Transhipment of Waste

Report number 84 July 2014

Report of the Comptroller and Auditor General

Transhipment of Waste

I have, in accordance with the provisions of Section 9 of the Comptroller and Auditor General (Amendment) Act, 1993, carried out a review of the implementation and enforcement of the European Waste Shipment Regulation in Ireland and the financial consequences of waste which originated in Ireland being illegally dumped in Northern Ireland.

This report was prepared on the basis of information, documentation and explanations obtained from the bodies and persons referred to in the report. The Department of the Environment, Community and Local Government, Dublin City Council (as the designated national competent authority) and the Environmental Protection Agency were asked to review and comment on the draft report. Where appropriate, the comments received were incorporated in the final version of the report.

I hereby submit my report for presentation to Dáil Éireann in accordance with Section 11 of the Act.

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Comptroller and Auditor General

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29 July 2014

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Abbreviations

DCC	Dublin City Council
EPA	Environmental Protection Agency
EWSR	European Waste Shipment Regulation
NIEA	Northern Ireland Environment Agency
NIECE	Network for Ireland's Environmental Compliance and Enforcement
NTFSO	National Transfrontier Shipment Office
OEE	Office of Environmental Enforcement



Summary

According to the latest available Eurostat figures, almost 20 million tonnes of waste was generated in Ireland in 2010. A cost effective waste management system is required to ensure that waste is removed and either recycled or disposed of appropriately.

Waste management involves significant costs. If not well regulated, clean-up costs may fall to public bodies or in some cases, there may be environmental damage which is beyond remediation.

International movements of waste are commonplace. Waste exports from Ireland in 2013 totalled just over 1.5 million tonnes. In contrast, waste imports to Ireland are limited – only around 75,000 tonnes were imported in 2013.

European Waste Shipment Regulation

The 2006 European Waste Shipment Regulation (EWSR) sets out the rules for cross-border shipment of waste within, to and from the EU area. The Department of the Environment, Community and Local Government (the Department) has policy responsibility for waste management and is the designated correspondent for Ireland under the EWSR. The Minister has designated Dublin City Council to be the national competent authority, responsible for the implementation of the EWSR in Ireland. In turn, the Council has established the National Transfrontier Shipment Office (NTFSO) to implement and enforce the regulation.

Coordinated audits on the enforcement of the EWSR were conducted between 2011 and 2013 by national audit institutions in eight EU member states, including Ireland. The report on the coordinated audit, published in October 2013, noted that all of the participating countries had implemented the EWSR and were generally complying with the formal requirements of the regulation.

In terms of the resources available for enforcement, Ireland compares favourably to the other countries that participated in the coordinated audit. In particular, Ireland is the only one of the participating countries where a dedicated national implementation and enforcement body (NTFSO) has been established.

Implementation and Enforcement

The NTFSO imposes charges on its customers with the aim of fully recouping costs incurred in the performance of its duties as competent authority for the purposes of the EWSR. However, the level of net income in any year is difficult to predict and the fee structure operated by the NTFSO makes it difficult to ensure full cost recoupment on an annual basis.

While planned enforcement actions are set out by the NTFSO annually, there is no medium to long-term enforcement strategy in place. The Department should ensure that an enforcement strategy is developed to set the strategic direction for enforcement activity over a three to five year timeline.

The coordinated audit noted that Ireland ranked second highest among the eight participating countries, in terms of the number of inspections of waste facilities and ports carried out. However, that number has fallen significantly in recent years, with 3,176 inspections during 2013 representing a 35% decrease on 2011. The average cost per inspection has risen from €137 in 2011 to €199 in 2013.

The NTFSO collates information on infringements detected during inspections of waste imports and exports but could not provide similar information for other types of inspection e.g. waste facilities, brokers and dealers. While the number of inspections of waste imports and exports decreased by more than a third between 2012 and 2013, the number of infringements detected was down by three quarters, from 502 to just 127. Consequently, the infringement detection rate reduced from 16% in 2012 to 6% in 2013. Whether the decline in detections is due to improved compliance or less effective inspections has not been established.

EU member states are required to implement a penalty system in respect of infringements of the EWSR. The sanctions provided for must be effective and proportionate and should dissuade infringements. While fines are available as an enforcement measure, the coordinated report stated that Ireland, along with Greece, stands out as imposing relatively few fines compared with other countries. In contrast, the NTFSO has issued over 400 warning letters annually in respect of minor infringements of the EWSR in recent years. Warning letters are not relied on to a significant degree in the other countries that participated in the coordinated audit.

The number of prosecutions taken annually in relation to infringements of the EWSR has ranged between ten and fourteen since 2011. Of ten prosecutions taken in 2013, seven were successful with fines and costs awarded totalling €31,785. No custodial sentence has ever been imposed in Ireland in respect of infringements of the EWSR.

No attempt has been made to measure the effectiveness of the enforcement regime in Ireland. The Department should ensure that, in addition to its risk-based inspections, the NTFSO carries out sufficient random checks and uses the results of these to calculate a statistical estimate of the overall level of EWSR compliance.

Repatriation of Illegally Dumped Waste from Northern Ireland

Separately, the State is currently engaged in an exercise to repatriate a significant volume of mostly municipal waste, originating in Ireland between 2002 and 2004, from sixteen illegal waste sites in Northern Ireland. The direct costs incurred by Ireland in respect of five site clearances completed by the end of 2012 totalled just over €5.4 million.¹ To date, it is estimated that about 31% of the total waste has been repatriated. The estimated amount of waste at the eight remaining sites is 172,000 tonnes. The current plan is to progress two sites per year until all sites are completed. By this schedule, the repatriation programme will be completed in 2018.

¹ Three site clearances completed since 2012 are not included because some of the associated costs remain to be paid.

It is important that the Department ensures the cost of the waste repatriation programme is minimised. It appears that lower unit rates for waste disposal are now being availed of, following the completion of a tender process carried out in respect of landfill sites in Ireland. The Department should examine the potential for procurement initiatives to produce savings for other classes of expenditure under the programme e.g. transport of waste and disposal of leachate (liquid that drains from landfills).

The Office of Environmental Enforcement, within the Environmental Protection Agency, is continuing to examine material uncovered at the illegal dump sites with a view to identifying offenders and considering the potential for prosecutions. While cases have previously been taken relating to illegal movements of waste to Northern Ireland, there have been no prosecutions in Ireland to date in respect of the current repatriation exercise.

