

# ANNUAL ENVIRONMENTAL REPORT

## AES NAVAN WASTE TRANSFER STATION

JANUARY 2010  
THROUGH  
DECEMBER 2010

**Waste Licence**

**Registration Number:** W0131-02

**Licensee:** Advanced Environmental Solutions (AES)  
Ireland Ltd

**Location of Activity:** Proudstown Road, Navan,  
County Meath

**Attention:** Office of Environmental Enforcement  
EPA Headquarters  
P.O. Box 3000  
Johnstown Castle Estate  
Co. Wexford

**Prepared by:** Bord na Mona



## REVISION CONTROL TABLE

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Abstracts: This report presents the Annual Environmental Report for AES Navan Waste Transfer Station in Navan, Co. Meath to the Environmental Protection Agency. The report covers the annual reporting period of 2010.

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## 1.0 INTRODUCTION

The Environmental Protection Agency (EPA) issued Advanced Environmental Solutions (Ireland) Ltd, with a Waste Licence for its Waste Transfer Station at Clonmagaddan, Proudstown, Navan, Co. Meath on 3<sup>rd</sup> February 2006. The Waste Licence reference number is W0131-02.

The facility is currently licensed to a maximum of 95,000 tonnes of waste per annum (38,000 tonnes of Non-hazardous household waste, 33,000 tonnes of Commercial & Industrial waste and 23,750 tonnes of C&D waste).

In May 2007, Bord na Mona PLC acquired Advanced Environmental Solutions (AES) Ireland Ltd., one of Irelands leading waste management companies, which services 5,000 commercial customers and 60,000 domestic customers.

AES Ireland Ltd. currently operates a network of recycling & transfer facilities throughout Leinster and further afield. These facilities are located in Navan, Co. Meath, Tullamore, Co. Offaly, Portlaoise, Co. Laois, Nenagh, Co. Tipperary and Rosslare, Co. Wexford.

Bord na Mona Technical Services was retained to prepare and submit the Annual Environmental Report (AER) for the facility in compliance with Condition 11.8 of the Waste Licence. This report addresses Condition 11.8 of the Waste Licence for the facility.

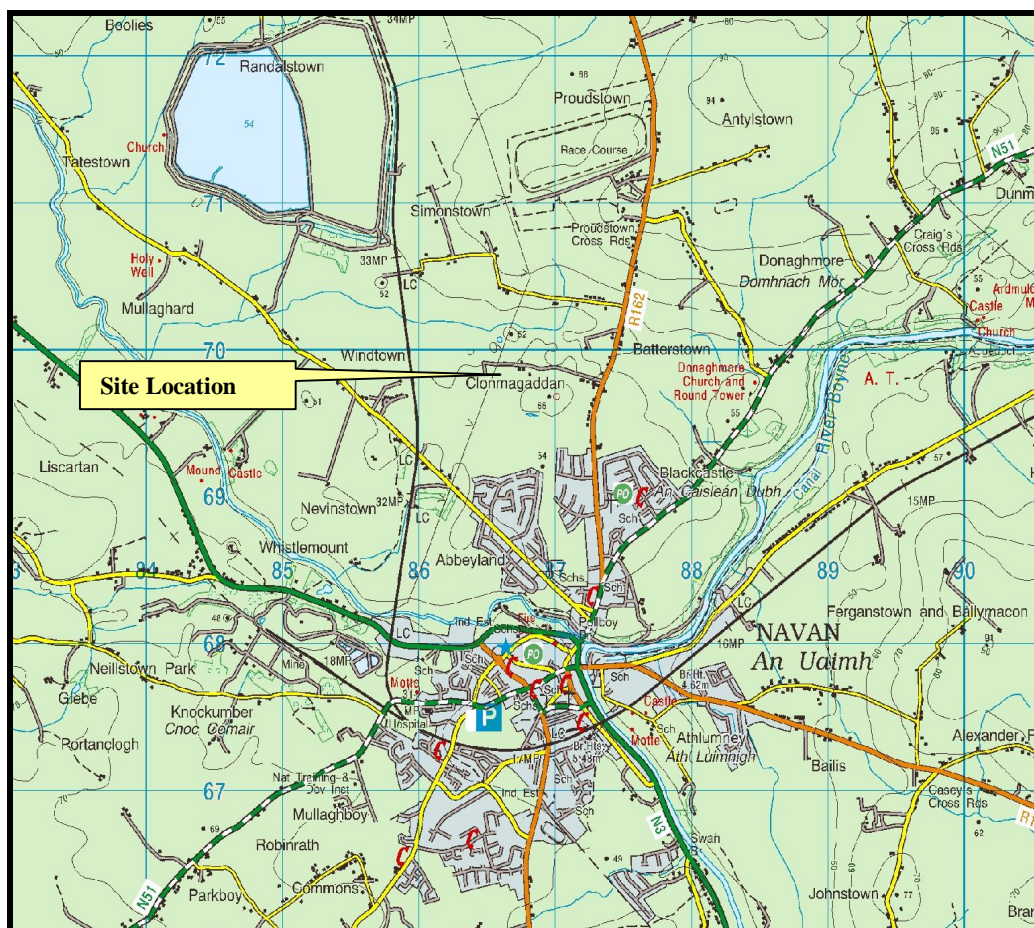
This report addresses Condition 11.8 of the waste license for the facility which states;

*“The licensee shall submit to the Agency, by the 31<sup>st</sup> March each year, an AER covering the previous calendar year. This report, which shall be to the satisfaction of the Agency, shall include as a minimum the information specified in Schedule F: Annual Environmental Report of this license and shall be prepared in accordance with any relevant guidelines issued by the Agency”.*

This report addresses the items listed in Schedule E: Annual Environmental Report of the Waste License for the facility. This AER covers the reporting period from 1st Jan. 2010 up to 31st December 2010.

## 1.1 Site Description and Activities

AES operates a Waste License (W0131-02) for its Waste Transfer Station at Proudstown Road, Navan, Co. Meath. Operations at the facility include the receipt of domestic, commercial, industrial and construction waste, which is sorted and segregated for onward recycling / recovery in accordance with the recycling potential. Waste deemed unsuitable for recycling / recovery is segregated and compacted for disposal off-site.



**Figure 1.1** Site location map of the AES facility, Navan, Co. Meath.

The site location map and monitoring location maps are included in Appendix 1.

## 1.2 Waste Handling Procedure

Normal operational hours of the site are between the hours of 08:00 to 20:00 Monday to Sunday inclusive, with empty waste collection vehicles leaving the facility from 06:00 Monday - Saturday. All waste accepted at the facility for disposal is removed from the facility within 48 hours of its arrival (during bank holidays/weekends waste is removed within 72 hours).

Current waste acceptance procedures involve the use of a computer based programme, called Integrated Waste System (IWS). The software is linked to the on-site weighbridge and is used

for recording of waste quantities accepted on-site. The vehicle registration number, customer and product is inputted into the system and from this detail, the source of waste can be obtained.

After weighing, each waste load is brought to the enclosed Recycling Plant Building where it is deposited on the floor for visual inspection to ensure that all wastes comply with the requirements of the Waste Licence, W0131-02. The Waste Segregation Manager is responsible for carrying out visual inspections and for maintaining a written record of all loads.

Written records of each inspection are recorded on the incoming waste inspection sheet at the end of each working day. Only after visual inspection can the waste be identified for disposal or recovery.

Within the Recycling Plant Building the waste is sorted according to its recycling potential and is either deemed suitable for further onwards recycling/ recovery or compacted within one of the compactors on site/ejector trailers and transported off-site for final disposal (non-recoverable waste) to an authorised landfill. The categories of waste deemed suitable for segregations and recycling is dependent on available markets for such materials. Materials commonly accepted for recycling include; steel & iron, cardboard & newsprint, timber, soil & stone (suitable for backfill material), green waste, plasterboard, plastics and glass. Household mixed recyclables are collected and accepted at the facility, where the waste is forwarded off-site for further recovery. All waste deemed unsuitable for recycling/ recovery is loaded into designated ejector trailers or is compacted within one of the two compactors on-site. All compacted waste is sealed within specialised containers and are subsequently transported for authorised disposal. All waste being transported from the facility is weighed and recorded at the weighbridge. An individual weigh docket is printed for each waste.

## 2.0 EMISSIONS FROM THE FACILITY

Emissions as per Schedule B of the Waste License, W0131-02, relating to energy and the use of the proposed bio-filters are not yet applicable. Surface-water, ground-water, dust and noise monitoring results are discussed in Section 6 of this report.

Foul water produced at the facility (leachate and wastewater) is directed into a storage tank. This tank is emptied and wastewater directed to Navan Wastewater Treatment Plant (WWTP). In accordance with the requirements of the Waste Licence, W0131-02, details of each consignment of foul water removed from the facility is maintained. The overall waste summary records for the reporting period are presented in Table 2.1.

