

Basel Convention Country Fact Sheet

Thailand

Status of Ratifications:

Party to the Basel Convention: 24.11.1997
 Amendment to the Basel Convention: -
 Basel protocol on Liability and Compensation: -
(Accession (a); Acceptance (A); Approval (AA); Formal confirmation (c); Ratification; Succession (d))

Competent Authority	Focal Point
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National Definition

There is no national definition of waste used for the purpose of transboundary movements of waste in Thailand.

National definition of hazardous waste used for the purpose of transboundary movements of waste exists in Thailand.
 Hazardous wastes to be controlled for the import and export are defined in the List of Hazardous Substances Item: chemical wastes in the "Notification of Ministry of Industry on List of hazardous substances" B.E. 2546 (2003) issued under the Hazardous Substance Act. B.E. 2535 (1992) in accordance with the wastes listed in Annex VIII of the Basel Convention (List A).

Thailand regulates/controls additional wastes as hazardous that are not included in Art. 1 (1)a of the Basel Convention and would be controlled for the purpose of transboundary movements pursuant to Art. 1 (1)b. Thailand has defined the list of hazardous waste for the purpose pursuant to Art. (1) b in the Notification of Ministry of Industry No. 6 B.E. 2540 (1997) issued pursuant to the provisions in the Factory Act B.E. 2535 (1992) on Disposal of Wastes or Unusable Materials. The categories of industrial hazardous wastes were defined and listed in 4 items as follows: Item 1 Hazardous wastes: Ignitable, corrosive, reactive, toxic and leachable substances; Item 2 Hazardous wastes from

non-specific sources; Item 3 Hazardous wastes: discarded commercial chemical products, off-specification species, container residues, and spill residues (acute hazardous and toxic hazardous chemicals); and Item 4 Hazardous wastes: chemical wastes.

According to the Notification of the Ministry of Industry No.1 B.E. 2541 (1998) issued pursuant to the provisions in the Factory Act B.E. 2535 (1992) on Disposal of Wastes or Unusable Materials, the categories of industrial wastes were defined and listed in 2 sections as follows: Section 1 Industrial Non-Hazardous Wastes; and Section 2 Wastes and Unusable Materials from Specific Industrial Processes.

Thailand has also defined the used of electrical and electronic equipments and their parts and components as hazardous substances type 3 to be controlled for the import in to the Kingdom of Thailand in accordance with the "Notification of Ministry of Industry on List of hazardous substances" B.E. 2546 (2003) issued pursuant to the Hazardous Substance Act B.E. 2535 (1992). In case of import of such equipments, the importer/consignee/factory shall follow procedures under the Notification of the Department of Industrial Works on the Criteria for the approval of the import of used electrical and electronic equipments into the Kingdom of Thailand, issued on 26 September B.E. 2546 (2003).

Thailand requires special consideration for the following waste(s) when subjected to transboundary movement: Plastic wastes.

Restrictions on Transboundary Movement

Amendment to the Basel Convention

The amendment to the Basel Convention (Decision III/1) has been implemented in Thailand.

Restrictions on export for final disposal

Thailand restricts the export of hazardous wastes and other wastes for final disposal.

The production, import, export and possession of the hazardous substances as well as hazardous wastes within the Kingdom of Thailand shall be followed the procedure under the Ministerial Regulations B.E.2537 (1994) issued under the Hazardous Substance Act B.E.2535 (1992) which has entered into force since 1994.

The restriction covers all countries. However, Thailand might export wastes listed in the Basel Convention for which there are no appropriate disposal facilities under the restricted control.

Restrictions on export for recovery

Thailand restricts the export of hazardous wastes and other wastes for recovery.

The production, import, export and possession of the hazardous

substances as well as hazardous wastes within the Kingdom of Thailand shall be followed the procedure under the Ministerial Regulations B.E.2537 (1994) issued under the Hazardous Substance Act B.E.2535 (1992) which have entered into force since 1994.