Report

1 Introduction

- 1.1 Waste is defined in the EU Waste Framework Directive¹ as any substance or object which the holder discards, intends to discard or is required to discard. Examples of waste include broken computers, car wrecks, sewage sludge, used plastic and empty batteries.
- 1.2 The 27 EU member states generated nearly 2.6 billion tonnes of waste in 2010.² The activities generating the highest proportion of EU waste in that year were construction (34%) and mining and quarrying (28%). Households accounted for less than 9% of waste generated.
- 1.3 Waste processing generally consists of either recovery which involves extracting useful materials or energy resources from the waste or disposal, which involves sending the waste for incineration or to landfill.
- 1.4 There are potential environmental impacts of waste processing. For example, landfill sites can lead to air, water and soil pollution. Incineration can be associated with harmful emissions.
- 1.5 EU waste management policies aim to reduce the environmental and health impacts of waste and to improve resource efficiency. The long-term goals are to reduce the amount of waste generated and, where waste is unavoidable, to achieve higher levels of recycling and to ensure safe disposal.
- 1.6 Waste management is increasingly becoming an economic issue. Whereas all waste had previously been viewed as disposable, certain types are now recognised as commodities and there is a growing trade in waste for recovery.
- **1.7** International movements of waste are commonplace. When considering whether to export waste, a business may consider a number of factors including
 - the capacity of domestic treatment facilities for certain types of waste
 - international variations in waste processing costs
 - the value of the waste as a resource
 - the strictness of the enforcement regime.

Challenges and Risks

- 1.8 The fundamental risks in relation to waste are that it will be dumped at an unlicensed site or processed in a manner harmful to human health and the environment. Where waste is moved across borders, these risks are heightened.
- 1.9 Failure to manage and control movements of waste can have economic consequences for countries. In the case of waste dumped at an inappropriate location, it may be necessary to transport the waste to a licensed facility and carry out remediation work to return the dumpsite to its former state. Over the long term, the cost of addressing adverse health and environmental effects can be very significant.

¹ Directive 2008/98/EC of the European Parliament and of the Council.

² The latest year for which Eurostat figures are available.

- 1.10 The European Environment Agency has identified a number of potential consequences of uncontrolled shipments of waste, including
 - adverse effects on the environment and on human health
 - channelling income to criminals or organised crime
 - unfair competition for law-abiding waste producers, treatment facilities and traders
 - possible loss of valuable resources.

Regulation of International Movements of Waste

- **1.11** At a global level, imports and exports of waste are regulated by the 1989 Basel Convention which has been adopted by nearly 180 countries as well as the EU.
- 1.12 The European Waste Shipment Regulation (EWSR)² transposes the Basel Convention principles into EU law. It regulates the shipment of waste within, to and from the EU area with the aim of protecting the environment both within the EU and internationally.
- 1.13 The EWSR provides that where illegal shipments of waste are discovered, the competent authorities³ of the member states in question may be liable for the costs associated with repatriation of the waste.

Waste Management in Ireland

- 1.14 The total volume of waste generated from economic activities and households in Ireland during 2010 was about 19.8 million tonnes.
- 1.15 In Ireland, the primary law governing the recycling and disposal of waste is contained in waste management legislation enacted between 1996 and 2013.
- 1.16 In the past, waste shipments exported from Ireland were controlled by local authorities (34 in total), whereas the Environmental Protection Agency had responsibility for the import and transit of waste within Ireland.
- 1.17 Following the introduction of the Waste Management (Shipments of Waste) Regulations in 2007⁵, a number of statutory bodies now have roles in relation to waste management in Ireland.
 - The Department of the Environment, Community and Local Government (the Department) has policy responsibility for waste management. The Department is the designated 'correspondent' for Ireland, under the EWSR, responsible for dealing with enquiries about the regulation and communicating with the Commission regarding its implementation.
 - Dublin City Council is the designated national competent authority, responsible for the implementation of the EWSR in Ireland. Its responsibilities include licensing waste imports and exports and operating an effective enforcement regime.
 - The National Transfrontier Shipment Office (NTFSO) was established within Dublin City Council to implement and enforce the EWSR.
 - The **National Waste Collection Permit Office** (established within Offaly County Council in 2012) processes applications for waste collection permits in Ireland. It is illegal to collect or transport waste on public roads within Ireland, for the purposes of reward, without a waste collection permit.

- Basel Convention on the
 Control of Transboundary
 Movements of Hazardous
 Wastes and their Disposal, 1989.
- 2 Regulation (EC) No. 1013/2006.
- 3 The EWSR requires each member state to designate a competent authority to be responsible for implementation of the regulation.
- 4 Waste generation statistics for 2012 are expected to be available later this year. The Waste Statistics Regulation (2150/2002/EC) requires national waste datasets to be reported biennially to Eurostat, within 18 months of the end of the reference period. The Central Statistics Office had not submitted the waste generation dataset for 2012 to Eurostat prior to the 30 June 2014 deadline.
- 5 S.I. No. 419 of 2007 gave effect to the EWSR provisions in Ireland.

- Local authorities have a role in granting and enforcing waste facility permits and certificates of registration for small waste activities carried out in the State.
- The responsibilities of the *Environmental Protection Agency* (EPA) in relation to waste management include the licensing of large-scale waste activities and waste facilities (landfills, incinerators, waste transfer stations), promoting waste prevention and minimisation projects and developing national plans to manage hazardous waste.

Waste Treatment

- 1.18 Over the last decade, Ireland has moved from a position of almost total reliance on landfill for managing waste to high levels of recovery for certain materials. However, the EPA reports a continued dependency on export for certain waste streams, including hazardous waste, and a significant proportion of recyclables.
- 1.19 In contrast to most other EU member states, waste management infrastructure in Ireland is generally owned by private operators. The role played by the State is primarily in the areas of waste management planning and environmental regulation.
- 1.20 In 1998, the Department cited reducing the reliance on landfill as the most important policy objective in the area of waste management. Another stated objective was to achieve greater economies of scale through the rationalisation and modernisation of landfill infrastructure.
- 1.21 The number of operational landfills for municipal waste² decreased from 126 to 28 between 1998 and 2010.³ The EPA estimated in 2012 that, at the existing fill rates, 15 of the 28 operational landfills would reach their approved capacity by 2015 and that national capacity would be exhausted within twelve years. There is no private landfill capacity for hazardous waste in Ireland.
- **1.22** The first private municipal waste incinerator in Ireland commenced operation in 2011 but there remains no private incineration capacity for hazardous waste.
- A landfill levy was introduced in 2002 to encourage the diversion of waste from landfill and to generate revenues to support waste reduction and recycling initiatives. Significant increases in the levy since September 2011 (from €30 to €75 per tonne) have been aimed at further encouraging alternatives to landfill.