<b>Month</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>
<b>Jan</b>	104	76	120	88	352	216	208	368
<b>Feb</b>	72	62	120	128	312	120	232	200
<b>Mar</b>	48	38	120	232	176	128	112	304
<b>Apr</b>	38	40	80	144	64	80	136	208
<b>May</b>	72	22	112	232	88	72	168	96
<b>Jun</b>	64	48	56	120	208	152	104	160
<b>Jul</b>	80	32	80	36	304	272	232	585
<b>Aug</b>	34	168	40	80	168	196	304	268
<b>Sep</b>	26	40	120	200	88	160	184	1,351
<b>Oct</b>	32	120	176	232	80	240	232	415
<b>Nov</b>	40	72	192	192	120	192	1,304	1,108
<b>Dec</b>	88	104	232	248	136	136	456	173
<b>Total</b>	<b>698</b>	<b>822</b>	<b>1,456</b>	<b>2,032</b>	<b>2,096</b>	<b>2,064</b>	<b>3,672</b>	<b>5,236</b>



### **3.0 WASTE MANAGEMENT RECORD**

The waste that arrives at the facility may be characterised as follows:

- Household Waste
- Commercial Waste
- Industrial Non-Hazardous Waste
- Construction and Demolition

These waste classification, subsequent to inspection, can be further categorised as being either suitable for recycling / recovery off-site or disposal off-site to authorised disposal facilities. Hazardous waste is not accepted at the site. Hazardous waste in the form of batteries and fluorescent tubing that are inadvertently accepted to the site are segregated into individual storage skips/areas within the plant and subsequently collected by authorised contractors for further treatment/ disposal. Any materials that are suspect in nature (i.e. hazardous are not accepted at the facility) are routed to the Waste Quarantine Area within the Recycling Plant for further examination and processing prior to removal off-site for appropriate treatment/disposal by an appropriate hazardous waste contractor.

#### **3.1 Waste Activities carried out at the Facility.**

Waste activities carried out at the facility are restricted to those outlined in *Part 1 – Activities Licensed* of the Waste License.

#### **Licensed waste disposal activities, in accordance with the Third Schedule of the Waste Management Acts 1996 to 2008.**

- |          |  |
|----------|--|
| Class 11 | Blending or mixing prior to submission of any activity referred to in a preceding paragraph of this Schedule.  |
| Class 12 | Repacking prior to submission to any activity referred to in a preceding paragraph of this Schedule.   |
| Class 13 | Storage prior to submission to any activity referred to in preceding paragraph of this Schedule, other than temporary storage, pending collection, on the premises where the waste concerned was produced. |

**Licensed waste recovery activities, in accordance with the Fourth Schedule of the Waste Management Acts 1996 to 2008.**

- Class 2      Recycling or reclamation of organic substances which are not used as solvents (including composting and other organic processes) (P).
- Class 3      Recycling or reclamation of metals or metal compounds:
- Class 4      Recycling or reclamation of other inorganic materials:
- Class 11     Use of waste obtained from any activity referred to in a preceding paragraph of this Schedule:
- Class 12     Exchange of waste for submission to any activity referred to in a preceding paragraph of this Schedule.
- Class 13     Storage of waste intended for submission to any activity referred to in a preceding paragraph of this Schedule, other than temporary storage, pending collection, on the premises where such waste is produced:

**3.2 Waste Quantities and Composition.**

The waste summary recorded for this reporting period is recorded and presented in Table 3.1. & 3.2 (waste recovered / disposed from the facility).

<b>Table 3.1: Incoming Waste to Midlands Waste Transfer Station</b>	
<b>EWC Code</b>	<b>Incoming Waste (Tonnes)</b>
020399 – Coffey Sacks	5.94
150101 BC – Baled Cardboard	2,260.04
150101 BP – Baled Paper	1.74
150101 C – loose Cardboard	2,999.84
150101 MX –Mixed Paper & Cardboard	40.58
150101 P - Loose Paper	6.52
150102 BPL – Baled Plastic Packaging	30.06
150102 PL – Plastic Packaging	8.94
150107 – Glass Bottles & Jars	301.66
160103 - Tyres	1.4
200134 - Batteries	0.12
170107 – Rubble	511.92
170202 - Glass	43.24
170411 - Cable	3.08
170504 – Soil & Stone	291.7
170802 – Plaster Board	85.36
170904 – Mixed C&D	6,942.85
180104 – Non Haz. Healthcare Waste	327.3
191212 – Mixed Waste from MRF	1,816.28
200101 NP	45.22
200102 – glass, sheetin	4.12
200108 – Biodegradable Canteen Waste	1,177.07
200108 D	3,491.78
200136	36.94
200138 - Wood	1,487.68
200139 – Hard Plastic	474.82
200140 - Metals	645.98
200199 P	80.1
200201	235.24
200301 C – Commercial Mixed Waste	24,260.25
200301 D – Domestic Waste	15,799.08
200301 K – Kerbside Blue Bin Contents	5,003.50
200303 – Street Cleaning Residues	1,234.32
<b>Grand Total</b>	<b>69,807.63</b>

Table 3.2 Outgoing Waste Recovered / Disposed from Midlands Waste Transfer Station

EWC Code	Outgoing Waste Vol. (tonne)	Destination Name	Destination Address	License No.
<b>150101BC</b>	292.92	Failand Paper services Ltd.	11 Triangle South, Clifton, Bristol UK BS8 1EY	
	291.9	Irish Packaging Recycling	Ballymount Road, Walkinstown, Dublin 12	WPR 021/02
	3461.3	(MLM) ACM Europe (UK)	Adamstown Hse, Towers Buisness Pk. Wilmslow Rd., Didsbury, Manchester, UK. M20 2YY	
<b>150101BP</b>	109.2	Ashley Paper Sales Ltd	Underwood House, Mill Lane, Ashley, WA15 ORD	
<b>150101C</b>	267.06	AES Tullamore	Cappincur Industrial Estate, Daingean Road, Tullamore, Co. Offaly	W0104-02
	170.3	Irish Packaging Recycling	Ballymount Road, Walkinstown, Dublin 12	WPR 021/02
<b>150102BP</b>	41.2	Asia Global Trade Ltd	7 Westbourne Gargens, Suite 2, London W2 5NR-UK	
	19.34	AWS Eco Plastics Ltd.	Unit 2, Britannia Business Pk., Point Pleasant Ind. Est., Wallsend, Tyne & Wear, 6HA, EA	WML/73274
	29.38	Greenway Ireland Ltd	11 Porthill Road, Mountmorris, BT60 2TY	WML 03/02
	23.84	Leinster Environmental	Clermont Business Park, Haggardstown, Dundalk, Co. Louth	WP2008/06
<b>150102PL</b>	189.58	AES Tullamore	Cappincur Industrial Estate, Daingean Road, Tullamore, Co. Offaly	W0104-02
	16.14	Irish Packaging Recycling	Ballymount Road, Walkinstown, Dublin 12	WPR 021/02
<b>150107</b>	248.48	Glassdon Rec.	52 Creagh Rd., Toomebridge, Co. Antrim	
<b>160103</b>	29.38	Crumb Rubber	Mooretown, Dromiskin, Dundalk, Co. Louth	DC/08/1136/
	6.16	Wilton Waste Recycling	Kiffa, Ballyjamesduff, Co. Cavan	W 06/03
<b>160505</b>	2.52	Apex Fire	Moneyhall, Cavan, Co. Clare	WP06-31
	1.8	Commons Fuels	Commons Lane, Navan, Co. Meath	
	4.66	Flogas	Dublin Road, Drogheda, Co. Louth	
<b>160601</b>	0.46	Enva	Clonmainham Ind. Est. Portlaoise, Co. Laois	181-4
	5.96	Wilton Waste Recycling	Kiffa, Ballyjamesduff, Co. Cavan	W 06/03
<b>170107</b>	480.36	Doherty Quarries & Waste Mgt Facility	Cruicetown, Slane, Co. Meath	WMP 2007/39
	3572.8	Drehid WMF	Killinagh Upper, Carbury, Co. Kildare	W0201-03
<b>170201</b>	248.88	AES Portlaoise	Kyletalesha, Portlaoise, Co. Laois	W0194-02
	711.9	Conroy Recycling	Sonna, Mullingar, Co. Westmeath	
	2182.12	Wilton Waste Recycling	Kiffa, Ballyjamesduff, Co. Cavan	W 06/03

