

Waste Trafficking, Challenges And Actions To Be Taken

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ABSTRACT

Illegal export of waste is known as waste trafficking and when committed, it has a large negative impact on sustainable resource management and recycling efficiency as well as on the environment and on human health. Furthermore, exporting waste for unsound and unacceptable treatment abroad instead of complying with the regulations creates an uneven playing field that impairs sound market mechanisms.

In order to secure sound and environmentally friendly waste handling globally, legislation such as the Basel Convention and the European Waste Shipments Regulation have been introduced. Despite the regulations in place, large amounts of waste are unlawfully exported from OECD countries to transition and developing countries, such as China, other Asian and West African countries. The illegal trade in waste is estimated at a value of between US\$ 10 and \$ 12 billion annually and generates very high revenues to the criminal actors involved in the trade. The enforcement of waste trafficking is organisationally complex and most enforcement activities today are reactive in nature and rely on the cooperation between environmental agencies, customs and police networks in a number of countries. The lack of proper coordination and allocation of resources between different national authorities are the main bottlenecks to effective and efficient enforcement of the regulations on trans-frontier shipments of waste. Furthermore, effective collection, use and exchange of information and intelligence are essential for better and more effective enforcement, but delivering the intelligence material needed constitutes a large challenge since it demands transnational and cross-organisational cooperation.

Ideally, in the long term, the most profound way of reducing the risks related to waste trafficking is to simultaneously reduce the probability of improper handling of the wastes and ensure financially and environmentally sound resource utilization in the receiving countries. However, such capacity building is time consuming and in the meantime the responsibility for securing sound and environmentally friendly waste handling and for preventing waste trafficking must be laid upon the exporting countries in co-

operation with the relevant international bodies. The successful approach to achieving this task is to simultaneously pursue two parallel lines of activities believed to reduce the occurrence as well as the effects of waste trafficking activities; making it easier to do right and, at the same time making it harder to do wrong.

INTRODUCTION

The global recycling markets contribute to the recovery of huge quantities of materials. However, in most developing countries recycling and recovery activities are carried out through low-end means such as crude backyard recycling with comparatively low yields (Nnorom et al 2007). Such handling often causes serious harm to the environment, human health as well as to society and the economy.

As a prime example, the majority of electrical and electronic waste (ee-waste) exported to China is processed and treated in backyards or small, primitive workshops (Liu et al 2006). Processing often includes methods such as manual disassembly, cyanide leaching and uncontrolled open burning for the purpose of extracting the valuable metals from the ee-waste. Any remains of this waste that has no value are usually dumped (Nnorom et al 2007). This handling results in serious pollution, since the substances in question are, for example: polycyclic aromatic hydrocarbons (PAHs), polychlorinated biphenyls (PCBs), polybrominated diphenyl ethers (PBDEs) as well as heavy metals (such as mercury, lead and zinc). Similar handling of ee-waste has also been reported to take place in other Asian countries such as India and Pakistan (BAN2002) as well as in West African countries such as Nigeria (BAN2005).

This type of handling endangers the health of the recyclers and residents living near the sites. Furthermore, the improper handling also causes harm to humans living further away from the sites and the environment through contamination of soil, water and ecosystems. In addition to the imminent threats to the environment and human health noted above, poor management of waste, especially the use of ineffective methods for recycling and recovery means poor resource management and loss of valuable resources that undoubtedly will contribute to the depletion of our planet's natural resources. Furthermore, exporting waste for unsound and unacceptable treatment abroad instead of complying with the regulations creates an uneven playing field that impairs sound market mechanisms (Comte 2006). This gives irresponsible waste producers and dubious waste brokers and processors an unfair economic advantage over soundly based and environmentally conscientious waste producers and waste managers. The skewed market mechanisms are very likely to delay or hinder the establishment of facilities and infrastructure needed for proper solid waste management throughout the world.

Illegal export of waste is known as waste trafficking and when committed, it has, as has been shown above, a large negative impact on sustainable resource management and recycling efficiency as well as on the environment and on human health. Furthermore, exporting waste for unsound and unacceptable treatment abroad instead of complying with the regulations creates an uneven playing field that impairs sound market mechanisms. Finally, the improper handling of waste will, without doubt, effect the reputation and credibility of the waste management sector negatively. The enforcement of waste trafficking is organisationally complex and suffers of the lack of appropriate data as well as the difficulty to determine whether a waste shipment is to be defined as illegal or not (Terazono et al 2004, Comte 2006, IMPEL 2006), but nevertheless, it is very important to find ways to tackle waste trafficking successfully. Below, this issue is further elaborated upon.