Repatriation of Illegally Dumped Waste

- 1.24 The State is currently repatriating a significant volume of illegally dumped waste from a number of unlicensed sites in Northern Ireland. It was estimated in 2012 that the cost of this exercise could be in the order of €30 million, although the Department has indicated that it now expects the final cost to be lower than that.
- 1 *Changing Our Ways*, waste management policy statement, September 1998.
- 2 Municipal waste includes household waste as well as other waste similar in nature and composition to household waste.
- 3 *A Resource Opportunity*, waste management policy, July 2012.
- 4 Receipts from the levy are remitted to the Environment Fund which is managed and controlled by the Minister for the Environment, Community and Local Government.

Focus of Examination

- 1.25 This examination reviews the implementation and enforcement of the EWSR in Ireland and also reports on the financial consequences of waste which originated in Ireland being illegally dumped in Northern Ireland.
- 1.26 The review of the enforcement of the EWSR formed part of a coordinated audit by national audit institutions in eight EU member states. The report on the coordinated audit was published in October 2013.¹ It presented the main findings from the eight national audits, discussed the differences between countries and made a number of general recommendations aimed both at the participating countries and at other European countries.

Report Structure

- 1.27 Chapters 2 and 3 of this report deal with the administrative arrangements in Ireland in respect of waste transhipment and the enforcement regime aimed at detecting infringements and penalising offenders.
- 1.28 Chapter 4 sets out the circumstances around the discovery of waste originating from Ireland at a number of unlicensed sites in Northern Ireland. It provides an update on costs incurred and progress made in relation to repatriation of the waste and outlines the efforts being made to identify and prosecute offenders.
- **1.29** Chapter 5 sets out general conclusions and recommendations.

2 Licensing and Charging

Waste Shipment Procedures

- 2.1 The EWSR sets out procedural options for the international movement of waste. The procedure to be used for a particular shipment depends on a number of factors including the type of waste involved, the country of destination, the processing method and any relevant national policy provisions.
- **2.2** There are two basic categories of waste, for the purposes of regulation of international shipments.
 - Green-listed waste is generally considered not to represent a significant risk to the environment or human health. Examples include glass fibre waste, electronic scrap and certain types of solid plastic waste.
 - Amber-listed waste is considered to be potentially harmful to the environment and human health. Examples include sewage sludge, hydraulic fluids, unrefined calcium sulphite and wastes from the manufacture of iron and steel. Amber-listed waste is considered hazardous when it displays one or more of a list of specified properties including, inter alia, being explosive, oxidising, flammable, toxic, carcinogenic, corrosive or infectious.
- **2.3** The EWSR specifically prohibits certain types of shipment, including the export of hazardous waste to non-OECD countries, for final disposal.
- **2.4** Figure 2.1 provides an overview of the EWSR procedures that generally apply for the shipment of different types of waste.

Figure 2.1 Overview of EWSR procedures

Management procedure	Green-listed waste	Amber-listed waste
EWSR procedure	General information procedure	Notification procedure
Is consent required before shipment?	No (unless waste is for final disposal)	Yes
Documentation requirements	Annex VII document to travel with shipment	Notification and movement documents
Fee payable	Quarterly, in arrears	In advance

Source: Office of the Comptroller and Auditor General

General Information Procedure

- 2.5 The general information procedure applies to shipments of individual types of green waste for recovery either within or from the EU. There is no requirement for the waste holder to provide advance notification of such shipments to the competent authority in either the country of dispatch or the country of destination.
- 2.6 Under the general information procedure, the waste holder is required to record certain details relating to the shipment (as prescribed in Annex VII of the EWSR) and to ensure that a copy of this record accompanies the shipment. The details to be recorded include the waste producer, the party that arranged the shipment, the name of the receiving facility, the type of waste and the method of treatment.

Notification Procedure

- 2.7 The notification procedure generally applies to shipments of amber waste for recovery or disposal and shipments of green waste for disposal. It also applies to mixed shipments containing more than one type of green waste for recovery.
- 2.8 Under the notification procedure, the waste holder (the notifier¹) must obtain consent from the competent authority of dispatch prior to the shipment taking place. When it receives a notification document, the competent authority of dispatch must consult with the competent authority of destination to determine whether the proposed shipment is permitted under the EWSR and is in accordance with national policy in both countries.
- **2.9** Figure 2.2 illustrates the required steps under the notification procedure for exports of amber waste from Ireland.

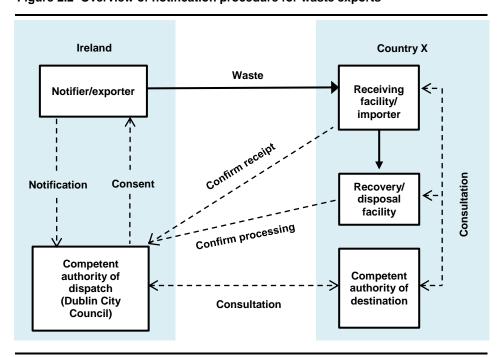


Figure 2.2 Overview of notification procedure for waste exports

Source: Office of the Comptroller and Auditor General

¹ The notifier is the party that arranges the shipment.

2.10 Following the shipment, the competent authority of dispatch must obtain two separate confirmations from the country of destination; one confirming that the waste has arrived and another confirming that it has been treated as planned.

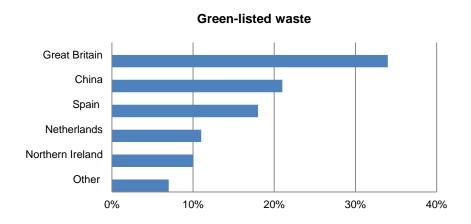
Illegal Shipments

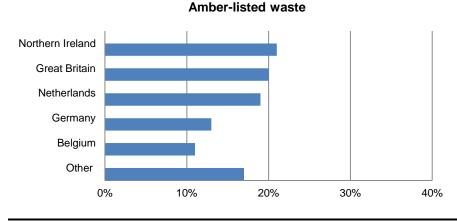
2.11 Waste shipments that do not accord with the appropriate procedure are considered illegal under the EWSR. Two thirds of all detected EWSR export violations involve exports to OECD member states. One third is to non-OECD states, with hundreds of such shipments being stopped every year.

Export of Waste from Ireland

2.12 Figure 2.3 shows the top five export destinations of amber and green waste from Ireland.

Figure 2.3 Destinations for waste exported from Ireland in 2012^a





Source: NTFSO

Note: a The latest year for which data is available.

2.13 Figure 2.4 sets out recent waste export figures for Ireland. The proportion of waste exported under the notification procedure that was sent for recovery increased from 74% in 2009 to 92% in 2013.