<b>Table 3.2 Contd. Outgoing Waste Recovered / Disposed from Midlands Waste Transfer Station</b>				
<b>EWC Code</b>	<b>Outgoing Waste</b>	<b>Destination Name</b>	<b>Destination Address</b>	<b>License No.</b>
170202	16.6	Murphy Environmental	Hollywood Great, Nags Head, The Naul, Co. Dublin	W0129-2
170402	3.66	Wilton Waste Recycling	Kiffa, Ballyjamesduff, Co. Cavan	W 06/03
170411	11.26	Wilton Waste Recycling	Kiffa, Ballyjamesduff, Co. Cavan	W 06/03
170504	28.48	Doherty Quarries & Waste Mgt Facility	Cruicetown, Slane, Co. Meath	WMP 2007/39
	688.6	Harristown	Harristown, Navan, Co. Meath	10/0004/01
170802	58.24	Panda Waste Services	Rathdrinagh, Beauparc, Navan, Co. Meath	W0140/03
	11	Recycleworld (Sandyhills)	N0.6 Mulberry Crescent, Castlenock, Dublin 15	WCP112
170904	23.12	AES Portlaoise	Kyletalesha, Portlaoise, Co. Laois	W0194-02
	11.28	Wilton Waste Recycling	Kiffa, Ballyjamesduff, Co. Cavan	W 06/03
190503	5679.26	Drehid WMF	Killinagh Upper, Carbury, Co. Kildare	W0201-03
191209	17805.48	Drehid WMF	Killinagh Upper, Carbury, Co. Kildare	W0201-03
191212	5746.78	Drehid WMF	Killinagh Upper, Carbury, Co. Kildare	W0201-03
	19438.58	Knockharley Landfill	Knockharley, Kentstown, Co. Meath	W0146-1
200136	36.16	KMK Metals.	Cappincur Ind. Est., Daingean Rd., Tullamore, Co. Offaly	W0113-03
200139	30.7	Leinster Environmental	Clermont Business Park, Haggardstown, Dundalk, Co. Louth	WP2008/06
200140	455.3	A1 Metal Recycling	Acragar, Mountmellic, Co. Laois	WP08/601/01
	429.9	Clearway	41 Dobbin Rd., Portadown, Co. Armagh BT62 4EY	LN/09/29
	505.96	Multimetals	The Marrough, Wicklow Town, Co. Wicklow	09/0014/01
	2.86	Wilton Waste Recycling	Kiffa, Ballyjamesduff, Co. Cavan	W 06/03
200201	107.88	BNM Kilberry	Kilberry, Co. Kildare	W0198-01
200301C	332	AES Portlaoise	Kyletalesha, Portlaoise, Co. Laois	W0194-02
	38.28	Wilton Waste Recycling	Kiffa, Ballyjamesduff, Co. Cavan	W 06/03
200301K	556.7	AES Tullamore.	Cappincur Industrial Estate, Daingean Road, Tullamore, Co. Offaly	W0104-02
	32.56	Thornton Waste Disposal	Killeen Rd. Ballyfermot, Dublin 10	W0044-02
<b>PALLETS</b>	35.54	Paddy Daly	Kilmainham, Kells, Co. Meath	
<b>Grand Total</b>	<b>69,493.82</b>			

#### **4.0 RESOURCE AND ENERGY CONSUMPTION**

##### **4.1 Resource Consumption Summary**

Resources consumed at the Midland Waste Transfer Station are recorded. During the recording period water usage on-site has not been recorded (mains, not metered) therefore, calculation of water usage is not possible at present.

Road Diesel Consumption was 766,000 Litres and Green Diesel Consumption was 155,541 Litres. The Kerosene usage for the site during 2010 was 4,650 Litres.

The total electrical consumption at the site was 237,000 kWh during the reporting period. During the same period foul water produced at the facility (leachate and wastewater) is directed into a storage tank. This tank is emptied and wastewater directed to Navan WWTP. A total of 5,236 m<sup>3</sup> was directed to Navan WWTP.

##### **4.3 Raw Materials Consumption & Waste Energy.**

The site has initiated an internal waste awareness campaign. AES have proactively installed recycling bins at every site and dedicated desk trays to collect office paper for recycling to improve the efficiency of the use of raw materials in processes and the reduction in waste generated on-site.

## 5.0 ENVIRONMENTAL OBJECTIVES AND TARGETS

### 5.1 Progress against Targets for 2010

Table 5.1 Progress against Objectives & Targets for 2010					
Ref.	Objective	Target	Timescale	Response	Details
1	To increase the area of hard-standing	Increase the area of hardstanding in the yard to assist vehicular parking	Dec-10	MD	This has been postponed until details of site remediation have been confirmed
2	Diversion of biodegradable commercial waste from landfill	Encourage commercial customers to avail of the brown bin collection to increase diversion of biodegradable commercial waste from landfill	Dec-10	MD	Ongoing. This coincided with the introduction of the Food Waste Regulations in July 2010. All commercial customers are now required to either avail of a brown bin collection or treat food waste on-site.
3	Environmental Monitoring	As per Waste Licence: Should any limits be exceeded, corrective actions to be implemented	Dec-10	MD/LC	Ongoing
4	Installation of upgraded dust suppression system	Install upgraded Dust Suppression System within Waste Transfer Building	Dec-10	MD	Dust Curtains have been replaced and front of Waste Transfer Building has been closed off to reduce escape of dust.
5	Upkeep of Environmental Management System	Accreditation of EMS to ISO 14001	Dec-10	MD/LC	Ongoing. AES has received group ISO 14001 Certification. AES Navan EMS is currently being updated in line with the standard and will be uploaded to Viewwise Document Management System.
6	Environmental Training & Awareness	Review all Environmental Training Requirements	Nov-10	MD/LC	Ongoing as part of review of update of EMS.

## 5.2 Schedule of Objectives and Targets for 2011.

Ref.	Objective	Target	Timescale	Respons.	Status
1	Maximise Recovery of Recyclables	Household glass bin being rolled out Feb 2011	Feb 2011	MD	Ongoing
		Household brown bin being rolled out July 2011	Jul 2011	MD	Ongoing
2	Diversion of biodegradable waste from landfill	Household brown bin being rolled out July 2011	Jul 2011	MD	Ongoing
		The quantity of BMW sent to Landfill will be calculated on a quarterly basis to ensure that Diversion Targets are met.	Dec 2011	MD	Ongoing
3	Environmental Monitoring	As per Waste Licence: Should any limits be exceeded, corrective actions to be implemented.	Dec 2011	MD/IH/LC	Ongoing
4	Efficiency of Fuel Consumption	Streamline Routes. Computer programme was acquired for AES Group to manage collection route to ensure maximum efficiency of labour and raw materials	Dec 2011	Logistics Manager	Trials done in 2010. Streamlining has started & will be reviewed continuously
		Drivers to complete EcoDrive Training	Dec 2011	IH	Ongoing
		Continued use of Dipetane Fuel Additive to improve fuel economy, reduce emissions, extend oil life and reduce engine wear.	Dec 2011	IH	Ongoing
5	Upkeep of Environmental Management System	Ongoing review of procedures, objectives & targets, records, training and aspects register.	Dec 2011	Enviro Team	Ongoing
6	Vehicle Maintenance Programme to be reviewed	Vehicle Maintenance Contractor to be hired for AES Group to provide a more reliable and traceable service	Jun 2011	Group	Ongoing

A report on the progress against the proposed Objectives and Targets for 2011 will be presented in the AER in 2011.



## 6.0 SUMMARY OF ENVIRONMENTAL MONITORING

Environmental monitoring at the facility is carried out in accordance with Condition 6 and Schedule C of the Waste License, W0131-02. The following sections 6.1 to 6.3 present the results of monitoring for the year 2010.

The environmental media monitored and the frequencies of monitoring at the facility are as follows;

- |                          |                      |
|--------------------------|----------------------|
| 1) Noise                 | Annually             |
| 2) Dust Deposition       | Three times per year |
| 3) Storm Water           | Weekly & Quarterly   |
| 4) Emissions to Sewer    | Quarterly            |
| 5) Bioaerosol Monitoring | Annually             |
| 6) Groundwater           | Bi-annually          |

Sections 6.0 present a summary of the Environmental Management Programme. These sections review the reports on the previous year (2010) and present proposals for the current year (2011).

### 6.1 Noise Monitoring Report Summary

In compliance with the requirements of the Waste License, W0131-02, noise monitoring at the Midlands Waste Transfer Station was undertaken. Monitoring was carried out on the 5<sup>th</sup> August 2010 (Report Ref. ECS3702).

Noise levels were monitored at 5 monitoring locations, four boundary locations and one noise sensitive location (NSL). The noise monitoring locations are presented in Table 6.1. and monitoring maps attached in Appendix 1.

<b>Map Reference No.</b>	<b>Location Type</b>	<b>Location</b>
N1	Boundary	North East corner of site, directly beside the dust gauge.
N2	Boundary	North West corner of site, directly beside the dust gauge.
N3	Boundary	South West corner of site,.
N4	Boundary	South East corner of site.
N5	Noise Sensitive Location	North East of site (GAA grounds)
N6	Noise Sensitive Location	South of Site (Housing Est.)

<b>Table 6.2 Noise Monitoring Results</b>						
<b>Noise Results 5<sup>th</sup> August 2010</b>						
Location	Duration (mins)	Time	LAeq dB	LA10 dB	LA90 dB	LAmx dB
N1	30	14:41	54	58	48	71
N2	30	15:26	<b>56</b>	58	46	82
N3	30	15:57	<b>57</b>	62	37	79
N4	30	16:28	<b>65</b>	67	59	79
N5 (NSL)	30	12:56	42	44	36	61
N6 (NSL)	30	17:00	54	54	44	80

Note 1: Results highlighted bold represent an exceedence of Waste Licence limits.

