

A Project Consigned of the Environment Agency in 1998  
งานที่ได้รับมอบหมายจากองค์การสิ่งแวดล้อมแห่งประเทศไทย ปี 2541

# **Overseas Environmental Measures of Japanese Companies (Thailand)**

มาตรการดูแลจัดการสิ่งแวดล้อมที่เกี่ยวข้องกับการดำเนินธุรกิจของบริษัทญี่ปุ่นในต่างประเทศ  
(ประเทศไทย)

## **Research Report on Trends in Environmental Considerations related to Overseas Activities of Japanese Companies FY 1998**

รายงานการสำรวจแนวโน้มการให้ความสำคัญต่อสิ่งแวดล้อม  
ที่เกี่ยวข้องกับการดำเนินธุรกิจของ  
บริษัทญี่ปุ่นในต่างประเทศ ปี 2541

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## **Preface**

A large number of Japanese companies have a presence in Southeast Asia and have built thriving businesses in the region.

On the other hand, as a legacy of its rapid economic growth, Southeast Asia is beset by serious environmental problems. Although the region is now beginning to address these issues by industrial pollution controls and other initiatives, measures are still inadequate due to the lack of financial and human resources, as well as technical expertise and experience.

Japanese companies, having overcome severe industrial pollution problems in the past on their home turf, and with greater financial backing and technical capacity than locally financed companies, are expected to play a leading role in promoting industrial pollution controls in Southeast Asia through the implementation of innovative environmental management techniques. Within Japan, too, there is mounting public pressure for Japanese companies to behave responsibly in regard to the environment of the foreign countries in which they operate.

Against this backdrop, in 1995, Global Environmental Forum, under commission by the Environment Agency of Japan, conducted a questionnaire survey on the measures being taken by Japanese companies to protect the environment in the four Southeast Asian countries of Thailand, Indonesia, the Philippines, and Malaysia. Many of the respondents expressed their wishes for the government of Japan to supply information, in the form of a handbook or guide, about environmental issues of the countries in which they operate, to assist them in carrying out more substantial environmental measures. There was also a demand for the preparation of corporate case studies describing the types of innovative environmental practices.

Following these requests, the Environment Agency in 1996 initiated a research on trends in environmental considerations related to overseas activities of Japanese companies. The research aimed at collecting information and examples useful in encouraging Japanese companies to implement environmental measures in the countries in which they operate. The results were published as research reports; the Philippines edition in 1996, and the Indonesia edition in 1997. This Thailand edition, the third in the series, reports the result of the research project commissioned by the Environment Agency in 1998.

Thailand hosts more Japanese companies than any other country in Southeast Asia. We hope that this report will help these companies improve their environmental practices, and serve as a useful resource for other Japanese companies contemplating a future move into Thailand.

We wish to take this opportunity to express our thanks and appreciation to everyone; particularly the Japanese Chamber of Commerce, Bangkok, and its Environment Committee, for their invaluable assistance in providing reference materials and in introducing companies willing to participate in the survey. We are grateful to the many Japanese companies in Thailand, and to the Ministry of Science, Technology and Environment, the Ministry of Industry, and other government agencies and the Bangkok Metropolitan Administration, who generously cooperated in information gathering. In addition, we acknowledge the help and support given within Japan, by the Japan Chamber of Commerce & Industry and by the Osaka Chamber of Commerce & Industry.

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# Contents

- Preface
- How to Use this Book
- Executive Summary in Thai..... i

## **Chapter 1      Overview of Environmental Issues and Environmental Conservation Practices in Thailand ..... 1**

Section 1	Thailand and Japanese Companies.....	3
Section 2	Current Environmental Issues in Thailand .....	9
Section 3	Environmental Policies in Thailand .....	15
Section 4	Industrial Pollution Controls and Regulations .....	21
Section 5	Water Pollution Management .....	33
Section 6	Air Pollution Management .....	45
Section 7	Hazardous Waste Management.....	49
Section 8	Environmental Impact Assessment in Thailand.....	53

## **Chapter 2      Environmental Conservation by Japanese Companies : Case Studies of Corporate Practices and Policies ..... 59**

Section 1	Japanese Companies in Thailand and their Environmental Conservation .....	61
Section 2	Cases of Meeting Strict Wastewater Standards.....	67
Case 1	Advanced Wastewater Treatment to Remove Traces of Heavy Metals .....	68
Case 2	Example of Coping with Stringent BOD Standard .....	71
Case 3	Example of Accommodating Separate Standards by Three Authorities.....	74
Case 4	Example of Employing Advanced Treatment Including Activated Carbon Treatment.....	78
Case 5	Example of Coping with a Strict Standard for Cyanide.....	82
Section 3	Cases of Establishing an Environmental Management System.....	87
Case 6	Example of Obtaining the ISO14001 Certification .....	88
Case 7	Example of Obtaining the ISO14001 Certification and Promotes Environmental Management Including its Business Partners.....	92
Case 8	Example of Obtaining the ISO14001 Certification with Other Group Companies .....	95