Figure 2.4 Exports of waste ('000 tonnes), 2009 to 2013

Year	Notification procedure: by treatment type		General information procedure	Total exports	
_	Disposal	Recovery	Sub-total		
2009	64	178	242	743	985
2010	58	224	282	739	1,021
2011	59	305	364	1,335	1,699
2012	54	307	361	1,191	1,552
2013	53	612	665	856	1,521

Source: NTFSO

2.14 The amount of waste imported into Ireland each year is relatively small (about 75,000 tonnes in 2013). The principal sources of imported waste are the UK and Northern Ireland.

Broker and Dealer Registration

- 2.15 The Waste Management (Registration of Brokers and Dealers) Regulations (S.I. No. 113 of 2008) established a registration system for waste brokers and dealers¹ in order to better facilitate controls on persons who arrange shipments of waste. While brokers and dealers arrange shipments of waste, they do not necessarily handle or transport the waste directly.
- 2.16 The 2008 Regulations require that any individual or business involved in the export of waste for recovery or disposal must register with the competent authority for the EWSR in Ireland (Dublin City Council). The registration process is administered by the NTFSO on behalf of Dublin City Council.
- 2.17 A fee of €200 applies to all applications for registration. Certificates of registration issued by the NTFSO remain valid for two years. As at February 2014, there were 360 brokers/dealers registered with the NTFSO.
- 2.18 The 2008 Regulations set out certain obligations for brokers and dealers which include
 - compiling and maintaining records relating to the waste dealt with in the course of business
 - notifying Dublin City Council if convicted of certain specified offences relating to waste shipment
 - providing information and records on the collection and movement of waste as specified by Dublin City Council.
- **2.19** Persons arranging the shipment of waste internationally are generally required to use only registered brokers or dealers.² Details of infringements detected and sanctions applied are provided in Chapter 3.

¹ Brokers arrange the recovery or disposal of waste on behalf of others. Dealers act in the role of principal for the purchase and subsequent sale of waste.

² Authorised collectors of hazardous waste need not use brokers and dealers.

Waste Movement Fees

- 2.20 The fee structure operated by the NTFSO includes an annual administration charge applicable to all waste importers and exporters as well as additional charges for each shipment, relating to the type and volume of waste shipped.
- **2.21** Figure 2.5 sets out the service charges imposed by the NTFSO for the shipment of green and amber waste.

Figure 2.5 NTFSO import and export charges

	Green-listed waste €	Amber-listed waste €
Exports		
Annual administration fee (per notifier) ^a	250	500
Tonnage fee – general	0.60	2.50
Tonnage fee – glass	0.30	_
Tonnage fee – soil	_	0.30
Bulk shipment tonnage fee (≥ 1,000 tonnes)	0.30	0.30
Imports		
Annual administration fee (per notifier)	500	500
Shipment fee	_	25

Source: NTFSO

Note: a The annual administration fee for a waste exporter/notifier shipping both green and amber waste is €600.

- 2.22 Under the notification procedure, it is necessary for the notifier to obtain consent from the NTFSO before certain types of international waste shipments (typically amber waste) can take place. The NTFSO will only process a notification application if it is accompanied by the correct fee.
- 2.23 In certain circumstances, a notifier may submit a single general notification to cover multiple planned shipments. A general notification is permitted where it is intended that each individual shipment will contain the same type of waste and will follow the same route to the same consignee and waste facility.
- **2.24** Once approved, a notification is valid for a specified period of time and for a defined number of shipments and tonnage. Most notifications are valid for one calendar year.
- **2.25** Figure 2.6 sets out the number of export notifications received by the NTFSO in each of the last five years and compares the volume of waste actually shipped to the volume indicated on notification documents.

Figure 2.6	Export notifications	received, 2009 to 2013
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Year	Number of notifications received	V	Volume of waste ('000 tonnes)		
		Notified	Shipped	Proportion shipped	
2009	581	620	242	39%	
2010	573	539	282	52%	
2011	622	636	364	57%	
2012	520	976	361	37%	
2013	597	2,012	665	33%	

Source: NTFSO

- 2.26 The volume of waste notified during 2013 was more than twice the volume for 2012. The Department stated that the rise in exports is likely to be related to increases in the landfill levy during that period as well as the removal of certain exemptions from the levy.¹
- 2.27 In cases where the amount of waste shipped is less than the notified amount, the notifier can apply to the NTFSO for a partial refund. Generally, the refund will be the fees paid for any unused tonnes, less a processing charge of €350 per notification.

Financing the EWSR Regime

- 2.28 The EWSR allows competent authorities to apply charges to waste notifiers in respect of the administrative costs of implementing the notification and supervision procedures and the costs associated with the enforcement regime.
- 2.29 Under the Waste Management Regulations, Dublin City Council has the power to impose such charges as are necessary to defray costs reasonably incurred by it in the performance of its duties as competent authority.
- 2.30 The NTFSO stated that the aim of its fee structure is to fully recoup the cost of administering and enforcing the EWSR from its customers. In addition to the fees set out in Figure 2.5, the NTFSO's income includes the proceeds of
 - enforcement fees and fines
 - repatriation fees²
 - regulation of hazardous waste movements within Ireland.³
- **2.31** Figure 2.7 sets out the income and expenditure of the NTFSO since 2008.
- 1 The landfill levy was increased from €50 to €65 per tonne in July 2012 and to €75 per tonne in July 2013
- 2 In May 2010, the NTFSO introduced a fee of €750 per shipment for the repatriation of green and amber waste from the EU, Irish and international ports.
- 3 This income relates to an additional function given to Dublin City Council with effect from January 2012. The NTFSO provides an online system to track and trace hazardous waste movements within the State.

Year	Income ^a		Expenditure	Annual surplus/ (deficit)	Environment Fund contribution	
	Gross €000	Refunds €000	Net €000	€000	€000	€000
	€000	€000	€000	€000	€000	€000
2008	2,217	(219)	1,998	(1,718)	280	_b
2009	1,505	(344)	1,161	(1,775)	(614)	560
2010	1,597	(654)	943	(1,635)	(692)	600
2011	2,178	(415)	1,763	(1,710)	53	-
2012	2,130	(300)	1,830	(1,758)	72	-
2013	2,761	(435)	2,326	(1,763)	563	-

Source: NTFSO

Notes:

- a Income for 2009 and 2010 includes fines and costs reimbursed following legal action taken.
- b In March 2008, the Department made a payment (from the Environment Fund) of €500,000 to Dublin City Council as a contribution towards the fit-out costs of the NTFSO, which had been established in July 2007. Since the receipt was lodged to the Dublin City Council capital account, it is not included as income of the NTFSO.
- **2.32** While annual expenditure by the NTFSO has remained relatively steady since 2008, the level of annual income has been more volatile.
- 2.33 There was no formal agreement in place for the NTFSO to receive ongoing funding from the Department. Notwithstanding this, the NTFSO received payments from the Environment Fund of €560,000 in December 2009 and €600,000 in September 2010.
- 2.34 It is not envisaged that any further payments to the NTFSO will be made from the Environment Fund. Under the current arrangements, Dublin City Council is to meet any funding requirement in the event of the NTFSO having an end year deficit. Conversely, any end year surplus for the NTFSO is to be remitted to Dublin City Council.
- 2.35 The NTFSO stated that some of the funding received from the Environment Fund during 2009 and 2010 was intended to assist with refund payments in cases where notified shipments were cancelled or the volume shipped was less than the notified amount. It attributed the high level of refunds to the downturn in the economy.