WASTE TRAFFICKING AND LEGISLATION

In order to prevent the unwanted effects to the environment, human health and society as described above, legislation has been implemented at an international as well as on regional and national levels. On an international level, the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal (EU 1993) and the OECD Council Decision on the Control of Transfrontier Movements of Waste Destined for Recovery Operations regulate trans-boundary movements of waste (OECD 1992).

Export of waste from the European Union is regulated by the Regulation on the Supervision and Control of Shipments of Waste within, into and out of the European Community (259/93/EEC) (EU 1993a), often referred to as the “European Waste Shipments Regulation” and in the United States, regulations regarding import and export of hazardous waste can be found in the Resource Conservation and Recovery Act (RCRA 1976).

Despite the regulations in place, large amounts of waste are unlawfully exported to transition and developing countries, such as China, other Asian and West African countries (Nnorom et al 2007, Terazono et al 2004). The illegal trade in waste is estimated at a value of between US\$ 10 and \$ 12 billion annually and generates very high revenues to the criminal actors involved in the trade (Comte 2006). A report from IMPEL (the European Union Network for the Implementation and Enforcement of Environmental Law) suggested that as much as 85% of the non-hazardous waste exported from the European Union is shipped illegally or in non-compliance with regulations. Irregularities include among others: the use of incorrect classification, false classification of waste products or unchecked items as re-usable products and other kinds of fraudulent shipment declarations (IMPEL 2005). Furthermore, Greenpeace (2010) reported that between 1988 and 1994, 94 attempted or actual cases of illegal export of a total of 10 million tons of hazardous waste residues were identified and Massari and Monzini (2004) reported illegal exports of hazardous waste from Italy to Romania, the Black Sea region, Lebanon and several African countries, such as Somalia and Mozambique.

Naturally, there are cases where waste producers or waste transporters break the law unintentionally, for example by producing incorrect transport documents or misinterpreting existing law. Some of these misunderstandings and errors might be explained by the complexity of the present laws and regulations (O’Keefe & Hall 2000), but even so a large fraction of the illegal exports of waste is suspected to be the result of consciously and continuously committed illegal action.

ORGANIZATION OF ENFORCEMENT ACTIVITIES

The organisation of enforcement measures to counter waste trafficking varies widely from country to country. The differences can to a large extent be explained by different administrative structures in different states and thereby varying competencies and jurisdictional scope for the organizations involved. However, in general three types of organisations or authorities involved in the enforcement of trans-frontier shipments of waste can be identified (IMPEL 2006). These are:

- Environmental Inspectorates – mostly organized within a Ministry of Environment
- Police Departments – mostly organized within a Ministry of Internal Affairs
- Customs – mostly organized within a Ministry of Finance

The division of responsibilities and competencies between these three types of organisation differs from country to country. The main responsibility for enforcement can be placed in any one of the organisational categories and in practice there are differing arrangements in different countries. The degree of division of responsibility and effectiveness between competent authorities differs from country to country (IMPEL 2006). In some countries, full responsibility for enforcement is given to one single authority or organization. In other countries, several organisations are involved. The degree of an organisation’s involvement in any particular case depends on the kind of controls and inspections about to take place. The degree of centralisation also varies. Some countries and types of authority are very centralised, while others show a high degree of decentralisation with considerable independence and decision-making powers delegated to regional and local authorities. In most countries co-operation between the organisations involved takes place voluntarily, either on a case-by-case basis or through more formal agreements such as memoranda of understanding.

Reports from IMPEL (2005, 2006) point out several barriers for effective enforcement of the regulations. Most enforcement activities today are reactive in nature and rely on the cooperation between environmental agencies, customs and police networks in a number of countries. Such cooperation still seems to be partly restrained by lack of priority, interest or capacity within some of the organisations. Furthermore, effective

collection, use and exchange of information and intelligence are found to be essential for better and more effective enforcement. Delivering the intelligence material needed constitutes a huge challenge since it demands transnational and cross-organisational cooperation. Altogether, a large number of actors, with most probably different views of an intelligence organisation, the use of intelligence material, secrecy and other issues related to intelligence and intelligence organisations have to be involved. Finally, IMPEL (2006) identified the lack of proper coordination and allocation of resources between different national authorities as one of the main bottlenecks for effective and efficient enforcement of the regulations on trans-frontier shipments of waste.

