee on Follow-up of Implementation of Measures concerning Groundwater Use and Land Subsidence
- Committee on Bang Krajao Environmental Management and Development.

As the secretariat to the NEB and the ad hoc committees, ONEB gives advice and cooperates with other government agencies and the private sector on environmental matters to protect, conserve and enhance the environment.

#### 4. National Policies on Environmental Development and Objectives

The major components of national environmental development policies and measures are as follows:-

(a) Emphasis is placed on preventive measures to curtail the destruction of natural environment and natural resources, i.e. to focus efforts on control of the causes of pollution rather than on trying to solve problems resulting from lack of preventive measures. While the cost of prevention is affordable, in many cases the costs of "cleaning up after the fact" are prohibitively high.

(b) It is also necessary to maintain a balance between socio-economic development and environmental improvement. This policy is in keeping with national socio-economic development policies and national policies in other areas.

(c) Environmental impacts of various development projects are considered from the initial stage of project preparation, through project construction and operation, to minimize environmental damage. Periodic monitoring following project implementation is essential.

(d) The scope of role and authority of various agencies is laid down at every level in order to achieve proper coordination and efficient policy implementation.

(e) Guidelines are formulated for promotional activities as well as for study and research concerning the prevention and correction of environmental problems in all areas, including environmental education, promotion, and information dissemination.

(f) However, since environmental promotion and conservation work has to be carried out on a continuous basis, these policies may have to be modified and adapted in the future to suit changing circumstances.

#### Environmental Development Objectives

The main objectives of the national policies and measures on environmental development are as follows :

(a) To promote protection, rehabilitation, and conservation of natural environmental resources so these will be available on a continuing basis for supporting development activities and quality of life so they will be available for posterity as well as now.

(b) To maintain desirable minimum standards of environmental quality for the population, particularly for reasons of health, hygiene, aesthetics, and orderliness, these being considered to be the main ingredients for enhancing the quality of life.

(c) To ensure appropriate utilization of natural resources so as to yield maximum social benefits at minimum cost to national environment, whilst aiming to prevent any danger to public health and safety, as well as to recycle the natural resources used.

(d) To create a balance between population levels and available natural resources in order to maintain a proper quality of life for the population.

(e) To create a balance between development and conservation of natural resources in the development of urban areas, in order to upgrade the standard of living.

(f) To preserve natural scenic values and sites or buildings having special significance from the natural, historical, archaeological, cultural, and religious points of view.

## 5. Guidelines for Environmental Development

### 5.1 Guidelines for achieving environmental development objectives

To achieve the objectives of environmental development mentioned above, the guidelines put forward are as follows:-

(a) Strict adherence to and enforcement of existing laws to prevent or to reduce damage to the environment. Examples of such laws are: the Industrial Plants Control Act; the Traffic Act; the Town Planning Act; and other municipal regulations controlling buildings and their construction.

(b) Budgetary support for projects attempting to solve immediate environmental problems or those promoting environmental quality.

(c) Promotion of participation by the public and various private organizations in efforts to improve environmental quality.

(d) Formulation of policies and plans for national environmental development which will be used as guidelines in national environmental administration.

(e) Coordination of policies and work on environmental issues which have been proposed by various government agencies with the objective of generating harmony and mutual support in terms of technical data within the framework of national policies and plans on environmental development.

(f) Systematic establishment of environmental standards in the following order:

(i) Formulation of interim standards relating particularly to water, air, and noise pollution. These standards will serve as yardsticks for proving the existence or measuring the extent of pollution as well as for providing the basis for future policy implementation.

(ii) Formulation of long-range environmental standards in conformity with national socio-economic conditions. These will be guidelines for environmental protection and assessment to ensure that all implementing agencies follow the same standards.

(g) Consideration of the environmental impact of various public and private sector projects in order to compare each project's cost and benefit with respect to any relevant social costs, including adverse effects on the environment. The objective of this exercise is to find ways to minimize or offset serious environmental losses or to stop or modify projects which may cause such losses.

### 5.2 Guidelines for Legal Procedures

(a) Laws on environmental protection and promotion of environmental quality will be reviewed and updated in keeping with rapid changes generated by socio-economic developments. The scope of work and authority of responsible agencies will also be scrutinized so that any loopholes or discrepancies in law enforcement may be eliminated or amended, making the existing laws more effective and responsive to real conditions.