3 Enforcement

- 3.1 Under the EWSR, EU member states are required to implement enforcement regimes which include
 - inspections at waste facilities and of registered dealers and brokers
 - spot checks on waste shipments (to include inspection of documents, confirmation
 of identity and physical checking of waste) at any stage from the point of origin to
 the point of destination
 - cooperation with other member states in order to facilitate the prevention and detection of illegal shipments.
- 3.2 In addition, member states must specify the penalty system that will apply in respect of infringements of the EWSR. The sanctions provided for must be effective and proportionate and should dissuade infringements.
- 3.3 While the EWSR prescribes general requirements for enforcement regimes, national authorities are free to design their own policies and strategies in relation to the type and extent of enforcement action to be taken.
- 3.4 The coordinated report found wide variations in how the EWSR was being enforced in different member states.¹

Enforcement Network and Resources

- 3.5 As the competent authority for Ireland, Dublin City Council is responsible for implementing an enforcement regime and ensuring that penalties are applied to those infringing the EWSR.
- 3.6 The Council has engaged a private company, employing nine staff, to conduct inspections and carry out investigations on its behalf. The enforcement team includes an environmental manager and six enforcement officers based in the NTFSO in Dublin, and two enforcement officers based in Cork.
- 3.7 Procedures are in place to provide members of the enforcement team with training to perform their roles. Flexible working arrangements are designed to facilitate an enforcement capacity outside of standard office hours.
- 3.8 The private contractor records enforcement information on an NTFSO database. This database is not linked to other IT systems used by the NTFSO.

- **3.9** In addition, the NTFSO cooperates and carries out joint inspections with various national and international organisations.
 - In October 2009, the NTFSO agreed a memorandum of understanding with the Revenue Commissioners' Customs Service with the aim of establishing formal links between both organisations and increasing the level of control over the import and export of certain types of waste, including hazardous waste.
 - The Network for Ireland's Environmental Compliance and Enforcement (NIECE), coordinated by the EPA, aims to ensure a more effective approach to the enforcement of environmental legislation in Ireland. Participants of the network include, inter alia, local authorities, government departments, An Garda Síochána, the Northern Ireland Environment and Heritage Service, the fisheries boards and the Director of Public Prosecutions. NIECE is currently undertaking a full review of enforcement using a risk-based approach to better target sources of illegal waste movement.
 - During 2013, the NTFSO carried out 338 inspections on behalf of IMPEL, which is an informal network of European regulators concerned with the implementation and enforcement of environmental legislation. The network is a tool for sharing experience and information on the practical application of environmental legislation across Europe.
- 3.10 Ireland compares favourably to the other countries that participated in the coordinated audit in terms of the resources available for enforcing the EWSR. The coordinated report noted that Ireland is the only one of the eight participating countries where a dedicated body (the NTFSO) has been established to implement and enforce the EWSR.¹

Enforcement Strategy

- 3.11 While not specifically required under the EWSR, it would be expected that each national authority would set out its enforcement priorities in a medium to long-term strategy and would adopt a risk-based approach for inspections i.e. inspection resources are directed to where risks of infringement are greatest.
- 3.12 Dublin City Council does not have a multi-annual strategy in place for the enforcement of the EWSR. However, the NTFSO does produce annual plans setting out the level of enforcement actions planned for the coming year.

NTFSO Inspections

- 3.13 The NTFSO adopts a risk-based approach to inspections at waste facilities. The inspections can involve paperwork verification, physical examination of material being loaded for shipment and walk-though inspections of the facility itself.
- 3.14 The coordinated audit found that NTFSO inspections of imports, exports and products were carried out at ports on a random rather than risk basis. These checks principally involve paperwork verification and/or physical inspections.
- 3.15 The Department indicated that risk-based inspections are now also being carried out by the NTFSO at ports.
- **3.16** The number of inspections carried out by the enforcement team in the NTFSO is set out in Figure 3.1.

¹ Page19, report of the coordinated audit.

² Page 32, report of the coordinated audit.

Figure 3.1 NTFSO insp	ections, 20				
Type of inspection	2009	2010	2011	2012	2013
Imports	11	9	3	3	3
Exports	1,999	3,367	4,046	3,048	1,979
Products	1,264	602	550	461	426
Second-hand vehicles	972	140	42	162	130
Waste facilities/brokers and dealers	76	119	174	337	584
Road checks	73	34	48	49	54
Total	4,395	4,271	4,863	4,060	3,176

Source: NTFSO

Note: a Figures from 2010 onwards include inspections carried out on behalf of IMPEL.

3.17 The NTFSO stated that the reduction in the total number of inspections carried out during 2013 is due to its adoption of a risk-based approach to enforcement. There is increased surveillance and a greater number of inspections of waste generating sites which typically involve more documentation checks and are more time consuming.

3.18 Figure 3.2 sets out the amounts paid to the private contractor in respect of inspections carried out between 2009 and 2013.

Figure 3.2 Cost of enforcement activity, 2009 to 2013

Year	Payments €000	Number of inspections carried out	Average cost per inspection €
2009	675	4,395	154
2010	669	4,271	157
2011	668	4,863	137
2012	634	4,060	156
2013	634	3,176	199

Source: NTFSO

- **3.19** The average cost per inspection increased by nearly 28% between 2012 and 2013.
- 3.20 Of the eight countries that participated in the coordinated audit, Ireland ranked second highest in terms of the number of inspections carried out. That report noted wide variations in the technical equipment used for inspections in different countries. Ireland is one of only two countries in the group where x-ray scanners are used to inspect containers in ports.¹

Investigations

3.21 Where infringements are detected during routine inspections, or where concerns are raised by members of the public, the enforcement team may carry out more detailed investigations. In 2013, 46 such investigations were carried out.

¹ Page 37, report of the coordinated audit.

