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Chapter 8

Transboundary Movement of Hazardous Waste: Lessons from uncovered cases

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Abstract

Cases of illegal and illicit transboundary movement of hazardous waste have been uncovered in Asian countries and other regions. In the case of illicit trade, what importing country regard as hazardous waste may be regarded as hazardous waste. This paper reviews some cases of illegal and illicit shipments, in which Asian countries are exporter and/or importer. are related to and extracts lessons from them. We found that illegal and illicit transboundary movements have different background. To prevent legal and illicit transboundary shipments of hazardous waste, appropriate countermeasures and policy should be taken by governments in the region.

Keywords: Illegal Transboundary Movement, Illicit Transboundary Movement, Hazardous Waste, Basel Convention

8.1 Introduction

Various forms of hazardous waste have been exported from developed countries to developing countries, causing environmental pollution. In the 1980s, hazardous waste imported into developing countries was often dumped improperly and led to health hazards. Recycling of hazardous waste, such as lead-acid batteries, has also caused pollution in importing countries. To solve these problems, the Basel Convention was adopted in 1989 and came into effect in 1992 after tens of countries ratified it. Accordingly, prior notice and consent is required to export hazardous waste to other countries before shipment commences. As of September 2009, the number of ratifying parties had reached 175.

Member countries introduced corresponding regulations in line with the Basel Convention. In addition, some countries have started regulating the international trade

of non-hazardous recyclable waste to prevent pollution problems in the process of recycling. After the Basel Convention and related regulations were implemented, some illegal shipments were intercepted by officials in importing countries, and some were shipped back to their country of origin. In this paper, we review a number of uncovered cases of illegal transboundary shipments of hazardous and recyclable waste, and extract lessons from the findings.

8.2 Uncovered cases of illegal and illicit transboundary movement of waste

Although the Basel Convention and related regulations have been implemented, illegal and illicit transboundary movement of waste continues, and new cases are uncovered every year. This section describes a number of such cases.

8.2.1 Hazardous waste and e-waste shipment seized in Hong Kong

Hong Kong is a duty-free port known as an international through-port for goods from Europe or the United States bound for China and the Asia region. Because of its geographical location and economic function as the gateway to the mainland, many shipments of hazardous waste, including electronic waste, pass through Hong Kong.

A common question asked is "how is e-waste being imported into the mainland?" On the American TV program "60 minutes" in November 2008, CBS Broadcasting Inc. reported that toxic electronic waste was being smuggled into Hong Kong in containers from the United States by thousands of merchant vessels every year, for storage and subsequent shipment to the largest hub of electronic waste on the Mainland—the town of Guiyu in Shantou City.

According to the Hong Kong Environmental Protection Department (EPD), between 2006 and 2008, over 900 inspections were conducted of suspicious storage sites and 13 joint raids with other law enforcement agencies were launched at sites involving illegal activities. Furthermore, the EPD completed the prosecution of 197 cases between January 2006 and October 2008. Among these 197 prosecutions, 138 convictions were made. Details of the types of e-waste and the countries of export in each case are shown in Table 1.

Between 2006 and 2008, 291 imported shipments of controlled electronic waste were returned to their countries of origin. Table 2 shows the number of shipments and the countries of export.

Table 1. Transboundary Movement of Electronic Waste between January 2006 and October 2008

Exporting Country	No. of Convictions	Types of Hazardous Waste	Total Fines and Other Penalties
Japan	31	Batteries and cathode ray tubes	HK$ 860,400
United States	26	Batteries and cathode ray tubes	HK$ 710,000
Canada	14	Batteries and cathode ray tubes	HK$ 353,000
Korea	10	Batteries and cathode ray tubes	HK$ 330,000 and a community service order for 180 hours
Ghana	7	Batteries and cathode ray tubes	HK$ 75,000
United Arab Emirates	6	Batteries and cathode ray tubes	HK$ 160,000
Other places[1]	44	Batteries and cathode ray tubes	HK$ 949,000

Note 1: Twenty-four countries including Guatemala, Malaysia, Singapore, and Italy were involved; each with less than 6 related convictions.