(b) New laws will be enacted on particular environmental issues when it is necessary to correct relevant legal provisions buried in various acts and when there are no definite enforcement agencies, including the laws involving water quality, air quality, and rural land use control.



(c) Studies on environmental laws will be promoted, including establishment of a research institute for this area of study.

### 5.3 Guidelines for Public Education

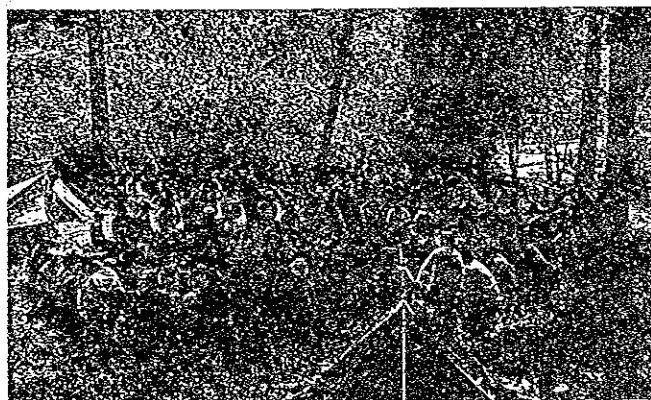
Education and publicity campaigns will be accelerated to arouse public awareness and promote an understanding of environmental problems and the damage they cause. This creation of public awareness will be achieved by:-

(a) Incorporating environmental education into the curriculum of educational institutions at all levels, starting from the compulsory primary level; and disseminating this knowledge through the mass media, training, workshops and seminars.

(b) Organizing training courses in environmental education for personnel in various government agencies so that environmental issues will be taken into consideration in their planning and operation.

(c) Launching campaigns to promote and protect environmental quality.

*In order to strengthen public education, school teachers and youth group leaders are being trained through ONEB environmental education programmes organized in national parks, sanctuaries and other areas.*



*at Pu Keo Wildlife Sanctuary*



*at Pukau-Pupan Dum National Park*

## 6. Requirement for Environmental Impact Assessment

Under Section 17 (1) of the Improvement and Conservation of National Environmental Quality Act (1975), as amended in 1978, the Prime Minister shall, with the advice of the National Environment Board, have the power to issue Notifications in the Government Gazette, prescribing the categories and magnitude of projects or activities of governmental agencies, State enterprises or private organizations, which are required to submit report concerning the study and measures for the prevention of and remedy for the adverse effect on environmental quality during the preparation stage to the Office of the National Environment Board for consideration and approval before further actions;

"Section 18. in the case where there is a Notification under section 17 (1), the official invested by law with the power and duties to consider and grant a permit or renewal of a permit to any person in order to enable him to carry out any project or activity shall submit a report concerning the studies and measures for the prevention of and remedy for the adverse effects on environmental quality during the preparation stage of the applicant to the Office of the National Environment Board for consideration and approval before further actions.

After the said official has submitted a report concerning the studies and measures for the prevention of and remedy for the adverse effects on environmental quality during the preparation stage under paragraph one, the Office of the National environmental Board shall consider the report within ninety days from the date of receiving such report. If the Office of the National Environment Board does not finish its consideration within the said period, it shall be deemed that the Office of the National Environment Board has granted its approval to the applicant in accordance with paragraph one.

In the case where the Office of the National Environment Board gives its approval under paragraph one, the said official shall grant the permit or renewal of permit to the applicant.

In the case where the Office of the National Environment Board does not give its approval under paragraph one, the said official shall delay the grant of permit or the renewal of permit to the applicant until such person has submitted measures for the prevention of and remedy for the adverse effects on environmental quality to which the Office of the National Environment Board can give its approval.