Elevated noise levels were noted at three of the four boundary locations (N2, N3 and N4) during the 2010 noise monitoring survey. The main source of noise recorded at boundary locations N1 and N2 were, for the most part, due to off-site activities and trucks on the main access road to the AES Ltd. facility and neighbouring industrial facilities. The highest Sound Pressure Level (SPL) was recorded at N4 (65 dBA) and was primarily due to the processing of C&D waste nearby. Tonal noise was detected at locations N1 and N4. Tonal noise at N4 may be attributed to the continuous movement of a conveyor belt through the monitoring period.

The main source of noise at N3 originated from the movement of mobile plant machinery within the AES site, including occasional reversing alarms and loading/unloading of waste trucks.

The dominant source of noise detected at the NSL's was passing traffic (cars, vans, jeeps and lorries). The LAeq recorded (42/54 dB) did not exceed the EPA guideline limit. No tonal noise was detected at these monitoring locations.

## **6.2 Ambient monitoring Report Summary**

In compliance with the requirements of the Waste License, W0131-02, dust monitoring at the Midlands Waste transfer Station was undertaken. Monitoring was carried out three times during the reporting period.

There are three dust monitoring locations on site, detailed in Table 6.3 and attached in Appendix 1 (map of monitoring locations).

Sample Name	Grid Co-ordinates	Location
D1	286877E, 269773N	<i>Back of site (Southeast)</i>
D2	286777E, 269892N	<i>Front of Site, near workshop (Adjacent to road) (Northwest)</i>
D3	286814E, 269889N	<i>Front of Site, at weigh- bridge (Adjacent to road) (North)</i>
D4	286882E, 269871N	<i>Located in Car Park (Northeast)</i>

Three dust sample jars were installed for a 31 day period; 25<sup>th</sup> May. – 25<sup>th</sup> Jun (Round 1), for a 29 day period 5<sup>th</sup> Aug – 3<sup>rd</sup> Sept (Round 2) and finally for a 29 day period 7<sup>th</sup> Oct – 5<sup>th</sup> Nov 2010 (Round 3). The results for the monitoring are presented in Table 6.4 below.

Report Ref.		ECS3647	ECS3673	ECS3749
		Round 1	Round 2	Round 3
Monitoring Location	Depositional Dust Limit	Deposition Rate 25 <sup>th</sup> May-25 <sup>th</sup> Jun	Deposition Rate 5 <sup>th</sup> Aug-3 <sup>rd</sup> Sep	Deposition Rate 7 <sup>th</sup> Oct-5 <sup>th</sup> Nov
(mg/m <sup>2</sup> /day)				
D1	350	<b>1331</b>	<b>659</b>	116
D2	350	163	<b>671</b>	<b>1985</b>
D3	350	<b>1070</b>	154	<b>714</b>
D4	350	<b>434</b>	202	192

Note 1: Results highlighted in bold represent exceedance of license limits.

As can be seen in Table 6.4, there were exceedances noted for each depositional dust monitoring event.

D1 – It was noted within reports that these exceedances were due to the presence of organic matter and green algae. Bird droppings were also noted within the Aug/Sept. sample jar. Although dead insects and organic material are removed by laboratory staff prior to analysis, it is not possible to remove finer particles of associated decaying organic matter which become dissolved in water (rainfall) within the sample jars.

D2 – This sample jar is exposed from passing traffic entering/exiting the Kilsaran quarry. The results of directional dust monitoring confirm that the highest results were received in the north (towards quarry) facing dust jar. It is also worth noting that this monitoring

location is situated in the middle of a mature, dense, evergreen hedgerow. Therefore the sample jar is subject to dust from these trees and associated insects and wildlife.

D3 – These exceedences were attributed to passing traffic on the access road to the AES and Kilsaran Quarry sites. The results of directional dust monitoring confirm that the highest results were received in the north (towards quarry) facing dust jar.

D4 – Exceedence noted during the May/June monitoring event. This exceedence was attributed to the warm dry weather experienced during monitoring combined with passing traffic on the adjacent road to Proudstown industrial estate and vehicles moving within the facility car-park. It is worth noting that this location is not subject to dust created from waste recycling activities due to screening.

### 6.3 SURFACE-WATER / STORM-WATER MONITORING REPORT SUMMARY.

In accordance with the requirements of Waste Licence, W0131- 02, the facility is required to conduct monitoring of Storm Water and Emissions to Sewer from the facility on a quarterly basis.

Emission limits for trade effluent and storm water are not specified in the Waste Licence. It should also be noted that this effluent is sent by tanker to the local authority WWTP.

Monitoring Location	Description
GWE-2 (Storm Water)	NW corner of site
GWE-3 (Storm Water)	East of site
Emissions to Sewer	Trade effluent storage tank beside fuel tank.

A map detailing the monitoring locations is attached in Appendix 1.

The results of monitoring emissions to sewer are presented in Table 6.6, while the results for storm water monitoring is presented in Table 6.7.

<b>Table 6.6 Emissions to Sewer Monitoring Results.</b>				
<b>Report Ref.</b>	<b>ECS3536</b>	<b>ECS3647</b>	<b>ECS3673</b>	<b>ECS3749</b>
<b>Parameter</b>	<b>Sewer Sample Quarter 1</b>	<b>Sewer Sample Quarter 2</b>	<b>Sewer Sample Quarter 3</b>	<b>Sewer Sample Quarter 4</b>
pH (pH units)	5.4	5.8	6.3	5.1
TOC (mg/l)	1322	3400	1210	1719
BOD (mg/l)	2138	4950	1213	3550
COD (mg/l)	3935	9615	3750	4645
TSS (mg/l)	394	990	338	318
Sulphate (mg/l)	289.98	338.67	261.33	475.49
Copper (mg/l)*	47	93	57	52
Zinc (mg/l)	865	2953	705	1302
OFG (mg/l)	16	2	11	9
**DRO (mg/l)	2233	3087	8870	2591
**Mineral Oil (mg/l)	<10	<10	*	<10
MBAS (mg/l)	0.2	<0.05	0.53	1.30

\* The concentration of mineral oil was not determinable due to sample matrix interference.

\*\* Sub-Contracted Test

<b>Table 6.7 Storm-water monitoring results</b>				
<b>Report Ref.</b>	<b>ECS3536</b>	<b>ECS3647</b>	<b>ECS3673</b>	<b>ECS3749</b>
	<b>Quarter 1</b>	<b>Quarter 2</b>	<b>Quarter 3</b>	<b>Quarter 4</b>
<b>Parameter</b>	<b>GWE-2</b>	<b>GWE-2</b>	<b>GWE-2</b>	<b>GWE-2</b>
pH (pH units)	7.5	8.3	8.4	*
Conductivity (µs/cm)	263	341	495	*
BOD (mg/l)	<2	<2	<2	*
COD (mg/l)	<10	<10	<10	*
TSS (mg/l)	5	<5	<5	*
Total N (mg/l)	3	3	2.4	*
Ammonia (mg/l)	0.02	0.12	0.11	*

\*Results for GWE-2 are not available as no sample was collected due to minimal rain fall during monitoring

\*Results for GWE-3 are not available as no sample was collected due to minimal rain fall during monitoring

#### 6.4 BIO-AEROSOL MONITORING RESULTS SUMMARY

Bio-aerosol monitoring was carried out at the facility as per the conditions of the Waste Licence, W0131-02 on the 5th August 2010.

The bio-aerosol sampling was undertaken at three locations in the vicinity of the facility, detailed in Table 6.8. These locations were selected following a review of the prescribed sampling locations in the UK Composting Association's – *Standardises Protocol for the Sampling and Enumeration of Airborne Microorganisms at Composting Facilities, 1999*.

Table 6.8 Bio-aerosol Monitoring Locations

<b>TABLE 6.8: LOCATION OF BIOAEROSOL SAMPLING POSITIONS</b>		
<b>Sampling Station</b>	<b>Identity</b>	<b>Boundary Location</b>
Location 1	SR - A/B	<i>Sensitive Receptor</i> Housing estate south east of site.
Location 2	UW - A/B	<i>Upwind boundary</i> 30 m north west of the AES Boundary site
Location 3	DW - A/B	<i>Downwind location</i> (South of GAA Club House to NE of Site)

The summary results of bio-aerosol monitoring are presented in Table 6.9 & Table 6.10.

<b>Table 6.9 Results of Total Bacterial Monitoring (Report Ref ECS3702)</b>			
<b>Sampling Location</b>	<b>Time</b>	<b>Total No. of Colonies</b>	<b>Concentration cfu/m<sup>3</sup></b>
UW-A	12:10 – 12:35	156	220.5
UW-B	14:55 – 15:20	53	74.9
	<b>Average</b>	<b>104.5</b>	<b>147.7</b>
SR-A	14:02 – 14:27	86	121.6
SR-B	16:17 – 16:42	370	523
	<b>Average</b>	<b>228</b>	<b>322.3</b>
DW-A	13:00 – 13:25	81	114.5
DW-B	15:38 – 16:03	110	115.5
	<b>Average</b>	<b>95.5</b>	<b>115</b>

<b>Table 6.10 Results of Aspergillus Monitoring (Report Ref ECS3702)</b>			
<b>Sampling Location</b>	<b>Time</b>	<b>Total No. of Colonies</b>	<b>Concentration cfu/m<sup>3</sup></b>
UW-A	12:10 – 12:35	0	0
UW-B	14:55 – 15:20	0	0
	<b>Average</b>	<b>0</b>	<b>0</b>
SR-A	14:02 – 14:27	0	0
SR-B	16:17 – 16:42	1	1.4
	<b>Average</b>	<b>1</b>	<b>1.4</b>
DW-A	13:00 – 13:25	0	0
DW-B	15:38 – 16:03	0	0
	<b>Average</b>	<b>0</b>	<b>0</b>

Results of bioaerosols indicated that bacteria levels were present at the downwind (115cfu/m<sup>3</sup>), Sensitive Receptor (322.3 cfu/m<sup>3</sup>) and upwind (147.7 cfu/m<sup>3</sup>) locations for *Total Bacteria*.