In addition to these organisational challenges described in order to conduct a successful inspection and being able to conclude whether a certain shipment is illegal or not, inspectors have to be able to establish whether:

- The material shipped is to be classified as a waste or as a product, a classification that is especially hard to do when it comes to distinguishing between end-of-life products (i.e. waste) and near-end-of-life products (still products)
- The waste is to be regarded as hazardous or not
- The waste is bound for an OECD or a non-OECD country
- The waste is being exported for the purpose of recycling or some other kind of waste treatment

ACTIONS TO BE TAKEN

Ideally, in the long term, the most effective way of reducing the risks related to waste trafficking is to simultaneously reduce the probability of improper handling of the wastes and ensure financially and environmentally sound resource utilisation in the receiving countries. To achieve this, the environmental regulations as well as the enforcement capacities in the receiving countries have to be strengthened. Furthermore, additional investments in and development of waste management infrastructure, mainly in the form of appropriate treatment and recycling facilities, and domestic waste management know-how have to be undertaken (Nnorom et al 2007). However, such capacity building is time consuming and as long as the infrastructure, the legislation and the enforcement capabilities in the receiving countries have not reached a level that provides the means necessary for securing sound handling and treatment, the responsibility for securing sound and environmentally friendly waste handling and for preventing waste trafficking must be laid upon the exporting countries, ideally in co-operation with the relevant international bodies. The successful approach to achieving this task is to simultaneously pursue two parallel lines of activities believed to reduce the occurrence as well as the effects of waste trafficking activities; making it easier to do right and at the same time making it harder to do wrong.

Making It Easier To Do Right

A vast majority of all waste producers are believed to act in good faith but they face complexity in determining what should be the most appropriate means of meeting their obligations. Therefore, criminals and criminal organisations are able to take advantage of this complexity and producers' lack of knowledge or lack of care. In addition, the complexity of the present legislation and regulations, as well as complicated administrative environmental and customs procedures, might lead to unintentional illegal waste handling and export of waste. Finally, for a waste producer it can be hard to distinguish between a serious waste handler or broker and a dubious one involved in illegal activities. Knowledgeable and vigilant waste producers, with a good understanding of the legislation and administrative procedures in place, who demand proper handling of their waste and are able to distinguish easily between serious and dubious waste handlers are less likely to place their waste in the hands of criminal organisations than producers less aware and knowledgeable.

Therefore, enabling waste producers by making it easier to do right is an important step in reducing the amount of waste illegally exported. Initiatives to support this strategy include:

- Awareness raising, information and communication about the problems related to waste trafficking and improper handling in the receiving countries as well as information about the criminal structures involved in and criminal methods used for waste trafficking
- Making information and counselling on the rules and regulations related to proper waste handling in general and trans-boundary shipments of waste in particular easily accessible to waste producers
- Making the regulations of trans-boundary waste shipments more clear, understandable and co-ordinated
- Providing means for waste producers to be able to identify more easily and get in contact with serious, law-abiding waste brokers and handlers, for example through a waste brokers' certification or accreditation system.

Making It Harder To Do Wrong

Despite the fact that almost all waste producers are acting in good faith, there are still criminals and criminal organisations intentionally involved in and profiting from waste trafficking and waste trafficking related activities. Basically, making it harder to do wrong is the same as making it easier for the enforcement agencies to carry out their job. Therefore, initiatives supporting this strategy include:

- Introducing measures to secure better traceability of exported waste, partly by requiring exporters to produce completion certificates to be returned to the waste producers
- Providing the resources needed for training and education for inspectors at the relevant authorities as well as providing the resources needed for efficient and effective enforcement of the legislation
- Establishing better coordination, on national as well as on regional and international levels, between the authorities enforcing the relevant legislation and fighting waste trafficking related crimes
- Using intelligence-based methods to establish the criminal motivation as well as the organisational procedures and the methods they use and to utilise the gathered intelligence as a tool for turning the enforcement activities from being reactive to becoming proactive
- Establishing a formal international body for the co-ordination of enforcement and intelligence initiatives related to fighting waste trafficking (for example organised under the auspices of Interpol, UNEP or the Basel Secretariat)
- Changing the regulations in a way that makes it harder for exporters to claim end-of-life products as products instead of waste and at the same time makes it easier for the inspectors to classify a shipment as consisting of products or wastes.