Other Checks

- 3.22 Additional checks on waste shipments are carried out by customs officers and An Garda Síochána but there are no reliable statistics on the number of such checks because many are performed as part of broader inspections or investigations and are not always recorded as waste-related.
- 3.23 The EPA, as licensing authority, also carries out inspections and audits of licenced facilities to ensure compliance with waste license conditions or in response to information received. The EPA stated that it carried out 217 inspections and audits at operational licensed waste facilities in 2013.
- 3.24 While the level of enforcement activity in Ireland compares favourably to the other countries that participated in the coordinated audit, it is difficult to conclude on the adequacy of the Irish inspection regime due to the lack of comprehensive data on all types of inspections and the compliance rates observed.

Infringements Detected

- **3.25** Following an inspection, the enforcement officer makes a recommendation to the NTFSO on what, if any, follow-up action is appropriate. The NTFSO makes the final decision on the action to be taken.
- 3.26 The NTFSO collates information on the number of infringements detected during inspections of imports and exports. However, it was unable to provide information on infringements detected during other inspections e.g. products, second-hand vehicles, broker/dealers, waste facilities or road checks.
- **3.27** Figure 3.3 sets out the number of breaches detected by the NTFSO enforcement team during inspections of imports and exports between 2009 and 2013.

Figure 3.3 Import and export infringements detected, 2009 to 2013								
	2009	2010	2011	2012	2013			
Number of inspections ^a	2,010	3,376	4,049	3,051	1,982			
Infringements detected	429	389	486	502	127			
Compliance rate	79%	88%	88%	84%	94%			

Source: NTFSO

Note: a Inspections of imports accounted for less than 1% of inspections in each year.

Sanctions

3.28 A basic principle established in the EWSR is that infringements of the regulations must be penalised. However, member states can design their own penalty systems. The enforcement instruments currently in use by member states range from warning letters to custodial sentences.

Warning Letters

- **3.29** Warning letters are generally issued in respect of minor infringements of the EWSR, where the imposition of a fine or other sanction is not deemed appropriate.¹
- 3.30 The NTFSO issued 565 warning letters in 2010. Of the other countries that participated in the coordinated audit, the Netherlands issued the next highest number of warning letters, at around 25. Five of the participating countries did not issue any warning letters in 2010.²
- 3.31 In excess of 400 warning letters have been issued by the NTFSO in each year since 2010.

Other Sanctions

Source:

NTFSO

- 3.32 In April 2012, the NTFSO implemented a new fee in respect of minor infringements of the EWSR, such as incomplete documentation. A monitoring fee of €350 was introduced in respect of the cost of investigating cases where a breach of the regulations occurred but no prosecution was taken. In 2013, a total of 50 monitoring fees were charged by the NTFSO, amounting to €17,500.
- 3.33 In cases where prosecutions are taken, the Waste Management (Shipments of Waste)
 Regulations (S.I. No. 419 of 2007) state that a person found guilty of an offence is liable
 - on summary conviction to a fine not exceeding €3,000 or imprisonment for a term not exceeding three months, or both, or
 - on conviction on indictment, to a fine not exceeding €500,000 or imprisonment for a term not exceeding three years, or both.
- 3.34 Summary details of the outcomes of prosecutions taken since 2009 are set out in Figure3.4. No custodial sentences have been imposed for breaches of the regulations.

Figure 3.4 Prosecutions, 2009 to 2013								
Enforcement area	2009	2010	2011	2012	2013			
Number of prosecutions	1	7	13	14	10			
Cases withdrawn/struck out/unsuccessful	1	1	5	6	3			
Successful prosecutions	_	6	8	8	7			
Custodial sentences	_	_	_	_	_			
Fines awarded	_	€13,500	€4,500	€15,000	€13,000			
Costs awarded	-	€18,802	€16,140	€22,949	€18,785			

1 The term 'minor infringement' is not defined in the EWSR but typically relates to an administrative violation that has not caused harm to the environment or public health and is capable of being undone.

² Page 40, report of the

coordinated audit.

3.35 While fines are available as an enforcement instrument, the coordinated report stated that Ireland, along with Greece, stands out as imposing relatively few fines compared with other countries.¹

Effectiveness of Enforcement Actions

- 3.36 The effectiveness of national and international enforcement has implications for the extent to which the EWSR can meet its primary objective of protecting the environment.
- 3.37 By definition, illegal waste shipments are difficult to identify and as a result it is difficult to estimate what proportion of the illegal waste flow is actually being intercepted and to draw conclusions about compliance and the effectiveness of enforcement activity.
- 3.38 The NTFSO stated that infringements detected during inspections are recorded by the inspector but not in an electronic format that would allow for the information to be easily reported.
- 3.39 The NTFSO measures annual enforcement performance by comparing the number of inspections actually carried out against the number planned at the start of the year. The outcome of inspections is not taken into account as part of this performance measurement.
- 3.40 The effectiveness of the enforcement regime in Ireland has not been reviewed. While the NTFSO has information on the level of enforcement activity and the number of infringements detected, information on the type and quantities of waste involved is not readily available.

4 Repatriation of Illegally Dumped Waste

- 4.1 The procedure to be followed where an illegal shipment has been discovered is set out in the EWSR. If the illegal shipment is the responsibility of the notifier/exporter, the competent authority in the country of dispatch should ensure the waste is taken back by the notifier/exporter. If the importer is responsible for the illegal shipment, the competent authority in the country of destination should ensure that the importer arranges for the waste to be processed in an environmentally sound manner.
- **4.2** If the responsible party fails to fulfil its obligations, either the competent authority of the country of dispatch or destination, as appropriate, must intervene itself.
- 4.3 Where illegal exports of Irish waste are intercepted by competent authorities in other member states, the NTFSO is notified that the waste must be repatriated to Ireland. During 2012 and 2013, a total of 17 waste shipments were repatriated to Ireland.
- 4.4 The largest repatriation project in the State relates to waste originating from Ireland that was discovered at a number of unlicensed sites in Northern Ireland. This waste had been transported prior to the introduction of the EWSR in 2006.
- 4.5 The task of excavating the sites and transporting the waste to licensed landfills in Ireland is scheduled to take several years. At a meeting of the North South Ministerial Council in October 2012, it was reported that the final cost of the repatriation programme could be in the order of €30 million. While it has not provided a revised estimate, the Department has indicated that it now expects the final cost to be lower than this.

Illegal Movement of Waste

- 4.6 The Northern Ireland Environment Agency (NIEA) has estimated that 250,000 tonnes of waste, mostly municipal waste, was illegally transported from Ireland and deposited at 17 unlicensed sites in Northern Ireland between 2002 and 2004. According to statistics published in the EPA National Waste Report 2004, this equates to approximately 3% of all municipal waste produced in Ireland during the three year period.
- 4.7 The Department has stated that the main factor influencing the illegal movement of waste from Ireland into Northern Ireland during the period in question was the significant rise in the cost of depositing waste at landfill sites in Ireland. The average landfill cost had risen from €40 per tonne in 2000 to €150 per tonne by 2004. The introduction of a landfill levy of €15 per tonne in June 2002 accounts for some of the increase.
- 4.8 The scale of the illegal transport that occurred raises questions about the effectiveness of enforcement of the Waste Shipment Regulation applicable at the time. Under the Regulation, it was permissible to transport waste between Ireland and Northern Ireland, for recovery or disposal, provided that the movements were properly authorised and controlled. In particular, prior notification of intended shipments had to be given to the competent authorities in both member states to enable them to take any necessary measures for the protection of human health and the environment or to raise objections to the shipment.