*Aspergillus fumigatus* was not detected at the upwind and downwind locations but at the sensitive receptor sample location (1.4 cfu/m<sup>3</sup>) during the monitoring event.

As the upwind location displays higher Bi-aerosols than the downwind location (147.7→115 cfu/m<sup>3</sup>), it is reasonable to suggest that activity at the AES facility is not responsible for the higher levels of Bi-aerosol concentration detected at the Sensitive Receptor (322.3 cfu/m<sup>3</sup>).

## **6.5 GROUND WATER MONITORING RESULTS SUMMARY**

In accordance with the requirements of the company's Waste Licence, W0131- 02, AES are required to conduct monitoring of the Groundwater underlying the Navan facility on a biannual basis.

During the monitoring period monitoring point GW-1 (tap located in the workshop), which was supplied by water from the Kilsaran well, was connected to the town mains as a means of water supply to the site. As there were no access to groundwater's on the AES site, a grab sample was extracted from a well via a tap (Kilsaran well) located in the neighbouring industrial facility. This would represent the quality of the groundwater's underlying the AES Navan facility.

A second sample from the county council water supply (GW-1) located in the garage within the AES facility was also extracted for comparison reasons as requested by AES personnel. The monitoring locations sampled are presented in Table 6.11.

TABLE 6.11: LOCATION OF GROUND WATER SAMPLING WELL	
Sample Point	Location
GW-1 (Groundwater)	(Kilsaran well) Tap on left hand wall of workshop in Kilsaran facility

Groundwater monitoring was undertaken in January and July 2010 and the results are presented in Table 6.12.

Table 6.12 Groundwater Monitoring Results			
Parameter	Round 1	Round 2	Guideline Threshold Values <sup>Note 1</sup>
	GW-1 Report Ref. ECS3536	GW-2 Report Ref. ECS3673	
pH (pH units)	7.7	7.7	6.5-9.5
Conductivity @ 25°C (µS/cm)	843	860	800-1875
COD (mg/l)	<10	<10	-
Chloride (mg/l)	29.62	30.17	24-187.5
Fluoride (mg/l)	<0.10	0.17	1.0 <sup>Note 2</sup>
Ammonia-N (mg/l)	<0.02	<0.02	0.05-0.136
Total Nitrogen (mg/l)	<1.00	<1.00	-
Nitrate as N(mg/l)	0.11	0.11	8.47
Total Coliforms (MPN/100ml)	17	22	-
Faecal Coliforms (MPN/100ml)	17	0	-
VOC's USEPA 524.2 (µg/l)	<10	<10	-

**Note 1 :** GTV = Groundwater Threshold Values refers to "European Communities Environmental Objectives (Groundwater) Regulations, 2010 (S.I. No. 9 of 2010)". "Threshold Values" have been established for pollutants that are causing a risk to groundwater bodies. Exceedance of a relevant threshold value at a representative monitoring point triggers further investigation to confirm whether the criteria for poor groundwater chemical status are being met.

**Note 2:** Guide Values refers to EPA Guideline Values for the Protection of Groundwater in Ireland, IGV = Interim Guideline Value. Note these standards are presented for guideline purposes only, therefore, due care should be exercised in cross-referencing these standards with the groundwater results obtained.

The results of the bi-annual groundwater monitoring events show that all parameters tested were within their respective IGV/GTV's. There was no volatile organic compounds (USEPA 524.2) detected.



## 6.6 Tank and Pipeline Testing & Inspection Reports

Condition 6.7 of the Waste License states;

*“The integrity and water tightness of all underground pipes and tanks and their resistance to penetration by water or other materials carried or stored therein shall be tested and demonstrated by the licensee. The testing shall be carried out by the licensee at least once every three years thereafter and reported to the Agency on each occasion. A written record of all integrity tests and any maintenance or remedial work arising from them shall be maintained by the licensee”*

Integrity Testing of the following bunds was carried out in February/April 2009 and found to be compliant.

1. Diesel Tank Bund
2. Diesel Filling Station Bund
3. Detergent Bund
4. Hydraulic Oil Storage Tank Bund – Garage Area
5. Oil Storage Tank Bund (Green) – Garage Area
6. Oil Storage Tank Bund (Blue) – Garage Area

The bund integrity test is due to be carried out in the 2012 reporting period.

## 6.7 Environmental Management Programme

The Environmental Management Programme (EMP) form part of the objectives and Targets for the facility, presented in Tables 5.1 & 5.2. Specifically it is proposed for the coming year:

- Household glass bin being rolled out Feb 2011.
- Household brown bin being rolled out July 2011
- The quantity of BMW sent to Landfill will be calculated on a quarterly basis to ensure that Diversion Targets are met.

## 7.0 SITE DEVELOPMENT & INFRASTRUCTURAL WORK

### 7.1 Current Infrastructure in-place

The facility is currently licensed to accept a maximum of 95,000 tonnes of waste per annum (38,000 tonnes of Household waste, 33,250 tonnes of Commercial and Industrial waste and 23,750 tonnes of Construction and Demolition waste).

In compliance with Condition 3.19.3 of the Waste Licence, W0131-02 the facility has calculated the duty capacity and the standby capacity of the plant. This information is summarised in Table 7.1. The current waste handling and processing equipment is capable of handling 1752 tonnes/day and 2568 tonnes/day respectively.

<b>Equipment</b>	<b>Standby</b>	<b>Max. Standby Capacity</b>
X2 Industrial compactors	1 x standby compactor (can be used to compact newsprint and/or non rec. waste)	22 tonnes per hour each <b>528 tonnes/ day</b>
X2 Tromelling line belt	Use of compactors on-site	20 tonnes per hour each <b>480 tonnes/ day</b>
X1 Baler	Use of compactors on-site	10 tonnes per hour <b>120 tonnes/ day</b>
X1 Bobcat	There is 1 Volvo Bobcat on-site	20 tonnes per hour <b>240 tonnes/ day</b>
X3 Hitachi & 1 grab	Grab lifts & Bobcats, Samsung onsite can be used	20 tonnes per hour each <b>720 tonnes/ day</b>
X1 Forklift	Bobcats on-site can be utilised	20 tonnes per hour <b>240 tonnes/ day</b>
Samsung grab	Bobcats, Hitachi/ Grabs can be utilised	30 tonnes per hour <b>360 tonnes/ day</b>
Conveyor Belt	Floor manual sorting areas & bobcats	10 tonnes per hour <b>120 tonnes/ day</b>
Volvo & Cat loading shovel	Grabs on-site can be utilised	80 tonnes per day each <b>24 tonnes/ day</b>
X2 Shredders	Compactors on-site can be utilised	50 tonnes per hour each <b>1200 tonnes/ day</b>
Blender Unit for vertical composting	Use of ejector trailers	10 tonnes per hour <b>120 tonnes/ day</b>
Vertical Composting unit	Use of compactor & ejector trailer on-site	80 tonnes/ week (4 chambers each handling 20 tonnes for a period of 7 days)

## **7.2 Site Development Works during 2010**

Midland Waste was not in a position to increase the area of hard-standing during 2010 as planned, because a decision on-site remediation work is pending from the Agency. Dust Curtains have been replaced and front of Waste Transfer Building has been closed off to reduce escape of dust.

Further details on site development works undertaken during 2010 is presented in Table 5.1: Progress against Targets for 2010.

## **7.3 Proposed Development Works for 2011**

Proposed development works for 2011 include increase the area of hard-standing in the yard to assist vehicular parking, pending a decision on site remediation from the Agency  
As yet there are no further development works proposed for 2011 at the AES Navan facility.

**8.0 ENVIRONMENTAL LIABILITIES (FINANCIAL PROVISIONS)**

The environmental liabilities are those considered to be restricted to the confines of the facility, therefore, any costs incurred in addressing same will be limited to removal and safe disposal of waste remaining on-site following an emergency event (e.g. fire or spillage) or the decommissioning and closure of the site. Such environmental liabilities cover should account for the cost of the clean up and removal of the maximum amount of waste that may be stored on site at any given time.

AES and Bord na Mona (parent company) have arranged insurance to cover the liability arising from damage to property and injury to parties as a result of sudden and unforeseen environmental impairment. AES have insurance cover for ‘*Business Interruption*’ and have adequate reserves for the cost of removing the maximum amount of waste that may be stored on-site at any given time and to ensure that said material is transported to an authorised and capable facility.