Source: Press Release of the Hong Kong Government News (news.gov.hk)
http://www.info.gov.hk/gia/general/200903/18/P200903180161.htm

Table 2. Number of Returned Illegally Imported Shipments of Electronic Waste (No. of containers)

Countries of Export	No. of Returned Illegally Imported Shipments (No. of Containers)[1]
United States	110 (140)
Japan	34 (39)
Canada	20 (30)
Vietnam	13 (45)
Australia	11 (15)
United Arab Emirates	11 (13)
Other places[2]	92 (139)

Note 1: Some shipments involved more than one container.

Note 2: Forty places, including Guatemala, Algeria, Malaysia, the Philippines and Singapore, were involved; each with less than 8 related shipments.

Source: Press Release at Hong Kong Government News (news.gov.hk)
http://www.info.gov.hk/gia/general/200903/18/P200903180161.htm

8.2.2 Medical Waste exported from Japan to the Philippines

In 1999, a container labeled as having waste paper and waste plastic contents, shipped from Japan to the Philippines, was abandoned in the port of Manila. The Philippine government investigated the container and found medical waste, and in accordance with the procedure defined in the Basel Convention, they requested the Japanese government to retrieve the waste shipment. The Japanese government complied and repatriated the waste to Japan in the form of an administrative subrogation and incinerated it. The president of the exporting company, Nisso Industry Co., Ltd., was arrested, and both the president and the company were found liable for illegal waste shipments and have since been convicted. However, the suspects were not prosecuted in line with the Basel convention and the waste disposal law, but in accordance with the Foreign Exchange Act (unmoderated exports). The waste was not regarded as hazardous because no hazardous substances or infectious materials were clearly found despite a rigorous investigation.

8.2.3 Used tire imports from the United Kingdom to Thailand

In 2002, 23.45 tons of used tires were imported from the United Kingdom to Thailand. However, after arriving in Thailand, the importer did not come to collect the containers within the stipulated 75 days. Therefore, the containers were opened by customs and used car engines and used electric appliances were found in addition to the used tires.
An exporter in the United Kingdom was identified as being in violation of the Basel Convention. The exporter subsequently reclaimed the batteries and electric appliances, but the waste tires were not returned because they were not defined as hazardous waste. In May 2003, the Government of Thailand promulgated restrictions on the import of used tires.

Ratifying parties were informed of this regulation by the Basel Convention Secretariat. Although used tires in Thailand are still not considered hazardous waste, Thailand is applying more stringent regulations on the import of such goods in an effort to protect health and the environment.

8.2.4 Plastic waste exported to Thailand from the Netherlands

In 2003, the Netherlands exported 17.7 tons of material described as high-density polyethylene and low-density polyethylene on the application form. After arriving in Thailand, the importers did not collect the shipment within the 75-day period and it was therefore opened by customs, who discovered that the material was actually imported waste paper and waste plastic.

In Thailand, import of waste plastics for recycling should be by import permit from the Department of Industrial Works (DIW) and comply with the procedures specified in the notice of the Ministry of Industry on Standards for the Import of Materials consisting of waste plastic in 1996 and Notification No. 112 of the Ministry of Commerce for Imports in 1996. However, the imported material had not yet followed the procedure to obtain an import permit. The Pollution Control Department (PCD) reported to the Competent Authority of the Netherlands and the waste was returned. Dutch authorities investigated the case and found that the company that exported the waste had already closed down. This case is an example of import under false declaration. Because import restrictions on plastics have since been delivered to the Basel Convention Secretariat and all ratifying parties, waste can now be shipped back to the exporting country.

8.2.5 Export of used pachinko machines from Japan to Thailand

Used pachinko machines, which are a popular game machine in Japan, were imported

into Thailand in 2004. In September 2003, Thailand had applied import restrictions on used electronic appliances, including those imported with the correct permit. However, the importer of the used pachinko machines did not obtain the necessary import permit; therefore, return measures were taken. In this case, the shipper may not have been aware of the new regulation because the shipment was made just after the regulation was implemented.