Framework Agreement

- 4.9 The European Commission initiated infraction proceedings in 2004 against both Ireland and the UK with regard to the cross border movement of waste. The action against Ireland related to the alleged illegal transportation and disposal of waste, whereas the issue for the UK concerned the illegal landfills where the waste was deposited.
- 4.10 Following initial investigations of the issues raised, a 'road map' was agreed in 2006 between the authorities in both jurisdictions to deal with the suspected illegally shipped waste and to strengthen future enforcement through enhanced cooperation. The general principles set out in the agreement included
 - full cooperation between both sides, including prompt exchange of relevant information
 - 'polluter pays' philosophy to apply where possible, with issues of legal and financial liability to be considered following the completion of investigations
 - where the issue of repatriation of waste arises, procedures set out in the EWSR and other relevant legislation governing the shipment of waste to apply
 - persons responsible for the illegal movement and disposal of waste in both jurisdictions, where identifiable, to be pursued and held accountable.
- 4.11 Having been presented with a copy of the agreement, the European Commission closed the infraction proceedings against Ireland and the UK in December 2007. On the basis of the approach set out, a framework agreement for repatriation of the illegally shipped waste was finalised between both jurisdictions in 2009.

Scope of Agreement

- 4.12 The framework agreement related in the first instance to two sites (Slattinagh, Co. Fermanagh and Trillick, Co. Tyrone) identified as priorities by the Northern Ireland authorities. The framework agreement was also to form the basis for action in respect of the other sites believed to contain waste predominantly or wholly the consequence of illegal shipment from Ireland.
- **4.13** The main provisions of the framework agreement are set out in Figure 4.1.

Figure 4.1 Terms of the Framework Agreement

Task Provisions of agreement Cost apportionment Excavation Dublin City Council (DCC) to procure Costs of excavation, removal, and removal contractor, in consultation with Northern examination and remediation initially Ireland Environment Agency (NIEA). to be apportioned at a rate of 80:20 between Ireland and Northern Examination Samples to be taken from each site to Ireland respectively. help to confirm the origin of the material. The contribution from Ireland is Sampling approach to be agreed by capped at 80% but if the proportion DCC and NIEA. of waste originating from Ireland is Remediation DCC and NIEA to agree parameters and found to be less than 80% at any arrange for work to be carried out (by site, the agreement provides that the contractor that excavated the waste, if rate of contribution can be reduced possible). accordingly. Disposal Excavated waste to be disposed of in Full cost of disposal to be met by Ireland. Ireland.

Source: Framework Agreement

Progress to Date

- 4.14 Excavation and repatriation of waste from the two sites prioritised under the framework agreement was completed in 2010. Work at an additional six sites (Ballymartin, Co. Down; Seskinore, Clogher and Omagh, Co. Tyrone; Fivemiletown and Kiladeas, Co. Fermanagh) has since been completed. When examinations were carried out at another site that had been identified by the NIEA, no illegally dumped waste originating in this State was discovered.
- **4.15** The amount of waste repatriated from the eight completed sites is approximately 78,000 tonnes 31% of the estimated total to be repatriated.
- 4.16 The estimated amount of waste at the eight remaining sites is 172,000 tonnes. The current plan is to progress two sites per year until all sites are completed. By this schedule, the repatriation programme will be completed in 2018.
- 4.17 Arrangements in respect of the work at each site are agreed in advance by the NIEA and the NTFSO. While the framework agreement assigns responsibility to Dublin City Council to arrange for removal of the waste, the practice to date has been to use hauliers already under contract with the NIEA to transport the waste to landfill sites in Ireland.
- 4.18 Disposal services at licensed landfill sites in Ireland were procured on a case by case basis for the first three sites cleared. In 2012, the NTFSO completed a tender process to establish a framework contract for landfill disposal sites. The framework contract was used for the two sites completed during 2012. In addition to the waste material, leachate¹ has to be removed, stored and tested prior to disposal in Ireland. No framework contract exists for the disposal of leachate arising at the excavation sites.
- **4.19** Figure 4.2 sets out the costs incurred in respect of the five sites completed by the end of 2012. Three sites completed since 2012 are not included because some of the associated costs remain to be paid.

Figure 4.2 Repatriation costs, first five completed sites

Site	Year of completion	Cost €000	Waste repatriated (tonnes)	Cost per tonne €
Trillick	2010	2,256	21,100	107
Slattinagh	2010	821	7,240	113
Ballymartin	2011	1,561	20,370	77
Clogher	2012	574	12,000	48
Seskinore	2012	227	3,721	61

Source: Department of the Environment, Community and Local Government

4.20 The cost per tonne at the five sites completed to date has varied considerably. The main cost driver is the cost of disposal at licensed landfills in Ireland, accounting for between 60% and 75% of the overall cost at each site. Therefore, it is important that this service is procured at a competitive rate. Waste disposal under the repatriation programme is exempt from the landfill levy.

¹ Leachate is the liquid that drains or leaches from a landfill.

4.21 Waste from the two sites prioritised under the framework agreement was disposed of at the Ballynacarrick Landfill, Co. Donegal, at a cost of €80 per tonne. Waste from the Ballymartin site was disposed of at the Whiteriver Landfill, Co. Louth at a cost of €45 per tonne. Waste disposal services for the two sites completed in 2012 were procured under the framework contract established by the NTFSO – waste from these sites was disposed of at the Scotch Corner Landfill, Co. Monaghan at a cost of €35 per tonne.