In the unlikely event of full decommissioning, financial reserves are available to allow a formal surrender of the licence ensuring that the inherent environmental safeguard associated with this regulatory process is activated.

## **9.0 INCIDENTS AND COMPLAINTS**

### **9.1 Complaints Summary**

All environmental incidents and complaints are recorded at the facility. During the 2010 reporting period, one complaint was received by the site from neighbouring facility, Kilsaran Concrete in relation to odour. Upon further investigation by AES staff, this odour was not evident. It was agreed that Kilsaran Concrete would contact Mark Duffy (Site Manager) should the issue arise again.

### **9.2 Reported Incidents Summary**

The facility had six incidents during the reporting period (see Appendix III);

1. Dust emissions recorded from the facility during the period 25<sup>th</sup> May - 25<sup>th</sup> June 2010 at locations D1, D3 & D4. These were reported to the Agency. As the exceedences were primarily attributed to contamination of the dust jars and from the passing of traffic on the adjacent country road, no corrective action was deemed necessary.
2. Exceedence in noise emissions within facility boundaries (N2, N3&N4) on 5<sup>th</sup> August 2010. The main sources of noise, within the facility, originated from trucks loading and unloading waste bins, machinery operating in the AES yard and recycling sheds and the intermittent beeping of reversing machinery. No tonal noise was detected from the boundary monitoring locations. No corrective action was deemed necessary.
3. Dust emissions recorded from the facility during the period 5<sup>th</sup> August – 3<sup>rd</sup> September 2010 at locations D1 & D2. These were reported to the Agency. As the exceedences were primarily attributed to contamination of the dust jars and from the passing of traffic on the adjacent country road, no corrective action was deemed necessary.
4. Diesel spill at site on 3<sup>rd</sup> September 2010 due to uncareful operative. This was contained and cleaned up. No corrective action was deemed necessary.
5. Hydraulic oil spill off-site 14<sup>th</sup> October 2010 due to burst hydraulic hosing. The oil was cleaned up using oil-dry and spill kits. The damaged hydraulic hosing was replaced with new hosing. No further correction action was deemed necessary.
6. Dust emissions recorded from the facility during the period 7<sup>th</sup> October – 5<sup>th</sup> November 2010 at locations D2 & D3. These were reported to the Agency. As the exceedences were primarily attributed to contamination of the dust jars and from the passing of traffic on the adjacent country road, no corrective action was deemed necessary.

### 9.3 Accident Prevention and Emergency Response

Condition 9.1 of the Waste Licence states:

*‘The licensee shall..... ensure that a documented Accident Prevention Procedure is in place which will address the hazards on-site, particularly in relation to the prevention of accidents with a possible impact on the environment. This procedure shall be reviewed annually and updated as necessary’.*

Condition 9.2 of the Waste Licence states:

*‘The licensee shall... ensure that a documented Emergency Response Procedure for the facility, which shall address any emergency situation which may originate on-site. This Procedure shall include provision for minimising the effects of any emergency on the environment. This procedure shall be reviewed annually and updated as necessary’.*

The accident prevention and emergency response has been prepared for the following:

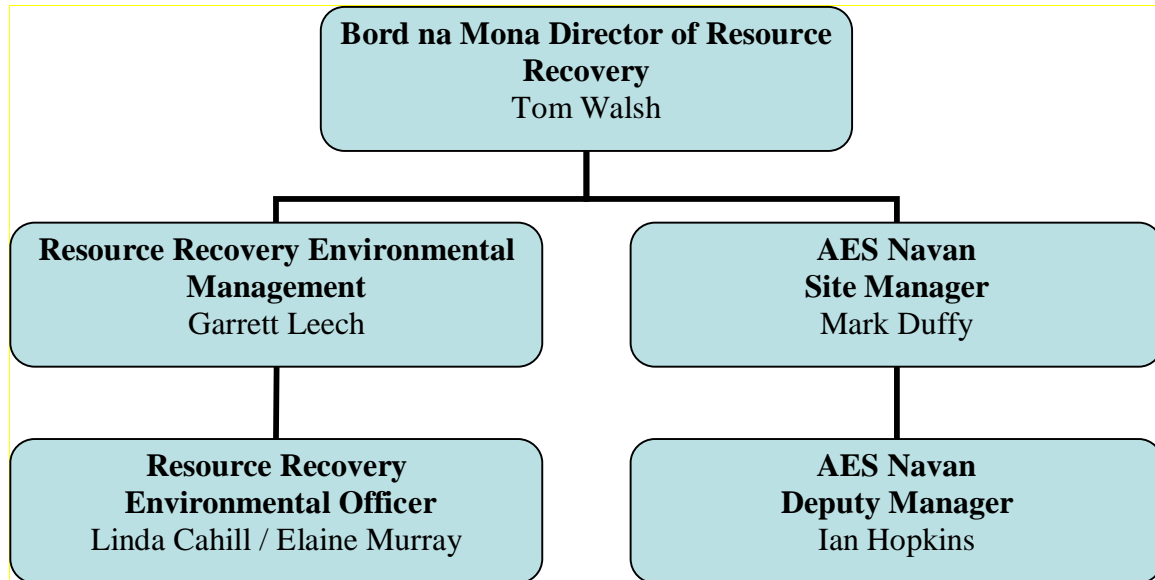
- EP-ERP-01\_General Emergency Preparedness & Response.doc
- EP-ERP-02\_Spill Clean Up Procedure.doc
- EP-ERP-03\_Fire Explosion Procedure.doc
- EP-ERP-04\_Malicious Damage Procedure.doc
- EP-ERP-05\_Unforeseen Emergencies & Fugitive Emissions.doc

These documents are attached in Appendix 2.

**10.0 FACILITY MANAGEMENT**

**10.1 Managing Staffing Structure**

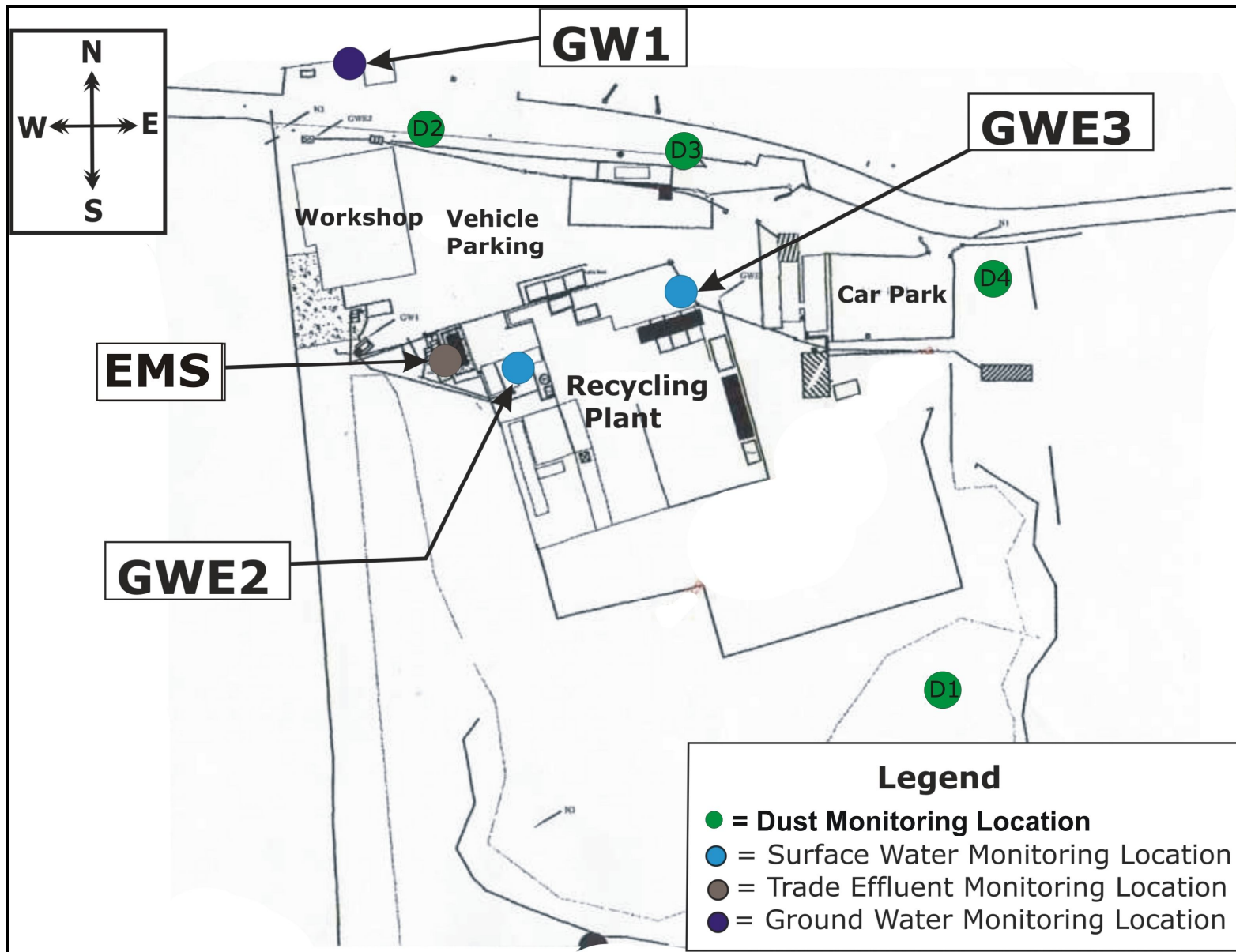
The management and staffing structure for the facility is presented in Figure 10.1



## **APPENDIX 1**


### **Map of Monitoring Locations**





## APPENDIX 2

### Accident Prevention & Emergency Response

<b>Emergency Response Plan</b>	 <p><b>AES</b> ADVANCED ENVIRONMENTAL SOLUTIONS IRELAND</p> <p><b>AES Navan</b> Emergency Response Plan</p>	<b>Document: EP 5.0-ERP-01</b>
Document Approved by:		Revision: 0
Site Manager		Issue Date: 01/09/10 Page: Page 1 of 3
<b>Title General Emergency Preparedness &amp; Response</b>		


**Purpose:** To identify the potential for, and to respond to, accidents and emergency situations, and to prevent and mitigate the environmental impacts that may be associated with them.