Restrictions on the import of used electronic appliances by Thailand were issued in September 2003 by the DIW. The regulation was most likely implemented because of the possibility of increased imports of used electronics as a result of a Chinese regulation in 2002 prohibiting the import of used electronics. This case is an example of regulation transfer from one country to another (Jänicke, 2006).

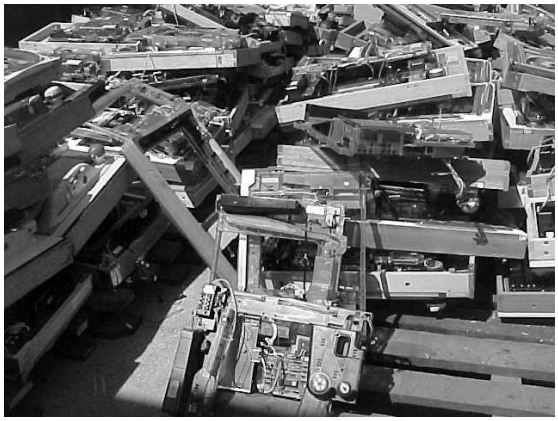

Figure 1. Used pachinko machines exported from Japan, courtesy of Ms. Teeraporn, PCD

The Thai regulation covers 29 items including appliances such as PCs and TVs and their constituent parts, and is similar to Chinese regulations. However, if imported items can be sold and reused, electrical and electronic equipment used within 3 years from its date of manufacture (copy machines within 5 years) are allowed to be imported. If the importer wants to dismantle and recycle the item, import of used electronics is allowed under the following conditions: (a) the importer should be a factory registered with the DIW; (b) the imported items must have economic value; and (c) the exporting country must be party to the Basel Convention. These points differ between the Chinese and Thai regulations.

The Thai regulations require importers to submit their application with the packing list and the letter guaranteeing that the imported goods were manufactured within 3 years at each time of importation. In addition, the DIW conducts inspection of

importers more frequently than previously. According to an importer of used Japanese home appliances, the regulations force unofficial (unregistered) importers out of business. The DIW issued import permits to 53 companies in 2006. The volume of shipments handled with import permits reached 216,932 tons in 2004, 217,467 tons in 2005, and 216,817 tons in 2006.

8.2.6 Plastic waste exported from Japan to Qingdao, China

In late March 2004, Chinese authorities discovered around 4,000 tons of waste plastic bound from Japan to Qingdao, China, in violation of regulatory standards. According to reports in China, the shipment from Japan tried to conceal large amounts of contaminated plastic with a small number of covers of good quality waste plastic. The imported contaminated plastics would have been illegally resold to farmers who do not have the permission to process imported plastics.

On May 8, 2004, the import of waste plastics to China from Japan was banned by the Chinese government who took a very serious view of the incident (Directorate of Public Notice No. 47 National Quality Supervision Inspection and Quarantine). Banning the import of a recyclable waste from a specific country was the first disciplinary action taken by the Chinese government. Central government requested the Japanese exporter to (1) return the entire shipment of waste plastics to Japan, (2) compensate the buyers of the waste plastic, and (3) requested the Japanese government to take measures to prevent similar shipments. These requests were the condition for resuming the import of waste plastics from Japan. The Chinese government regarded the imported contaminated waste plastics as hazardous waste and therefore to be controlled under the Basel convention. However, the Japanese government did not consider them as hazardous waste because they did not contain hazardous substances. The two countries were deadlocked with conflicting views.

Because of a prolonged official investigation and trial, as well as time-consuming measures such as compensation of the buyer, reclamation of the waste plastic was not started until September 2005. Part of the shipment has been confirmed to have returned to Japan, but most of it was distributed to unknown destinations. The chairman of the importer was sentenced to 10 years in prison and fined 200,000 CNY, while a fine of 800,000 CNY was imposed on the importer and processing company.