All countries and wastes listed in the Basel Convention.

Restrictions on import for final disposal

Thailand restricts the import of hazardous wastes and other wastes for final disposal.

Generally, any productions, imports, exports and possessions of the hazardous substances and wastes within the Kingdom of Thailand shall follow the procedures under the Regulation of Ministry of Industry B.E.2537 (1994). In case of import of hazardous wastes and used electrical and electronic equipments, the importer/ consignee/factory shall follow procedures under the Notification of the Department of Industrial Works on the Criteria for the approval of the import of chemical wastes into the Kingdom of Thailand, issued on 14 May B.E. 2539 (1996) and the Notification of the Department of Industrial Works on the Criteria for the approval of the import of used electrical and electronic equipments into the Kingdom of Thailand, issued on 26 September B.E. 2546 (2003). Additionally, the Royal Thai Government has a national policy on total ban of the hazardous waste import for final disposal within the country, e.g. The National Environmental Broad had a decision on import ban of used lead acid batteries and plastic wastes for final disposal since 1993 and 1994, respectively.

Under the notification of Ministry of Commerce on the import of used tyres into the Kingdom of Thailand B.E. 2546 (2003), issued on 23 May 2003, the imports of used tyres (under the harmonized code item 4012.11, 4012.12, 4012.192, 4012.199, 4012.202, and 4012.209) including their rubber scrap, pairings and waste (under the harmonized code item 4004.00) to Thailand have been prohibited. In case of the import for the purpose of research, model study or the vehicle attachment and for racing or tourism is excluded from the control under this notification.

The restriction covers all countries; wastes listed in the Basel Convention; used lead-acid batteries and plastic wastes; and wastes listed in the Notification of Ministry of Industry No. 2 B.E. 2546 (2003).

Restrictions on import for recovery

Thailand restricts the import of hazardous wastes and other wastes for recovery.

Generally, any productions, imports, exports and possessions of the hazardous substances and wastes within the Kingdom of Thailand shall follow the procedures under the Regulation of Ministry of Industry B.E.2537 (1994). In case of import of hazardous wastes and used

electrical and electronic equipments, the importer/ consignee/factory shall follow procedures under the Notification of the Department of Industrial Works on the Criteria for the approval of the import of chemical wastes into the Kingdom of Thailand, issued on 14 May B.E. 2539 (1996) and the Notification of the Department of Industrial Works on the Criteria for the approval of the import of used electrical and electronic equipments into the Kingdom of Thailand, issued on 26 September B.E. 2546 (2003).

In addition, for the import of plastic wastes for recovery in the Kingdom, the importer/consignee/factory shall follow procedures under the Notification of Ministry of Commerce on the Import of Goods No.112 B.E.2539 (1996) and the Notification of Ministry of Industry on the criteria for the approval of the import of the scarp and used material which is made of used plastic and unused plastic B.E. 2539 (1996). For other hazardous wastes, since, Thailand has a specific law for the purpose of the control and hazardous waste management within the country, namely the Notification of Ministry of Industry No. 6 B.E. 2540 (1997). Therefore, if any wastes listed in the Notification have imported for recovery within the Kingdom, the importer/consignee/factory shall manage such wastes pursuant to the criteria of the Notification.

The restriction covers all countries; wastes listed in the Basel Convention; plastic wastes; and wastes listed in the Notification of Ministry of Industry No. 6 B.E. 2540 (1997) and the Notification of Ministry of Industry No. 2 B.E. 2543 (2000).

Restrictions on transit

Thailand restricts the transit of hazardous wastes and other wastes.

Generally, any productions, imports, exports and possessions of the hazardous substances and wastes within the Kingdom of Thailand shall be followed the procedures under the Regulation of Ministry of Industry B.E.2537 (1994). In addition, the importer/ consignee/factory shall follow the Regulation of Port Authority of Thailand concerning the export and import of dangerous goods.