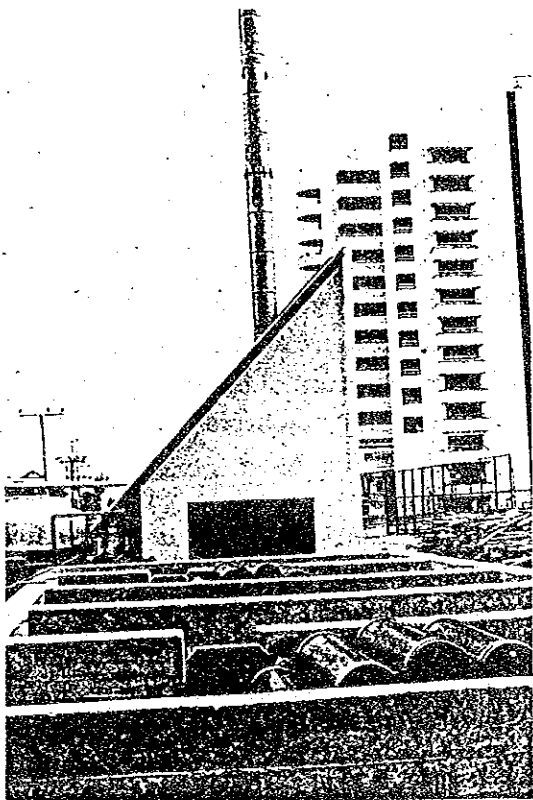
After such person has submitted measures for the prevention of and remedy for the adverse effects on environmental quality under paragraph four, the Office of the National Environment Board shall consider the said measures within thirty days from the date of the submission; if the Office of the National Environment Board does not finish its consideration within the said period, it shall be deemed that the Office of the National Environment Board has granted its approval thereto under paragraph four and the said official shall grant a permit or a renewal of permit to the applicant.

Section 19. For the purpose of carrying out the activities under section 18, the National Environment Board may request any governmental agency, or Government educational institution, as it thinks fit, to make a report concerning the studies and measures for the prevention of and remedy for the adverse effects on environmental quality.

The National Environment Board may authorize an expert in the study of the adverse

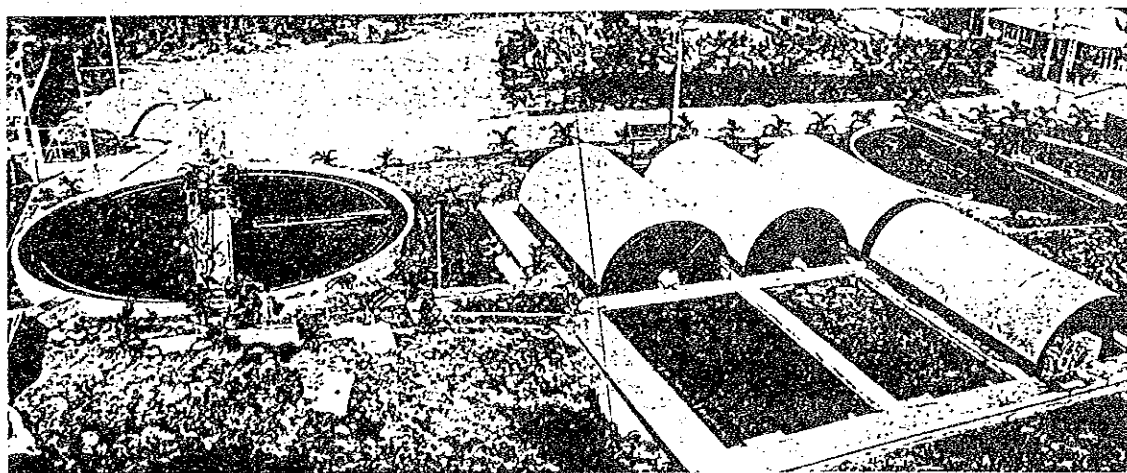
effects on environmental quality to make a report of the studies and measures for prevention of and remedy for the adverse effects on environmental quality.

The application for a grant of a permit, the qualifications of the expert, the order suspending or revoking the permit, and the control of the activities of a licensee shall be in accordance with the rules, conditions, and procedures prescribed in the Ministerial Regulation and the fees for the application for and grant of a permit shall be in accordance with those prescribed in the Ministerial Regulation.



*A Waste Treatment Facility of a hotel in Phuket Islands. According to the EIA, newly constructed hotels have been requested to equip with a waste treatment plant in order to protect beautiful beaches and sea water quality.*

*Following ONEB's monitoring studies on sea water quality, Pattaya City Council in collaboration with the Public Works Dept., Office of the National Economic and Social Development Board and ONEB established the Pattaya Central Wastewater Treatment Plant which contributed in improving the degraded environmental quality in the famous resort, Pattaya.*



## 7. Establishment of Environmental Quality Standards.

Environmental quality standards and regulations presently include:

- Air quality standards
- Noise standards
- Water quality standards
- Solid waste and night soil management
- Toxic substance standards and regulations
- Nuisance abatement

The National Environment Board has power and duties to recommend standards of environmental quality to governmental agencies having the statutory power to prescribe them as well as to recommend measures for the prevention and conservation of environmental quality in various respects to the governmental agencies concerned.