8.2.7 Return shipment from China to Korea

China conducts inspections before accepting shipments from an exporting country in

efforts to prevent illegal waste imports. In Korea, since 1999, Pan-Kan Test Co. has been carrying out pre-shipment inspection services by radioactivity testing with portable detectors and by visual inspection to discriminate between acceptable and export-prohibited items. Through these inspections, around 10% of total attempted imports are rejected. When using a Pan-Kan test service, the exporter must be officially registered with the Chinese government as a waste exporter. In 2007, about 300 companies registered.

According to Pan-Kan Test Co., China deemed 28 cases in 2005 and 12 cases in 2006 to be illegal exports and shipped them back (Table 3). Of these 28 cases, 4 were returned under the category of e-waste. The returned waste included printers, fax machines, copying machines, odorous goods (wood/shoes/gloves), video tape, compressors, computer monitors, plastics, and medical waste.

Table 3. Situation of waste returned to Korea from China

Year	Number of exports (A)	Amount (million tons)	No. of return shipments (B)	Ratio of returns (B/A)	Related e-waste
2005	4,750	58.2	28	0.59%	4
2006	5,081	54.9	12	0.24%	N/A

Source: An Hong Jun (2006) and the Korea Zero Waste Movement Network (2006)

The export volume of recyclable waste showed a tendency to decrease by around 20% following the Lehman Brothers shock. However, as of late 2009, export volume had recovered to previous levels. As for the number of returns, 7–8 cases are reported annually, accounting for approximately 0.1% of the total number of exports in 2008 and 2009. The type of return waste is not significantly different from that in the mid-2000s. Specifically, in April 2009, mixed fiber cable was discovered in 90 tons of recyclable waste headed for Tianjin, China. In March 2009, 20 tons of recyclable vinyl for Qingdao was returned due to its soiled appearance.

It is also possible to export recyclable waste via a transit point such as Hong Kong, Vietnam, or North Korea, and in particular, there is concern about inappropriate exports through Hong Kong and other countries. In these countries, inspection by Pan-Kan Test Co. is not required for exports of recyclable waste. In fact, waste printed circuit boards (PCBs) and waste telephones are exported to China through Hong Kong (Fig. 2).

Figure 2. Waste export by land shipment (left: waste printed circuit boards; right: waste phones)
Source: An Hong Jun (2006)

There are two main ways to treat the handling of hazardous waste after return: in Korea as the exporter's responsibility, or in a third country for re-export. Although Pan-Kan Test, Co. serves primarily to verify waste exports in the exporting country, it does not take any direct responsibility for return because the approval by Pan-Kan Test, Co. does not guarantee export permission by the Chinese government.

Meanwhile, according to the Act on the Trans-boundary Movement of Waste and its Treatment (ATW), returned waste can be treated as legal execution by proxy. However, this applies only to exports without Ministry of Environment (MOE)'s approval and the possibility of unexpected pollution. In addition, it is a necessary condition that the exporter does not have the financial ability to treat the hazardous waste. In other words, Korea does not have any provisions that cover returned shipments of waste bound for China. Until now, it has not been reported whether the MOE is involved in the treatment of return waste from China[i].

8.2.8 Compost exported from Singapore to Indonesia

In 2004, the local environmental management office of the Batam Islands received notice of a sighting of something resembling hazardous waste on Galang Baru Island. The material was 1149 tons of compost imported from Singapore on July 28, 2004. As a result of inspection by the Ministry of Environment of Indonesia, it was found that the imported compost was in fact hazardous waste because it contained a high concentration of metals. In discussions between the Indonesian and Singaporean governments conducted in late 2004, the Singaporean side claimed the waste was not hazardous and was simply compost. In March 2005, in response to the conflict, someone dabbed

graffiti on the gates of the Singaporean embassy in Jakarta.

In May 2005, the Singaporean and Indonesian governments reached an agreement, which was witnessed by the Basel Convention Secretariat in Geneva. The imported material could not be regarded as hazardous waste according to the regulations of Singapore and the Basel Convention, but it was considered as hazardous waste according to the regulations of Indonesia. However, the restriction of hazardous waste in Indonesia was submitted to the Basel Convention Secretariat on July 29, 2004 and the information was disseminated to ratifying parties including Singapore on August 27, 2004. When the compost was shipped, the Singaporean government had no responsibility to control the material. Therefore, in order to resolve the dispute, the Singaporean government agreed to issue a permit to retrieve the goods.