All countries and wastes listed in the Basel Convention.

**Reduction
and/or
Elimination of
Hazardous
Waste
Generation**

National strategies/policies

Provide an efficient hazardous waste management scheme that will cover the process of import, export, transport, separation, collection, treatment, and disposal; provide an emergency system to prevent and mitigate major hazardous waste accidents in the industrial sector, in transportation, and in storage of hazardous waste; and encourage and promote private sector to join the investment and handle of hazardous waste management at all stages, as well as clean productions and clean technologies.

Legislation, regulations and guidelines

According to the Notification of the Ministry of Industry No. 6. [B.E. 2540 (1997)] issued pursuant to the Factory Act B.E. 2535(1992) on Disposal of Wastes or Unusable Materials, Factory operators having hazardous wastes which have such characteristics and properties as defined in Annex 1 of the notification (as described in waste stream) must carry out the disposal of the wastes or unusable materials as defined as follows: such hazardous wastes shall not be taken out of the factory except with prior approval from the Director-General of Industrial Works Department or the person assigned by Director-General of Industrial Works Department to take them out to detoxify, dispose, discard or landfill by method and at the place according to the criterion and the method defined in Annex 2 of the Notification; and details on type, quantity, characteristics, properties and storing place of such hazardous wastes or unusable materials concerned as well as method of storage, detoxification, disposal, discarding, landfilling and transport according to "Form Ror. Ngor. 6", attached to the notification must be notified to the Department of Industrial Works within the limit of 90 days from the effective date hereof, except that factory operators who operate a factory after the effective date hereof shall notify within the limit of 90 days from the commencing date of factory operation. Additionally, the separation, collection, transportation, treatment and disposal of infectious wastes generated from hospitals, clinics and health care service centers have been complied with the Regulation of the Ministry of Health on the Disposal of Infectious Waste B.E. 2545 (2002).

Economic instruments/ initiatives

Tax differentiate, e.g. the different excise tax rate for recyclable batteries production which is rebated 5% of the excise tax, unleaded gasoline (ULG); tax exemption, e.g. equipment for the control, treatment or eliminate pollutants; deposit-refund system, e.g. bring-back program, this system will be used as a tool for subsidizing the consumer to return the remains of products containing hazardous substances such as dry cell batteries for final disposal or recovery; the environmental fund is established for the environmental sound management activities in accordance with item 2 "Environmental Fund" of the Enhancement and Conservation of the National Environment Quality Act B.E. 2535 (1992); and the Thai green label scheme project is established for developing the criteria on the clean or waste minimized products (e.g. no mercury added dry cell batteries, recyclable plastic products, etc.).

Measures taken by industries/waste generators

In cooperation and support from relevant authorized agencies, 6 categories including plastics, agro, pulp and paper, electroplating, dyeing and tannery industries have been in the process of developing clean technologies and waste minimization methods.

The co-incineration of wastes in cement kilns as one optional waste disposal other than landfilling, since 2001. The benefits of this program

are both energy and material recovery. The program also included the energy replacement for coal/coke and the material replacement for raw material used in the cement kiln process. There are currently seven cement manufacturers expanded their capability in co-incinerators of hazardous wastes.

Currently, pilot project on waste exchange programs are being conducted in Thailand to encourage recycling in industries. This program is based on the premise that one industry's waste is another industry's raw material. Companies match their waste disposal and their raw material needs through a computerized database, and subsequently exchange waste. For the supplier of the waste, these types of transactions avoid disposal costs, while the user; the purchase of used raw materials can be done at lower prices than that of new materials and can be reduced the energy needed during the manufacturing processes. As of 2004, over 400 industries had registered on the waste exchange database established by Ministry of Industry.

Additionally, at the local level many successful programs have been implementing, for example. Some local communities have conducted their own waste management program based on the 3Rs, such as source separation program, waste recycling in school. Such programs can reduce more than 30% of total waste generated in the community.