The Prime Minister, under Section 17 (2) of the Improvement and Conservation of National Environmental Quality Act (1975), amended in 1978, shall with the advice of the National Environment Board, have the power to issue Notifications in the government Gazette prescribing environmental quality standards which, by law, are not within the scope of power and duties of any governmental agency, as well as Section 17 (3) methods to be used for monitoring environmental quality.

Also, under Section 20. If there is an emergency arising from environmental pollution, which, if left unremedied, will be dangerous to life, or will, cause personal injury or damage to the properties of the people or the State, the Prime Minister shall have the power to issue an order prohibiting the person from causing such danger or damage or the person who may be in danger or suffer any damage from acting in any way which will intensify the severity of such environmental pollution, or issue an order that certain acts be carried out in order to stop or reduce the severity of environmental pollution during the emergency.

The Prime Minister may delegate the power to issue the order under paragraph one to the Changwat Governor to exercise such power within the Changwat area on behalf of the Prime Minister by issuing the order to that effect and publishing it in the Government Gazette.

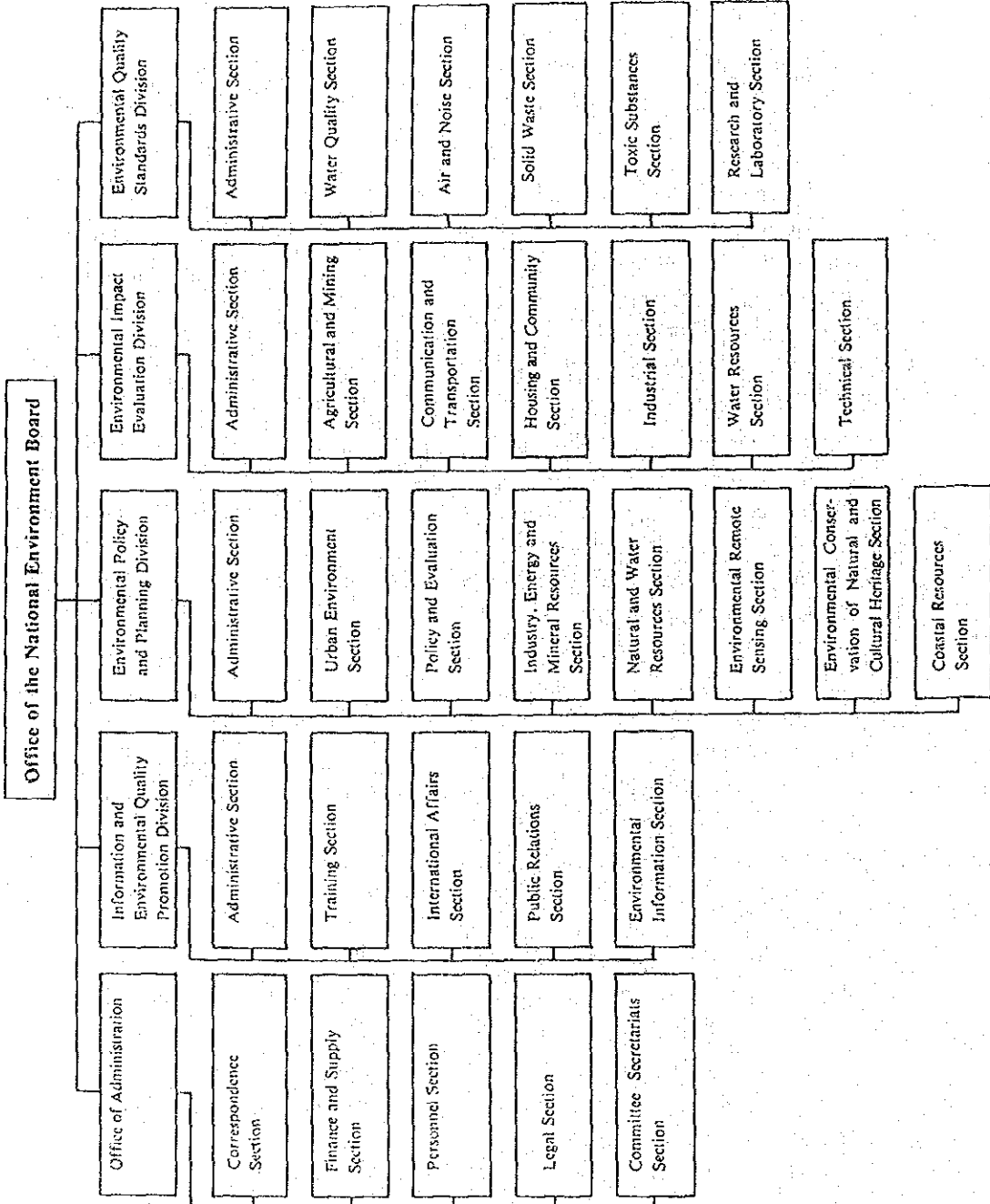
After the Prime Minister has issued the order under paragraph one or the Changwat Governor acting on his behalf has issued the order under paragraph two, the said order shall be published in the Government Gazette without delay.