8.2.9 Export of secondhand lead-acid battery waste from Japan to Vietnam and Hong Kong

A sharp increase in nominal exports of secondhand lead-acid battery waste from Japan has been observed since early 2005. According to trade statistics, the HS code (Harmonized Commodity Description and Coding System) for secondhand lead-acid batteries does not distinguish them from new lead-acid batteries. Therefore, the exact quantity of export of secondhand lead-acid batteries is unknown. However, through preliminary consultation with the Ministry of Economy, Trade and Industry and review of the trade statistics, most of the batteries exported to Vietnam and Hong Kong are believed to be waste lead-acid batteries.

It is not clear whether the exported lead-acid batteries were reused or not. The Japanese Ministry of Environment and Ministry of Economy, Trade and Industry issued a notice in April 2006 for preliminary consultation relating to the export of lead-acid batteries. This measure requested that during preliminary consultation, exporters provide pre-shipment verification of direct re-use and the existence of users at the destination. The pre-shipment inspection includes “a selection of functioning items”, “no damage to the battery casings” and "testing of power-on prior to exporting, as well as removing non-working items”. In addition, the name and address of the buyer in the exporting country should be provided during the consultation service.

Because it was not confirmed that the exported items were re-used, Vietnam and Hong Kong regarded the items as hazardous waste and have enhanced their inspections. Since the imported waste lead-acid batteries to Vietnam seemed to have been re-exported to other countries, the Vietnam government issued a notice to enhance

import controls for regulating importation of waste for re-export purposes. In 2006, the Japanese Ministry of Environment and Ministry of Economy, Trade and Industry issued a joint notice to some exporters as the Hong Kong and Vietnam authorities had ordered a return shipment of some containers with damaged lead-acid batteries.