**Scope:** The Scope of this procedure is the application of the Environmental Emergency Plan

**References:** [EP 5.0 Emergency Preparedness and Response](#)  
[EPL 5.1 Emergency Contact List](#)  
[EP 6.0 Environmental Incident Investigation and Reporting](#)  
[EP 7.0 Non Conformance Procedure](#)  
[EP 8.0 Corrective and Preventive Action Procedure](#)  
[Emergency Plan](#)  
 Safety Statement  
 Material Safety Data Sheets

**Incident Contact List:**

Emergency Contact List for AES Navan			
Service / Agency	Address	Telephone Numbers	Fax / e-mail
EPA Regional Inspectorate	McCumiskey House, Richview, Clonskeagh Road, Dublin 14.	01-268 0100 1890 335599	01-268 0199 info@epa.ie
Meath County Council	County Hall, Navan, Co. Meath.	046-9097000	046-9097001 info@meathcoco.ie
Eastern Regional Fisheries Board	15a Main Street, Blackrock, Co. Dublin	01-2787022	01-2787025 info@erfb.ie

<b>Emergency Response Plan</b>		<b>Document:</b> EP 05-ERP-02
Document Approved by:	 <p><b>AES</b>  <small>AGRICULTURAL ENVIRONMENTAL SERVICES</small></p> <p><b>AES Navan</b>  Emergency Response Plan</p>	Revision: 0
_____		Issue Date: 01/09/10
Site Manager		Page: Page 1 of 4
<b>Title Spill Clean up procedure</b>		

**Purpose:** This procedure details the steps to be taken when dealing with a spillage of a hazardous substance on site. It is required in order to:

- Protect Employees
- Protect the Environment
- Prevent Fugitive Emissions

**Scope:** This procedure applies to AES Navan.

**Procedure:**

**Note:** This procedure should be followed for all small, large and massive spills, which may occur.


***Definitions:***

Small Spill: Less than 5 litres

Large Spill: Greater than 5 litres and less than 250 litres.

Massive Spill: Greater than 250 litres

1. Hazardous materials shall be handled (loaded, unloaded and moved) by a competent person using the correct equipment and appropriate protective clothing. Appropriate precautions should be taken at all times to minimise the risk of accidental spillage.
  2. In the event of a spillage occurring, the Site Manager or the Deputy Site Manager shall initially investigate the following issues:
    - How long it has been since the incident occurred.
    - Consult the relevant data sheets (Material Safety Data Sheets or otherwise) for the method of spill containment and fire control of the affected material.
    - Contact the relevant emergency response number (local fire service, police, hospital and Environmental Protection Agency telephone numbers which are detailed on the Emergency Contact List.
-

<b>Emergency Response Plan</b>		<b>Document:</b> EP 5.0-ERP-03
Document Approved by:	 <p style="text-align: center;"><b>AES</b> ADVANCED ENVIRONMENTAL SOLUTIONS IRELAND</p> <p style="text-align: center;"><b>AES Navan</b> Emergency Response Plan</p>	Revision: 0
_____		Issue Date: 01/09/10
Site Manager		Page: Page 1 of 2
<b>Title Fire / Explosion Procedure</b>		

**Purpose:** A procedure to deal with fire/explosion emergencies is required for the following reasons:


- To protect Employees.
- To protect the Environment.
- To prevent fugitive emissions.

**Scope:** This procedure applies to AES Navan.

**Procedure:**

1. Employees shall only attempt to fight a fire if safe to do so. If an employee feels that they cannot tackle a fire safely and effectively, **EVACUATION OF ALL PERSONNEL IS THE PRIMARY PRIORITY.**
2. The Site Manager or Deputy Site Manager shall evacuate the area in a calm, efficient manner. All staff and contractors shall be instructed to walk briskly to the designated evacuation point.
3. In the event of a fire/explosion occurring, the Site Manager shall complete a roll call to account for all employees and contractors that may be present on-site.
4. The Site Manager shall identify the location of the fire/explosion risk through dialogue with the individual who discovered the fire and shall take one of the following actions:
5. Determine whether the fire can be **SAFELY** isolated utilising the available fire fighting equipment.
6. If the fire is not controlled with the fire fighting equipment available, the local fire brigade shall be notified immediately. Local fire, police and hospital telephone numbers are detailed on the Emergency Contact List. These details are displayed within the Main Site Office and the Weighbridge Office. The Site Manager or any other designated person from the Emergency Response Team should;
  - a. Dial 112 for emergency services
  - b. Request emergency service
  - c. Give details of type of emergency and phone number in case call is inadvertently disconnected
  - d. Provide information requested by call recipient




<b>Emergency Response Plan</b>		<b>Document:</b> EP 5.0-ERP-04
Document Approved by:	 <p><b>AES</b> ADVANCED ENVIRONMENTAL SOLUTIONS IRELAND</p> <p><b>AES Navan</b> Emergency Response Plan</p>	<b>Revision:</b> 0
Site Manager		<b>Issue Date:</b> 01/09/10
		<b>Page:</b> Page 1 of 1
<b>Title Malicious Damage Procedure</b>		

**Purpose:** This procedure is required in order to monitor and prevent malicious damage.

**Scope:** This procedure applies to AES Navan.

**Procedure:**

1. Where any occurrence of malicious damage is noted or where persons are observed causing malicious damage, the Site Manager shall be informed as soon as is practical.
2. Where malicious damage results in a significant environmental impact, or a potentially significant environmental impact, the Site Manager shall be advised who then undertakes to minimise and repair the damage caused.
3. Persons observed causing malicious damage shall be subjected to internal disciplinary action. The Site Manager, will report external persons to the Gardai.
4. Following an emergency, the Site Manager, or other designated responsible person shall record details of the incident as per EP 6.0 Incident Investigation and Reporting.

<b>Emergency Response Plan</b>		<b>Document:</b> EP 5.0-ERP-05
Document Approved by:	 <p style="text-align: center;"><b>AES</b> ADVANCED ENVIRONMENTAL SOLUTIONS IRELAND</p> <p style="text-align: center;"><b>AES Navan</b> Emergency response Plan</p>	Revision: 0
_____		Issue Date: 01/09/10
Site Manager		Page: Page 1 of 2
<b>Title Unforeseen Emergencies and Fugitive emissions</b>		

**Purpose:** The purpose of this procedure is to outline the procedure to be adhered to in the event of an unforeseen emergency.

**Scope:** This procedure applies to the AES Navan.

**Procedure:**

1. Following the occurrence of an incident requiring emergency action, the observant shall contact the Site Manager or in his absence most senior representative of management on-site.
  2. Access situation and severity. Request emergency services where necessary. If calling for the emergency services, local Fire, police and hospital telephone numbers are detailed on the Emergency Contact List displayed within the Main Site Office and the Weighbridge Office.
    - a. Dial 112 for emergency services
    - b. Request emergency service
    - c. Give details of type of emergency and phone number in case call is inadvertently disconnected
    - d. Provide information requested by call recipient
    - e. Determine estimated time of arrival to site and communicate this information to the relevant member of ERT.
    - f. Hang up only when told to do so by call recipient
    - g. Fill out details required by emergency contact log as soon as it safe to do so.
  3. Should the incident be determined to be capable of being addressed in-house under the guidance of the most senior representative of management on-site, the Environmental Emergency Response Team shall be mobilised paying due regard to the appropriate emergency response procedure (EP 05-ERP-1-5).
  4. In the event the situation involves a Man Down, do not move the casualty until First Aid or Emergency Services give instruction.
  5. Once ERT arrive at the incident, all contractors and visitors must be directed to the assembly point.
-

APPENDIX 3

Summary of Emissions and Waste Management  
(PRTR)