## APPENDIX I

The Committee of National Environment Board appointed in November 1988 consists of :-

1. Deputy Prime Minister : Chairman
2. Permanent Secretary of the Ministry of Defence
3. Permanent Secretary of the Ministry of Agriculture and Cooperatives
4. Permanent Secretary of the Ministry of Transport and Communications
5. Permanent Secretary of the Ministry of Interior
6. Permanent Secretary of the Ministry of Science, Technology and Energy
7. Permanent Secretary of the Ministry of Public Health
8. Permanent Secretary of the Ministry of Industry
9. Secretary - General of the Office of the National Economic and Social Development Board
10. Secretary - General of the Office of the National Environment Board : Secretary
11. Mr. Prachuab Chaiyasarn :  
Minister of Science, Technology and Energy
12. Dr. Phaichitr Uathavikul :  
President of Thailand Development Research Institute (TDRI)
13. Mr. Watana Ratanawichit :  
Deputy Secretary - General of the Office of the Juridical Council
14. Mr. Kosit Panpiemras :  
Deputy Secretary - General of the Office of the National Economic and Social Development Board
15. Mr. Kasem Snidvongs :  
Deputy Permanent Secretary of the Ministry of Science, Technology and Energy
16. Mr. Ajarin Sarasas :  
Secretary - General of the Federation of Thai Industries
17. Prof. Dr. Adul Wichiencharoen :  
Chairman of Silpakorn University Council
18. Dr. Akom Sorasuchart :  
Consultant of the Department of Neurology and Drugs Addiction, Vajira Hospital
19. Mr. Chaleo Yoovidhya :  
Managing Director of T.C. Pharmaceutical Industries Co., Ltd.
20. Mr. Manit Rattanasuwan :  
Marketing Director of Manitads Co., Ltd.

**APPENDIX II**



## Environmental Policy and Planning Division

Administrative Section	Policy and Evaluation Section	Urban Environment Section	Natural and Water Resources Section	Industry, Energy and Mineral Resources Section	Environmental Remote Sensing Section	Environmental Conservation of Natural and Cultural Heritage Section	Coastal Resources Section
<ul style="list-style-type: none"> <li>To conduct the routine clerical and secretarial work for the division</li> </ul>	<ul style="list-style-type: none"> <li>To prepare National Environment Plans and Policies.</li> <li>To promote budget support for environmental quality development projects having priority.</li> <li>To evaluate Environmental Plans and Policies.</li> <li>To prepare the State-of-Environment report.</li> <li>To systematize environmental data, statistics and report relevant abstracts and bibliographies.</li> <li>To coordinate with international environmental agencies for policy planning and other assistance.</li> </ul>	<ul style="list-style-type: none"> <li>To formulate environmental development policy, strategies and plans in the field of urban environment.</li> <li>To study and set up strategies and protective measures for urban land use, infrastructure, social services and population distribution.</li> <li>To analyse and promote environmental development projects, in the field of urban environment.</li> </ul>	<ul style="list-style-type: none"> <li>To assess data of land use and natural resources relating to important environmental and ecosystem values.</li> <li>To formulate plans, policies, and strategies for nature conservation, and to coordinate with other agencies concerned to cope with environmental problems.</li> <li>To evaluate and support projects for strengthening environmental quality.</li> </ul>	<ul style="list-style-type: none"> <li>To establish appropriate guidelines and measures for the most beneficial use of energy and mineral resources as well as control &amp; prevention of environmental deterioration caused by industry, energy and mineral resources.</li> <li>To assist concerned agencies in preparation of an appropriate plan for control and prevention of urgent pollution problems in river basins and in different sizes of community.</li> <li>To analyse and encourage environmental quality control and development projects.</li> </ul>	<ul style="list-style-type: none"> <li>Rapid monitoring and measurement of environmental conditions by airborne and evaluation of spaceborne sensor data.</li> <li>Closely related activities relating to instrument, platforms, data collection, processing, interpretation, distribution and analysis.</li> <li>Operational applications of Remote Sensing for environmental management planning on: <ul style="list-style-type: none"> <li>environmental quality analysis</li> <li>land-use mapping</li> <li>derelict land and waste disposal studies</li> <li>natural resources surveys.</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>To formulate environmental development plans and policies related to natural and cultural heritages conservation</li> <li>To study and set up appropriate guidelines and measures for natural and cultural heritages conservation</li> <li>To evaluate environmental development projects in the field of natural and cultural heritages conservation.</li> </ul>	<ul style="list-style-type: none"> <li>To formulate environmental plans and policies related to coastal resources and marine environment development</li> <li>To study and set up appropriate guidelines and management for coastal resources and marine environment</li> <li>To evaluate environmental development projects in the field of coastal resources and marine environment</li> </ul>