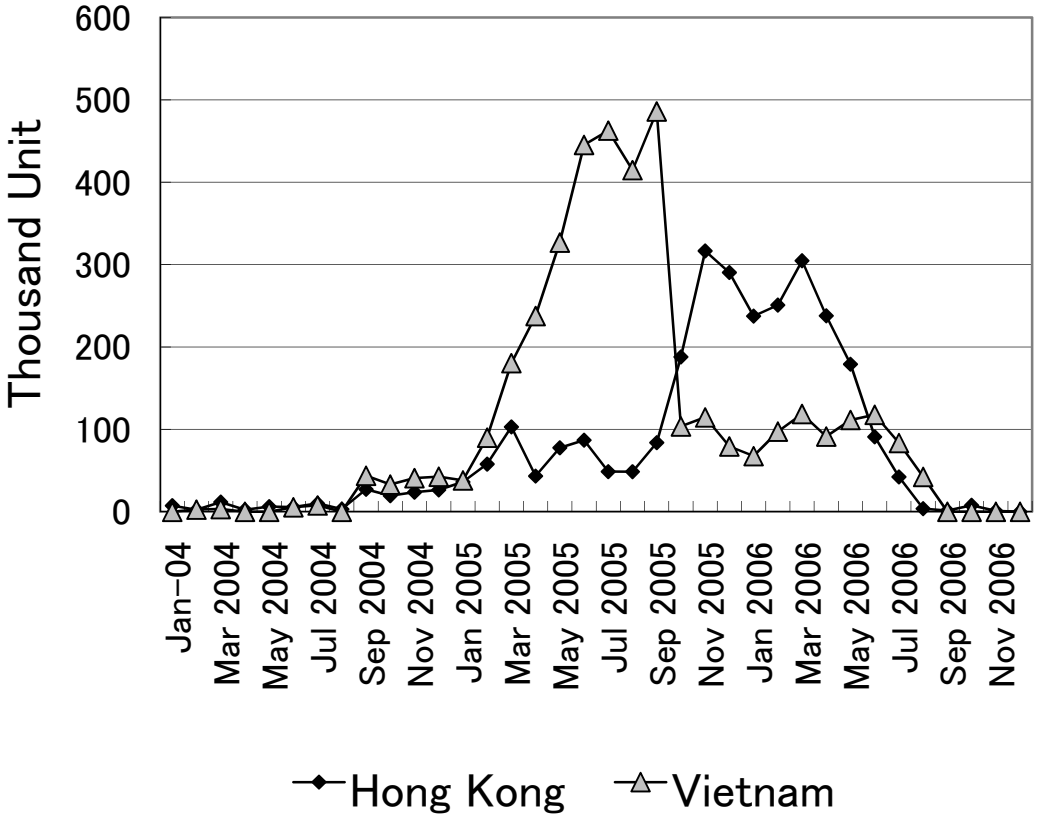

Chart 1. Export of Lead Acid Battery from Japan to Hong Kong and Vietnam

The export of waste batteries decreased rapidly under stricter trade regulations and customs inspections. However, some sources pointed out the possibility that some exporters might have shipped waste lead-acid batteries concealed with mixed metals.

Although it occurred after trade statistics showed a decrease in the export of lead-acid batteries, a pile of waste lead-acid batteries with Japanese instructions was found in a small-scale recycling factory in Guangzhou, China in January 2007 (Figure 3). The recycling factory in question dismantled batteries, shipped the lead electronic plates to another recycling company, and melted the terminals into ingots.

Figure 3. Photo by Kojima Michikazu (January 2007)
Waste lead-acid batteries from Japan in Guangzhou, Guangdong, China

8.2.10 Secondhand automobile parts exported from Japan to Africa

In 2006, secondhand auto parts were exported from Japan to Africa, via France, and the container was intercepted and examined by French authorities. The French government regarded the secondhand auto parts as hazardous waste in accordance with the Basel Convention because the packaging was not appropriate to prevent damage and oil leakage during transportation. During consultation between the French and Japanese governments, the Japanese government claimed that the container did not qualify as hazardous waste under the Basel Convention. Although discussions were deadlocked, the exporter was forced to notify the French government, which permitted the export in accordance with European Union (EU) regulations.

8.2.11 Waste plastics imported from the United Kingdom to China

In January 2007, 200 thousand tons of plastic waste and 500 thousand tons of waste paper were imported from England to Foshan district in Nanhai, Guangdong Province. According to a survey conducted by the Guangdong Environmental Protection Bureau (EPB), Lianjiao village and an industrial park in Nanhai have become well known as a regional center for the trading and processing of domestically generated waste plastic since the late1970s. Annually, the region recycles over 20 000 tons of waste plastic, of which more than 80% was collected domestically. However, 90% of imported waste plastics have been imported without the required waste import permit from the State Environmental Protection Administration (SEPA).

According to a report by China Central Television, the Nanhai City EPB expressed the intention to eradicate the waste plastics recycling industry in the region

and also requested the return of approximately 700 000 tons of imported waste from the United Kingdom. The SEPA and Guangdong Province EPB ha stated that the regulation will be applied strictly to imports of recyclable waste.

According to reports of interviews with British officials, the amount of recyclable waste exported from the United Kingdom to China has increased 158-fold over the past 8 years. British authorities have also participated in IMPEL (the European Union Network for the Implementation and Enforcement of Environmental Law) to try to prevent illegal shipments. However, it is difficult to guarantee that exported recyclable waste meets the Chinese environmental standards.

8.3 Points of comparison among the cases

The previous section summarized a number of uncovered cases involving Asian countries. This section summarizes the characteristics of each case from several standpoints.

8.3.1 Countries involved

This paper deals only with cases involving importing or exporting Asian countries. All Asian countries involved in the case studies are party to the Basel Convention. On the other hand, some hazardous waste imported into Asia originates from the United States, which is not a ratifying party but is a signatory of the Basel Convention and has its own regulations on transboundary movement of hazardous waste. These facts demonstrate that illegal or illicit shipments occur even under the Basel Convention.