The ISWA Position On Waste Trafficking

The International Solid Waste Association (ISWA) is an international non-profit association working in the public interest with the main objective to promote and develop professional waste management worldwide for a sustainable society and since the organization does not have any legislative or law-enforcing authorities and its members enroll in order to contribute to the organisation on a voluntarily basis. ISWA has produced a position paper on waste trafficking (ISWA 2011). The position paper stated that ISWA regards waste trafficking as a truly international criminal action that causes harm to human health and the environment as well as to society, both through the effects related directly to improper handling of waste, but also by impairing sound market mechanisms that hinder the establishment of the infrastructure needed for sound waste management. In addition, waste trafficking seriously damages the reputation and credibility of the waste management sector and hampering the development of a global resource management network. Therefore, ISWA regards the fight against waste trafficking as a necessary and needs to be fully integrated as a key aspect to establish a sound, global system for resource and solid waste management. Therefore, ISWA commits itself to:

- Regard waste trafficking as an integral part of any consideration regarding globalisation of solid waste management and as a part of the ISWA project on globalisation and waste management to prepare a report focusing on waste trafficking
- Take every opportunity to inform and raise the awareness, within as well as outside of the solid waste management sector, about the problems related to waste trafficking and the criminal mechanisms in play
- Provide and assist, with other partners, in the running of training courses for solid waste management professionals on waste trafficking and global waste management
- Being actively involved in processes aimed towards strengthening the environmental regulations, enforcement capabilities, waste management infrastructure and other waste management capacities in the receiving countries
- Involve ISWA's Regional Development Networks, and prompt National Members as well as other members and partners of ISWA to promote the legal transportation of waste and assist in ISWA's work against waste trafficking
- Actively cooperate with the European Commission and the U.S. Government as well as with international organizations, such as UNEP, UNIDO, the Basel Secretariat, IMPEL, Interpol, the World Customs Organisation and the WTO to reinforce the fight against waste trafficking
- Promote the ideals of producer responsibility to ensure that second-hand items exported from First World countries are either repatriated for waste treatment back to the exporting countries or that those companies exporting such goods set up treatment facilities in the receiving countries.

CONCLUSION

It is evident that the global trade and movement of waste present opportunities as well as threats. If handled correctly, large amounts of valuable secondary raw materials can be recovered and reintroduced into industrial resource flows. If not, the environment and human health can be in danger and valuable resources can be lost. Since most OECD countries have the capacity to handle their waste in a sustainable way the main challenge is the waste that either is generated in or exported to developing countries, where insufficient legislative and physical environmental infrastructure is resulting in crude handling and low-yielding recycling procedures.

In the long term, the risks related to handling of waste in receiving developing countries can be reduced by strengthening environmental regulations and enforcement capacities as well as by developing the physical waste management infrastructure in these countries. However, such processes are time consuming. In the meantime, the responsibility for globally securing sound and environmentally friendly export of reusable items, secondary raw materials and other types of waste must be laid upon the exporting countries in co-operation with the relevant international bodies. Such an obligation has already been accepted by the introduction of international legislation such the Basel Convention and regional legislation as the European Waste Shipments Regulation. However, despite the regulations in place, large amounts of waste are illegally exported from OECD countries to developing countries. Some of the violations can be explained waste transporters unintentionally breaking the law, but a large fraction of illegal exports are suspected to be the result of consciously and continuously committed waste trafficking operations.

Since waste trafficking is a truly international issue, effective preventative actions must be based upon an international, intelligence-based, cross-organisational and cross-functional cooperation. The successful approach to achievement of this task is to simultaneously pursue two parallel lines of activities believed to reduce the occurrence as well as the effects of waste trafficking activities: making it easier to do what is right and at the same time making it harder to do wrong. In this process the waste management industry, together with environmental agencies and law enforcement organisations, has a major role to play.

Finally, it is important, once and for all, to establish that waste trafficking is a criminal action and that individuals and organisations that consciously are involved in waste trafficking activities are criminals and therefore should be treated as such.

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