Case 9	Example of Jointly Obtaining the ISO14001 Certification with Division Companies of a Corporate Group.....	97
Case 10	Example of Obtaining the ISO14001 Certification with Little Environmental Impact.....	99
Section 4	Cases of Adopting Locally Tailored Environmental Practices.....	103
Case 11	Example of Converting Byproducts into Soil Conditioners to be Returned to Farmland.....	104
Case 12	Example of Taking Thorough Measures for Disagreeable Odors as Environmental Consideration to the Community People.....	107
Case 13	Example of an Industrial Estate Where the Community People are Allowed to Watch Environmental Conservation Measures.....	109
Section 5	Other Examples of Innovative Environmental Practices .....	113
Case 14	Example of Working Closely with the Central Wastewater Treating Unit of the Industrial Estate.....	114
Case 15	Example of Setting Strict Company Standards in Anticipation for Tightening of Official Standards .....	117
Case 16	Example of a Salt Manufacturing Process with Minimum Environmental Impact .....	121
<b>Appendices</b>	.....	<b>125</b>
Appendix 1:	Enhancement and Conservation of National Environmental Quality Act, B.E. 2535, A.D. 1992 .....	125
Appendix 2:	Notification of the Ministry of Industry No.6, B.E. 2540, A.D. 1997 Prescribing Treatment of Hazardous Waste Substances .....	149
Appendix 3:	Current State of Environmental Practices of Japanese Companies in Thailand and Other Asian Countries .....	163
Appendix 4:	Sources of Environmental Information in Thailand and Japan .....	171
•	References and list of organizations and institutions that have assisted in creating this book	

## **How to Use This Book**

This book consists of two chapters and appendices. Chapter 1 describes the environmental issues that Thailand now faces, and summarizes Thai laws and regulations on the environment. Chapter 2 presents case studies illustrating the practical measures being taken by Japanese companies in Thailand, particularly in the manufacturing industry, to safeguard the environment. The appendices provide useful information for gaining a deeper understanding of the issues raised.

Note that the term Japanese companies in Thailand as used in this book refers to corporate members of the Japanese Chamber of Commerce, Bangkok, irrespective of any special criteria such as the percentage of equity invested from Japan.

This book is designed so that each chapter, and each section within each chapter, can be read independently. Readers may select relevant information according to their particular needs.

The following describes how this book is organized.

Chapter 1 is divided into eight sections that present up-to-date information about Thailand's environmental problems, and laws and regulations:

- Section 1: Thailand and Japanese Companies
- Section 2: Current Environmental Issues in Thailand
- Section 3: Environmental Policies in Thailand
- Section 4: Industrial Pollution Controls and Regulations
- Section 5: Water Pollution Management
- Section 6: Air Pollution Management
- Section 7: Hazardous Waste Management
- Section 8: Environmental Impact Assessment in Thailand

Section 1 sketches the history of Japan's relationship with Thailand and the expansion of Japanese companies into the country. Section 2 describes specific environmental problems, such as water and air pollution, that affect Thailand at present.

The remaining sections in Chapter 1 explain and provide detailed information, categorized by topic, about the environmental laws and regulations that must be considered when formulating a corporate environmental management plan. Section 3 describes the structure of the environmental administrative system that Thailand has rapidly been putting into place in recent years. Section 4 summarizes the main features of seven laws, all related to the environment and with particular relevance to combating industrial pollution. Foremost among these laws is the Enhancement and Conservation of National Environmental Quality Act, A. D. 1992.

Sections 5, 6, and 7 outline legal mechanisms and regulatory standards in three areas – water pollution, air pollution, and hazardous waste – as essential aspects of industrial pollution control. The last section, Section 8, gives an overview of Thailand's Environmental Impact Assessment (EIA) system.

The information in Chapter 1 was mainly compiled from interviews with officials of the Ministry of Science, Technology and Environment and Ministry of Industry, and from materials published by the Thai government.

In Chapter 2, Section 1 summarizes the features and methods by which Japanese companies in Thailand, particularly in the manufacturing sector, are attempting to protect the environment. This introduction is followed by sixteen examples of innovative environmental practices being carried out by the fourteen companies studied in the on-site survey. The case studies are divided into four sections:

- Section 2: Cases of Meeting Strict Wastewater Standards (five examples)
- Section 3: Cases of Establishing an Environmental Management System (five examples)
- Section 4: Cases of Adopting Locally Tailored Environmental Practices (three examples)
- Section 5: Other Examples of Innovative Environmental Practices (three examples)

Efforts by the manufacturing sector and other industries to protect the environment in Thailand are aimed primarily at controlling water pollution, which was therefore the main focus of the cases we selected. In addition, in Section 3, we included examples of setting up an environmental management system, reflecting the strong commitment among Japanese companies in Thailand in obtaining ISO 14001 certification and building environmental management systems.

The appendices include the following information as a reference.

- Appendix 1: Enhancement and Conservation of National Environmental Quality Act, B.E. 2535, A. D. 1992 (complete text)
- Appendix 2: Notification of the Ministry of Industry No.6, B.E. 2540, A.D. 1997 Prescribing Treatment of Hazardous Waste Substances (excerpt)
- Appendix 3: Current State of Environmental Practices of Japanese Companies in Thailand and Other Asian Countries
- Appendix 4: Sources of Environmental Information in Thailand and Japan

Appendix 1 is the Enhancement and Conservation of National Environmental Quality Act, discussed in Sections 3 and 4 of Chapter 1. Its complete text is included here for better understanding of the reader. Appendix 2 contains excerpts from the Notification of the Ministry of Industry, which sets out the precise requirements for hazardous wastes treatment.

The currency conversion rate used in this book is approximately 3.3 yen to one Thai baht, a rate as of February, 1999. In Thailand, a calendar year is officially expressed by B.E., which is converted to A.D. by deducting 543. For example, B.E. 2535 becomes A.D. 1992 by deducting 543.