8.3.2 Types of waste and interpretation of definitions

Types of waste concerned include e-waste, lead-acid batteries, hazardous industrial waste, mixed waste, tires, and others. Lead-acid batteries contain hazardous substances, whereas waste tires or waste plastics are not usually hazardous. Because the demand for waste tires is not that large, their value is usually very low or even negative. Therefore, there is a possibility that low-demand non-hazardous waste is being dumped in developing countries.

It should be noted that in some cases, the view of exporting countries on specific items differs from that of importing countries or transit countries. For example, compost shipped from Singapore was regarded as hazardous waste in Indonesia, while secondhand automobile parts shipped from Japan were regarded as hazardous waste by

the French government, but in neither case were the items viewed as hazardous by the exporting countries. These kinds of issues occur due to ambiguity in the definition of hazardous waste and other terms including product, secondhand goods, and non-recyclable waste.

8.3.3 Prior notice and consent

None of the cases presented in section 2 went through the procedure of prior notice and consent. It is not clear, therefore, whether exporters and importers were aware of such regulations. However, both exporters and importers of waste lead-batteries are likely to conduct international trade intentionally under the guise of secondhand goods. On the other hand, exporters of automobile parts from Japan considered that the shipment to be legal because such parts are typically reused.

Table 4. Summary of case studies

Year	Importing and exporting countries (Status of ratification)	Declaration in the exporting country	View of the importing country on imported material	Content
Sept 1996–2005	Asia (parties) and North America (non-party) → Hong Kong (a region of China, which is party)	Mixed metal, plastic waste, secondhand electronics, etc.	Medical waste, cathode ray tubes, hazardous waste, and other waste	From 2006 to 2008, the number of waste return shipments reached 291
1999	Japan (party) → Philippines (party)	Used paper and waste plastics	Mixed hazardous and medical waste	After returning to Japan, contamination by toxins was tested for, but no toxic substances were clearly found.
2002	United Kingdom (party) →Thailand (party)	Waste tires	Stacked electric appliances, such as lead-acid batteries constitute hazardous waste	Electric appliances, batteries, and other waste were returned. There is no demand for waste tires.

2003	Netherlands (party) →Thailand (party)	High-density polyethylene and low-density polyethylene	Plastics waste	Violation of Thai regulations. Transaction requires a permit.
2004	Japan (party)→Thailand (party)	Used pachinko machines	Used pachinko machines	Violation of Thai regulations. Transaction requires permit. Returned.
2004	Japan (party) →China(party)	Waste plastic	Waste plastics with garbage from daily life	Japanese government regarded it as non-Basel waste, but export company clearly violated Chinese regulations
2005–2009	Korea (party) →China (party)		E-waste, odorous items such as shoes, gloves, and medical waste	In 2005, 28 cases of return shipments for Korea and 12 additional cases were reported
2004	Singapore (party) → Indonesia (party)	Compost	Hazardous waste containing heavy metals	Indonesia and Singapore differed in their views. Singapore permitted imports from Indonesia and did not regard the shipment as hazardous waste.
2005–2006	Japan (party) → Hong Kong (party), Vietnam (party) → China (?)	Secondhand lead-acid batteries	Waste lead-acid batteries (hazardous waste)	Return shipment measures were taken by Hong Kong and Vietnam
2006	Japan (party) → France(party) → Africa (not clear)	Secondhand car engines	France regarded it as hazardous waste.	Japan regarded waste items as secondhand goods. France issued a report permit to Africa.
2007	United Kingdom (party) → China (party)	Plastics, paper, etc.	Waste from daily life	The case is regarded as a violation of domestic law. Returned to exporting country.

Source: Compiled from various sources.

Honda (2009) defines illegal transboundary moment as the transboundary movement of waste controlled by both exporting and importing parties beyond the jurisdiction of the Basel Convention, while illicit transboundary movement is the transboundary movement of gray-area waste controlled only by the importing party, but again beyond the jurisdiction of the Basel Convention.

8.4 Measures to prevent further illegal and illicit trade

Several possible trade measures have been designed to prevent illegal and/or illicit trade of hazardous waste. To consider appropriate policies, the difference between illegal and illicit trade should be clearly taken into account.