*Organizational Structure of Environmental Policy and Planning Division.*

## Information and Environmental Quality Promotion Division

Administrative Section	Training Section	International Affairs Section	Public Relations Section	Environmental Information Section
<ul style="list-style-type: none"> <li>● Conduct the routine clerical and secretarial work for the division</li> </ul>	<ul style="list-style-type: none"> <li>● Organizes seminars, symposium, lectures and training on the environment through use of various media and institutes.</li> <li>● Provides lecture materials and documents.</li> <li>● Encourages the incorporation of environmental education into non-formal and formal education process.</li> </ul>	<ul style="list-style-type: none"> <li>● Responsible for liaison with the environmental agencies of other countries and with the international agencies in conducting joint projects.</li> <li>● Acts as coordinator in preparing requests for technical and financial assistance from foreign countries.</li> <li>● Coordinates with international agencies within and outside the country in planning and conducting programmes for foreign guests and distinguished visitors.</li> </ul>	<ul style="list-style-type: none"> <li>● Serves as the centre for coordination and public relations on matters of environmental quality promotion</li> <li>● Prepares, publishes and distributes the NEB journal, newsletter (in Thai) and other publication materials within the country.</li> <li>● Acts as a coordinator between government agencies, state enterprises and private sectors on matters of environmental protection and enhancement.</li> <li>● Promotes environmental awareness through campaign activities including environmental exhibitions.</li> </ul>	<ul style="list-style-type: none"> <li>● Responsible for environmental information services within and outside the country</li> <li>● Serves as national focal point to provide environmental information through the International Referral System for Sources of Environmental Information established to facilitate exchange of environmental information within and between nations</li> <li>● Provides environmental information through library services.</li> <li>● Prepares, publishes and distributes NEB Newsletter, official documents and other information materials to foreign institutions within and outside the country.</li> </ul>

*Organizational Structure of Information and Environmental Quality Promotion Division*



## Environmental Impact Evaluation Division

Administrative Section	Agricultural and Mining Section	Communication and Transportation Section	Housing and Community Section	Industrial Section	Water Resources Section	Technical Section
<ul style="list-style-type: none"> <li>• Conducts routine clerical and secretarial work for the division.</li> </ul>	<ul style="list-style-type: none"> <li>• Reviews EIA reports on agricultural and mining activities as well as all development activities relating to mangrove forests.</li> <li>• Recommends mitigation measures and monitors important environmental impacts.</li> <li>• Provides guidelines and Terms of References for relevant EIA report preparation.</li> </ul>	<ul style="list-style-type: none"> <li>• Reviews EIA reports on communication development especially harbours, airports, and express ways.</li> <li>• Recommends mitigation measures and monitors important environmental impacts.</li> <li>• Provides guidelines and Terms of References for relevant EIA report preparation.</li> </ul>	<ul style="list-style-type: none"> <li>• Reviews EIA reports on housing and public utility development especially hotel construction.</li> <li>• Recommends mitigation measures and monitors important environmental impacts.</li> <li>• Provides guidelines and Terms of References for relevant EIA report preparation.</li> </ul>	<ul style="list-style-type: none"> <li>• Reviews EIA reports on industrial development especially industrial estates, thermal power plants, petrochemical industries, etc.</li> <li>• Recommends mitigation measures and monitors important environmental impacts.</li> <li>• Provides guidelines and Terms of References for relevant EIA report preparation.</li> </ul>	<ul style="list-style-type: none"> <li>• Reviews EIA reports on water resources development especially dam/reservoir and irrigation projects.</li> <li>• Recommends mitigation measures and monitors important environmental impacts.</li> <li>• Provides guidelines and Terms of References for relevant EIA report preparation.</li> </ul>	<ul style="list-style-type: none"> <li>• Improves the technical and procedural system for application of EIA as a tool for environmental management including development activities.</li> <li>• Organizes training courses on EIA for both relevant public and private sectors.</li> <li>• Compiles technical materials on EIA for divisional service.</li> </ul>