Others

The following methods have been used as support tools to reduce and/or eliminate generation of wastes: ISO 14000s, ISO 18000, Life cycle Assessment and Greening of Supply Chain etc.; research on clean technologies and waste minimization e.g. research on cleaner production in the dyeing and synthetic rubber industries; and technical guidelines on the environmental sound management of hazardous wastes generated from communities e.g. laboratory waste, commercial waste, infectious waste, vessel and port waste.

Transboundary Movement Reduction Measures

National strategies/policies

Generally, the Royal Thai Government (RTG) has taken the strategies/measures in accordance with the provisions of the Basel Convention. RTG bans import of any hazardous wastes for final disposal and restricts import of some hazardous wastes for recovery. In addition, it has the extra control, as follows: 1) The National Environmental Board's Decision 1993 on "Ban on the import of used lead-acid batteries for either disposal or recovery"; and 2) The National Environmental Board's Decision 1994 on "Strict control on the import of used plastic scarps for recovery."

According to the national policy, the Government will not allow Thailand to become an end receiver of waste, which has to bear the costs of waste and pollution.

**Disposal/
Recovery
Facilities**

Disposal facilities

- GENCO, Map Ta Put, Rayong Province; Stabilization/neutralization unit, Secured landfill, Fuel blending unit; D9, D5
- GENCO, Samae Dum, Bangkok; Physical and chemical wastewater pre-treatment plant for dyeing and electroplating, Stabilization/neutralization unit; D9, D9
- SGENCO, Ratchaburi Province; Secured landfill; D5
- Professional Waste Tecnology Ltd.; Stabilization/neutralization unit, Secured landfill, Wastewater treatment plant; D9, D5, D9
- Siam Cement Ltd. (Keangkoi, Lampang, Thongsong, Taluang and Khoawong); Co-incineration; D10

A complete list and further information could be obtained from:
Department of Health; <http://www.anamai.moph.go.th>

Recovery/recycling/re-use facilities

- GENCO, Rayong; Fuel Blending Unit (used solvent and waste oil); R1 and R2
- Sita-Thai Waste Management Sevice Ltd., Saraburi; Fuel Blending Unit (used solvent and waste oil); R1
- Siam Cement Ltd. Keang Khoi,Keangkoi, Lampang, Thongsong, Taluang and Khoawong ; Co-incineration; R1 and R2
- Lead Melting Industries; Recycling of lead from used lead-acid batteries; R4
- Techno-chem Ltd., Chacheongsoa; 1,1,1-Trichloroethane, 1,1,2-Trichloroethylene, 1,1,3-Trichlorotrifluoroethane, Methylenechloride, Isopropyl alcohol;

A complete list and further information could be obtained from:
Department of Industrial Works; <http://www.diw.go.th>
e-mail: iwmb@pcd.go.th

**Bilateral,
Multilateral or
Regional
Agreements**

No agreements.

**Technical
Assistance and
Training
Available**

- Department of Industrial Works (DIW)
- Pollution Control Department (PCD)
- Environmental Research and Training Center (ERTC)
- Department of Environment Quality Promotion (DEQP)
- Environmental Research Institute of Chulalongkorn University (ERIC)

Data on the Generation and Transboundary Movements of Hazardous Wastes and Other wastes in 2003 (as reported)		Quantities (in metric tons)
Generation	Amount of hazardous wastes generated under Art. 1(1)a (Annex I: Y1-Y45) of BC	
	Amount of hazardous wastes generated under Art. 1(1)b of BC	
	<i>Total amount of hazardous wastes generated</i>	Not reported
	Amount of other wastes generated (Annex II: Y46-Y47)	1,800,000
Export	Amount of hazardous wastes exported	Pending clarification
	Amount of other wastes exported	Not reported
Import	Amount of hazardous wastes imported	894
	Amount of other wastes imported	Not reported