Enforcement Progress

- 4.22 The Office of Environmental Enforcement (OEE) within the EPA is tasked with examining material uncovered at each site with a view to identifying offenders and considering the potential for prosecutions. The role of the NIEA is to gather evidence and assess the case for action against landowners and others potentially involved in wrongdoing.
- **4.23** The OEE and the NIEA have agreed to work together to ensure that persons, in either jurisdiction, found to be responsible for the illegal movement or disposal of waste will be pursued and made accountable for their actions.
- **4.24** The protocol in place for securing evidence from sites provides that
 - waste material is to be examined onsite to gather only traceable evidence
 - exhibits are to be handled by the minimum possible number of officers
 - all transfers of evidence from one officer to another are to be recorded on a chain of custody form
 - statements of evidence (including all photographs taken) are to be provided by each officer at the conclusion of each dig
 - site logs and notebooks are to be retained for future reference.
- 4.25 The OEE is coordinating investigations relating to material uncovered at the sites where repatriation is complete. A total of 211 exhibits have been excavated from the first seven sites completed, with 144 of these being potentially traceable. Material from the most recently completed site (Kiladeas, Co. Fermanagh) is currently being processed.
- **4.26** For two sites, the OEE has concluded that there is no prospect of identifying the offender and will not be carrying out any further investigations. The material uncovered at the other sites is at various stages of investigation.
- 4.27 Given the seriousness of the transgressions involved and the passage of time since the movement of waste took place, it is the view of the EPA that the only realistic enforcement option is to take cases on indictment.
- 4.28 While a number of cases involving the illegal movement of waste to Northern Ireland have previously been taken over the years, there have been no prosecutions in Ireland to date in respect of this current repatriation exercise. Cases have been taken in Northern Ireland against some of the landowners involved.

Regulatory Developments

- 4.29 The Department has committed to completing a review of waste regulation and enforcement. The review will have a particular focus on dealing with serious criminal offenders and the need for a more intelligence-led and coordinated multi-agency enforcement, aimed at ensuring targeted, timely and effective enforcement outcomes.
- **4.30** The Department expects that the review will be published in the near future and that the proposals will be implemented during 2015.

5 Conclusions and Recommendations

- 5.1 According to the latest available Eurostat figures, almost 20 million tonnes of waste was generated in Ireland in 2010. A cost effective waste management system is required to ensure that waste is removed and either recycled or disposed of appropriately.
- 5.2 Waste management involves significant costs. If not well regulated, there is a risk that those costs may fall, in whole or in part, to public bodies. Social costs may also be incurred in the form of environmental damage, which in some cases may be beyond remediation.
- 5.3 The primary objective of waste management regulations is to promote prevention, minimisation and sound environmental management of waste. The EWSR regulates the shipment of waste within, to and from the EU area.

Implementation of EWSR

- 5.4 The actions taken by the authorities in Ireland to implement the provisions of the EWSR include
 - enacting appropriate national legislation
 - establishing a competent authority (Dublin City Council)
 - defining notification procedures for waste shipments
 - implementing an inspection regime
 - putting penalties and sanctions in place
 - participating in international enforcement campaigns.
- 5.5 The report of the coordinated audit on the enforcement of the EWSR stated that all eight countries have implemented the regulation and generally comply with formal requirements. Ireland compares favourably in terms of the resources available for enforcement and it is the only one of the countries examined in the audit where a dedicated body (the NTFSO) has been established to implement and enforce the EWSR.

Financing the EWSR

- 5.6 Dublin City Council has the power to impose charges on waste notifiers to defray costs incurred in the performance of its duties as competent authority for the purposes of the EWSR.
- 5.7 Since the level of income (and refunds) in any year is difficult to predict, the NTFSO fee structure makes it difficult to ensure full cost recoupment on an annual basis. Under the current arrangements, any end year deficits of the NTFSO are to be funded by Dublin City Council and any end year surpluses are to be remitted to it.
- 5.8 The NTFSO stated that it is currently recouping its costs in full.

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Enforcement Strategy

- **5.9** Dublin City Council has engaged a private contractor to carry out its enforcement functions.
- **5.10** While planned enforcement actions are set out annually, there is no medium to long-term enforcement strategy in place.

Recommendation 1

The Department should ensure that an enforcement strategy is developed to set the strategic direction for enforcement activity over a three to five year timeline.

Accounting Officer's response

Agreed. A three year enforcement strategy (commencing in January 2015) will be put in place in accordance with this recommendation. The 2014 amendment to the EWSR requires competent authorities to prepare annual inspection plans, strengthen enforcement and increase co-operation between agencies.

- 5.11 The coordinated audit noted that a risk-based approach was taken to inspections at waste facilities, whereas imports and exports were inspected on a random basis. In Ireland's case, it is important that the enforcement regime takes account of the particular risks associated with controlling movements of waste across the land border with Northern Ireland.
- 5.12 The Department stated that, since 2012, the NTFSO has prepared risk-based annual inspection plans. The plans include targeted inspections carried out jointly with the Northern Ireland Environment Agency.
- 5.13 The rate of detection of infringements during inspections of waste imports and exports reduced from 16% in 2012 to 6% in 2013. Whether the decline in detections is due to improved compliance or less effective inspections has not been established.

Sanctions

- **5.14** The EWSR requires member states to implement a penalty system featuring effective and proportionate sanctions that dissuade infringements.
- 5.15 The coordinated report noted that warning letters in respect of minor infringements of the EWSR are used much more extensively in Ireland than the other participating countries. In contrast, the number of infringements leading to fines or legal action was relatively low.

Effectiveness of Enforcement

- 5.16 No attempt has been made to measure the effectiveness of the enforcement regime in Ireland. While the NTFSO undertakes some random inspections and records some information on enforcement activity and infringements detected, the detail recorded is not sufficient to facilitate a meaningful review of the effectiveness of enforcement activity.
- **5.17** Changes over time in the level of EWSR compliance can provide an indication of the deterrent effect of enforcement measures.

Recommendation 2

The Department should ensure that, in addition to its risk-based inspections, the NTFSO carries out sufficient random checks and uses the results of these to calculate a statistical estimate of the overall level of EWSR compliance.

Accounting Officer's response

Agreed.

Repatriation of Illegally Dumped Waste

- 5.18 There remains a substantial amount of work to be completed under the programme of waste repatriation from Northern Ireland. The waste in the remaining eight sites is estimated at 172,000 tonnes. Under the existing schedule of two sites per year, the repatriation programme is not due to be complete until 2018.
- 5.19 It is important that the Department ensures the cost of the waste repatriation programme is minimised. It appears that lower unit rates for waste disposal are now being availed of, following the completion of a tender process carried out in respect of landfill sites in Ireland. No similar process has been undertaken for haulage services or the removal and disposal of leachate.

Recommendation 3

The Department should examine the potential for procurement initiatives to produce savings for other classes of expenditure under the programme e.g. transport of waste, disposal of leachate.

Accounting Officer's response

Agreed. The NTFSO has commenced the tendering procedure for the establishment of a multiparty framework agreement for the haulage of waste from Northern Ireland to licensed disposal facilities in the Republic of Ireland. The NTFSO ensures that leachate is managed and disposed of at a waste water treatment plant in Ireland in the closest proximity to the site being remediated in order to minimise transport and fuel costs. The haulage of leachate is included in the tender procedure referred to above.