*Organizational Structure of Environmental Impact Evaluation Division.*

## Environmental Quality Standards Division

Administrative Section	Water Quality Section	Air and Noise Section	Solid Waste Section	Toxic Substances Section	Research and Laboratory Section
<ul style="list-style-type: none"> <li>● To conduct the routine clerical and secretarial work for the division</li> </ul>	<ul style="list-style-type: none"> <li>● To study, investigate and search for measures to prevent and control water pollution</li> <li>● To formulate quality standards for both water resources and wastewaters.</li> <li>● To conduct water quality monitoring &amp; control and report on the quality of water resources and also pollution situations.</li> <li>● To perform technical studies and search for appropriate technology in water pollution control and management.</li> <li>● To testify and solve problems in the case of complaints on water pollution problems.</li> <li>● To coordinate with other agencies in solving water pollution problems.</li> </ul>	<ul style="list-style-type: none"> <li>● To conduct surveys on ambient air quality and noise levels in communities.</li> <li>● To formulate and propose air quality and noise level standards including emissions from sources.</li> <li>● To suggest concerned agencies to be responsible for implementation.</li> <li>● To set up guidelines and measures for prevention and control of air pollution.</li> <li>● To collect evidence of pollution in case of complaint.</li> </ul>	<ul style="list-style-type: none"> <li>● To study and search for appropriate methods of improving solid waste collection and disposal</li> <li>● To perform technical studies on waste reclamation and utilization.</li> <li>● To study and search for appropriate methods for collection and disposal of hazardous wastes.</li> </ul>	<ul style="list-style-type: none"> <li>● To collect and analyze toxic substances data from various agencies.</li> <li>● To improve and formulate draft Acts relating to toxic substances.</li> <li>● To establish standards for toxic substances analytical methods.</li> <li>● To study and investigate effects of toxic substances on people.</li> <li>● To coordinate with other agencies in solving toxicity problems.</li> <li>● To develop monitoring programs to determine the levels and fate of toxic substances.</li> </ul>	<ul style="list-style-type: none"> <li>● To study and search for appropriate technology on environmental quality control and maintenance.</li> <li>● To provide technical suggestions for offices and agencies concerned.</li> <li>● To analyze physical and biochemical specimens related to air, water and solid wastes.</li> <li>● To establish appropriate analytical methods for environmental samples.</li> </ul>

*Organizational Structure of Environmental Quality Standards Division.*

## Office of Administration

Correspondence Section	Finance and Supply Section	Personnel Section	Legal Section	Committee Secretariats Section
<ul style="list-style-type: none"> <li>● To be responsible for official correspondence</li> <li>● To keep, type and photocopy official and confidential documents</li> <li>● To control car usage for ONEB</li> <li>● To manage ONEB tidiness and security</li> </ul>	<ul style="list-style-type: none"> <li>● To operate the fiscal budget and drawing on accounts</li> <li>● To control the finances and accountability of ONEB</li> <li>● To buy, distribute, maintain and repair supplies and equipment for ONEB</li> <li>● To maintain and provide car service</li> </ul>	<ul style="list-style-type: none"> <li>● To be responsible for personnel administration, selective examination, placement, transfer, training and seminars.</li> <li>● To control bio-data records, position and salary promotion, manpower planning, and welfare of office personnel.</li> <li>● To be responsible for official documents for officials in ONEB who will go abroad.</li> </ul>	<ul style="list-style-type: none"> <li>● To recommend any amendments or improvements of laws concerning prevention of and conservation of environmental quality to the Council of Ministers.</li> <li>● To receive for consideration and remedy petitions from any person who has been aggrieved or damaged by an act which has adverse effects on the environmental quality</li> <li>● To give advice to ONEB officers to do their work in compliance with laws, rules, and regulations.</li> </ul>	<ul style="list-style-type: none"> <li>● Responsible for conference and meetings administration</li> <li>● Provides secretarial services to the Ad Hoc Environmental Committees</li> <li>● Provides secretarial services to National Environment Board meetings</li> <li>● Prepares agenda and summarizes meetings results of Ad Hoc Environmental Committees for submitting to the National Environment Board.</li> </ul>