8.4.1 Basel Ban Amendment

Many parties have expressed hope for the early implementation of the Ban amendment to reduce improper transboundary movements of hazardous waste. However, the ban amendment will not contribute to reduce the number and type of cases mentioned in Section 2 because prior notice and consent was not used in all such cases. If the exporter is trying to export hazardous waste under the guise of products, secondhand goods, or non-hazardous recyclable waste, the government may not be aware of the shipment of hazardous waste. More effort to enforce the law, such as frequent inspection of cargo, is the only measure that will reduce such illegal trade. On the other hand, the ban amendment made previously official transboundary movement of hazardous waste illegal, but nevertheless, it is not effective for reducing the illicit trade of hazardous waste.

8. 4.2 Information sharing among parties

To reduce illicit trade, exporters and governments of exporting countries should be aware of existing trade regulations and standards on hazardous waste, secondhand goods, products, and non-hazardous recyclable waste in the importing country.

The Basel Convention has schemes to facilitate information sharing, which are defined in Articles 3, 4, and 13. Parties can disseminate the national definition and list of hazardous waste and other waste, as well as prohibition of import of hazardous waste, through the Basel Convention Secretariat. Although the information-sharing scheme is defined in the Basel Convention, only a few countries utilize the mechanism. Even

though the definition and list of hazardous wastes have been disseminated to other countries, ambiguity in the definition might still exist. Furthermore, the exporter or the government of the exporting country may have a different interpretation from the government of the importing country.

In addition, some shipments exported from the United States, which is not party to the Basel Convention, were seized in Hong Kong. In response, Hong Kong has developed necessary procedures in accordance with the Basel Convention. However, the regulations of Hong Kong are not identical to those of China. Hong Kong can not disseminate its regulations through the Secretariat of the Basel Convention to other parties because China's Ministry of Environment is the competent authority.

Table 4 Possible differences in interpretation of the definition of hazardous waste

Importing country / Exporter	Regarded as hazardous waste under the Basel Convention		Not regarded as hazardous waste under the Basel Convention
	No report, based on Articles 3 and 4	Report, based on Articles 3 and 4	No report, based on Articles 3 and 4
Regards as regulated waste	No difference in interpretation	No difference in interpretation	Differences in interpretation, Problem whereby export is difficult
Not regard as Basel waste	Differences in interpretation which might cause conflict	Depending on what is reported, differences in interpretation may lead to conflict	No difference in interpretation

Source: author

8.4.3 Information dissemination in exporting countries

Although importing countries have sent a clear definition and list of what they regard to be hazardous waste to other parties through the Basel Convention Secretariat, exporters may not be aware of them. Information dissemination efforts in the exporting countries are thus another key factor to reducing illicit transboundary movement of hazardous

waste.

A good example of information dissemination practiced by the Japanese government is the organization of seminars more than 10 times every year (Yoshida and Kojima, 2008). Moreover, the Japanese government has provided consultation services to exporters.

8.4.4 Inspection of shipments

Inspection at ports is key for preventing illegal shipments. Exporters sometimes forge shipping documents and send hazardous waste overseas. Due to budget constraints, however, it is very difficult to check every shipment, but on the basis of various information collected by different government agencies, inspection should be conducted effectively.

8.5 Conclusion

The present study reports evidence of a number of illegal and illicit shipments of hazardous waste in recent years. To determine an appropriate policy, it is important to understand the background of such cases. Examination of various cases helps to clarify the form that appropriate countermeasures and policy for preventing illegal and illicit transboundary shipments of hazardous waste should take. Hazardous waste should also be defined and listed clearly by each party, and the information should be disseminated to other parties though the Basel Convention Secretariat. The same information should also be disseminated to exporters by the governments of exporting countries, and enforcement should be strengthened to prevent illegal export of hazardous waste.

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[i] This information is based on interviews with a representative of the MOE in October 2009. The MOE takes the stance that waste imports and exports are basically commercial contracts between private parties; therefore, in the event of return shipment, hazardous waste should be treated as the responsibility of the exporter.

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