*Organizational Structure of Office of Administration*

### APPENDIX III

#### Type and Sizes of Projects or Activities Requiring Environmental Impact Assessment (EIA) Reports

Items	Types of Projects or Activities	Sizes
1	Dam or Reservoir	storage volume greater than 100,000,000 cubic meters or storage surface area greater than 15 square kilometers
2	Irrigation	irrigated area greater than 80,000 rais (12,800 hectares).
3	Commercial Airport	all sizes.
4	Hotel or Resort Facilities environmentally sensitive area such as areas adjacent to rivers coastal areas, lakes or beaches or in the vicinity of national parks	greater than 80 rooms
5	Mass Transit System and Expressway as defined by the Announcement of the Revolutionary Party No. 290, 24 November B.E. 2515	all sizes.
6	Mining as defined by the Mineral Act No. 1 B.E. 2510, No. 2 B.E. 2516 and No. 3 B.E. 2522	all sizes.
7	Industrial Estate as defined by the Industrial Estate Authority of Thailand Act, B.E. 2522	all sizes
8	Commercial Port and Harbour	with capacity for vessels of greater than 500 ton-gross.
9	Thermal Power Plant	Capacity greater than 10 MW.
10	Industries	
	(1) Petrochemical Industry	greater than 100 tons/day of raw materials required in production processes of oil refinery and/or natural gas separation.
	(2) Oil Refinery	all sizes.
	(3) Natural Gas Separation of Processing	all sizes.
	(4) Chlor-Alkaline Industry requiring NaCl as raw material for production of Na <sub>2</sub> CO <sub>3</sub> , NaOH, HCl, Cl <sub>2</sub> , NaOCl and Bleaching Powder	production capacity of each or combined product greater than 100 tons/day

Items	Types of Projects or Activities	Sizes
	(5) Irons and/or Steel Industry  (6) Cement Industry (7) Smelting Industry other than Iron and Steel (8) Pulp Industry	requiring from iron and/or scrap iron as raw materials for production greater than 100 tons/day or using furnaces with combined capacity greater than 5 tons/batch. all sizes. production capacity greater than 50 tons/day. Production capacity greater than 50 tons/day.

**Source:** Notification of the Ministry of Science, Technology and Energy, B.E. 2524 issued under Improvement and Conservation of National Environmental Quality Act, B.E. 2518 as amended in B.E. 2521, published in the Royal Government Gazette (Special issue), Vol. 98, part 158, dated September 27, B.E. 2524 (1981)

## APPENDIX IV

**NEB**

OFFICE OF THE NATIONAL  
ENVIRONMENT BOARD

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**OFFICE OF THE NATIONAL  
ENVIRONMENT BOARD**

Soi Phibun Watthana 7, Rama VI Road,  
Bangkok 10400  
Tel. 279-7180-9

Secretary-General:

Arthorn Suphapodok  
Tel. 279-0129, 279-7180-9 Ext. 110

Deputy Secretary-General :

Suvat Saguanwongse  
Tel. 279-8086, 279-7180-9, Ext. 190

Sunthad Somchevita  
Tel. 279-0130, 279-7180-9 Ext. 111

Office of the Secretary  
Tel. 278-5465, 279-7180-9 Ext. 112

Secretary: Miss Manthana Chiravathanapong  
Information and Environmental Quality Promotion Division  
Tel. 278-5467, 279-7180-9 Ext. 138

Director: Suphavit Piamphongsant  
Environmental Policy and Planning Division  
Tel. 278-5468, 279-2793, 279-7180-9 Ext. 156

Director: Sunthad Somchevita (acting)  
Environmental Impact Evaluation Division  
Tel. 278-5469, 279-2792, 279-7180-9 Ext. 147

Director: Chalernsak Wanichsombat  
Environmental Quality Standards Division  
Tel. 278-5466, 279-7180-9 Ext. 125

Director: Dr. Saksit Tridech



JICA