Sheet : Facility ID Activities

AER Returns Workbook

30/3/2011 9:14



| PRTR# : W0131 | Facility Name : Midland Waste Disposal Company Limited |  
 Filename : W0131\_2010(1).xls | Return Year : 2010 |

31/03/2011 12:08

Guidance to completing the PRTR workbook

### AER Returns Workbook

Version 1.1.11

REFERENCE YEAR 2010

#### 1. FACILITY IDENTIFICATION

Parent Company Name	Midland Waste Disposal Company Limited
Facility Name	Midland Waste Disposal Company Limited
PRTR Identification Number	W0131
Licence Number	W0131-02

Waste or IPPC Classes of Activity

No.	class name
4.4	Recycling or reclamation of other inorganic materials.
3.11	Blending or mixture prior to submission to any activity referred to in a preceding paragraph of this Schedule.
3.12	Repackaging prior to submission to any activity referred to in a preceding paragraph of this Schedule.
3.13	Storage prior to submission to any activity referred to in a preceding paragraph of this Schedule, other than temporary storage, pending collection, on the premises where the waste concerned is produced.
4.11	Use of waste obtained from any activity referred to in a preceding paragraph of this Schedule.
4.12	Exchange of waste for submission to any activity referred to in a preceding paragraph of this Schedule.
4.13	Storage of waste intended for submission to any activity referred to in a preceding paragraph of this Schedule, other than temporary storage, pending collection, on the premises where such waste is produced.
4.2	Recycling or reclamation of organic substances which are not used as solvents (including composting and other biological transformation processes).
4.3	Recycling or reclamation of metals and metal compounds.

Address 1	Clonmagaddan
Address 2	Proudstown
Address 3	Navan
Address 4	Co. Meath
Country	Ireland
Coordinates of Location	-6.88714 53.6705
River Basin District	IEEA
NACE Code	3832
Main Economic Activity	Recovery of sorted materials
AER Returns Contact Name	Linda Cahill
AER Returns Contact Email Address	lcahill@aesirl.ie
AER Returns Contact Position	Environmental Officer
AER Returns Contact Telephone Number	045 439478
AER Returns Contact Mobile Phone Number	087-7697465
AER Returns Contact Fax Number	045-981621
Production Volume	0.0
Production Volume Units	
Number of Installations	0
Number of Operating Hours in Year	0
Number of Employees	0
User Feedback/Comments	
Web Address	

#### 2. PRTR CLASS ACTIVITIES

Activity Number	Activity Name
50.1	General
5(c)	Installations for the disposal of non-hazardous waste
50.1	General

#### 3. SOLVENTS REGULATIONS (S.I. No. 543 of 2002)

Is it applicable?	No
Have you been granted an exemption?	No
If applicable which activity class applies (as per Schedule 2 of the regulations)?	
Is the reduction scheme compliance route being used?	

| PRTR# : W0131 | Facility Name : Midland Waste Disposal Company Limited | Filename : W0131\_2010(1).xls | Return Year : 2010 |

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Sheet 1 Treatment Transfers of Waste

AER Returns Workbook

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Transfer Destination	European Waste Code	Quantity (Tonnes per Year)	Description of Waste	Waste Treatment (EPA/EN 12542)	Method Used		Location of Treatment	Facility Name and Location (Name No. and Address of Facility)	Name and Location (Name No. and Address of Facility)	Actual Address of Facility (Name No. and Address of Facility)
					Method Used	Method Used				
Within the Country	17 01 07	3072.9	medium of concrete, bricks, tiles and	D1		Washed	David Waste Management Facility, W0194-03	Kilnagly Upper Carbury Co. Wick, Ireland	Kilnagly Upper Carbury Co. Wick, Ireland	Kilnagly Upper Carbury Co. Wick, Ireland
Within the Country	17 02 01	711.9	wood	R13		Washed	Conroy Recycling Ltd., Co. Wick, Ireland	Wick, Ireland	Wick, Ireland	Wick, Ireland
Within the Country	17 02 01	2182.12	wood	R13		Washed	Conroy Recycling Ltd., Co. Wick, Ireland	Wick, Ireland	Wick, Ireland	Wick, Ireland
Within the Country	17 02 02	18.6	glass	R13		Washed	Murphy, Co. Wick, Ireland	Holywood Great Nags Head Wick, Ireland	Holywood Great Nags Head Wick, Ireland	Holywood Great Nags Head Wick, Ireland
Within the Country	17 04 02	3.68	aluminium	R13		Washed	Wilson Waste, Co. Wick, Ireland	Kilnagly Upper Carbury Co. Wick, Ireland	Kilnagly Upper Carbury Co. Wick, Ireland	Kilnagly Upper Carbury Co. Wick, Ireland
Within the Country	17 04 11	11.26	cellulose other than those mentioned in 17 04	R13		Washed	Wilson Waste, Co. Wick, Ireland	Kilnagly Upper Carbury Co. Wick, Ireland	Kilnagly Upper Carbury Co. Wick, Ireland	Kilnagly Upper Carbury Co. Wick, Ireland
Within the Country	17 05 04	28.48	soil and stones other than those mentioned in 17 05 03	D1		Washed	David Waste Management Facility, W0194-03	Wick, Ireland	Wick, Ireland	Wick, Ireland
Within the Country	17 05 04	688.8	gypsum-based construction materials other than those mentioned in 17 05 01	D1		Washed	David Waste Management Facility, W0194-03	Wick, Ireland	Wick, Ireland	Wick, Ireland
Within the Country	17 08 02	58.24	gypsum-based construction materials other than those mentioned in 17 08 01	R13		Washed	David Waste Management Facility, W0194-03	Wick, Ireland	Wick, Ireland	Wick, Ireland
Within the Country	17 08 02	11.9	gypsum-based construction materials other than those mentioned in 17 08 01	R13		Washed	David Waste Management Facility, W0194-03	Wick, Ireland	Wick, Ireland	Wick, Ireland
Within the Country	17 09 04	23.12	mixed construction and demolition wastes other than those mentioned in 17 09 01, 17 09 02 and 17 09 03	R13		Washed	AES Portlaoise, W0194-02	Kilnagly Upper Carbury Co. Wick, Ireland	Kilnagly Upper Carbury Co. Wick, Ireland	Kilnagly Upper Carbury Co. Wick, Ireland
Within the Country	17 09 04	5679.26	off-specification compost	D1		Washed	David Waste Management Facility, W0201-03	Kilnagly Upper Carbury Co. Wick, Ireland	Kilnagly Upper Carbury Co. Wick, Ireland	Kilnagly Upper Carbury Co. Wick, Ireland
Within the Country	19 12 09	17850.48	minerals (for example sand, stones) other wastes (including residues of mechanical treatment of materials) from mechanical treatment of wastes other than those mentioned in 19 12	D1		Washed	David Waste Management Facility, W0201-03	Kilnagly Upper Carbury Co. Wick, Ireland	Kilnagly Upper Carbury Co. Wick, Ireland	Kilnagly Upper Carbury Co. Wick, Ireland
Within the Country	19 12 12	9748.79	11 other wastes (including residues of mechanical treatment of materials) from mechanical treatment of wastes other than those mentioned in 19 12	D1		Washed	David Waste Management Facility, W0201-03	Kilnagly Upper Carbury Co. Wick, Ireland	Kilnagly Upper Carbury Co. Wick, Ireland	Kilnagly Upper Carbury Co. Wick, Ireland
Within the Country	19 12 12	19458.58	11 other wastes (including residues of mechanical treatment of materials) from mechanical treatment of wastes other than those mentioned in 19 12	D1		Washed	David Waste Management Facility, W0201-03	Kilnagly Upper Carbury Co. Wick, Ireland	Kilnagly Upper Carbury Co. Wick, Ireland	Kilnagly Upper Carbury Co. Wick, Ireland
Within the Country	20 01 36	36.16	discarded electrical and electronic equipment other than those mentioned in 20 01 30	R13		Washed	Knockshanny Landfill, W0146-01	Knockshanny Wick, Ireland	Knockshanny Wick, Ireland	Knockshanny Wick, Ireland
Within the Country	20 01 39	30.7	plastics	R13		Washed	Environmental, W0200-06	Capinure and Est. Changane Co. Wick, Ireland	Capinure and Est. Changane Co. Wick, Ireland	Capinure and Est. Changane Co. Wick, Ireland
Within the Country	20 01 40	455.3	metals	R13		Washed	Environmental, W0200-06	Capinure and Est. Changane Co. Wick, Ireland	Capinure and Est. Changane Co. Wick, Ireland	Capinure and Est. Changane Co. Wick, Ireland
To Other Countries	20 01 40	429.9	metals	R13		Washed	Cherway, L0929	Cherway Wick, Ireland	Cherway Wick, Ireland	Cherway Wick, Ireland
Within the Country	20 01 40	505.96	metals	R13		Washed	Multimetals, 000014001	Town Co. Wick, Ireland	Town Co. Wick, Ireland	Town Co. Wick, Ireland
Within the Country	20 01 40	2.86	metals	R13		Washed	Bord na Mona, Co. Wick, Ireland	Bord na Mona Wick, Ireland	Bord na Mona Wick, Ireland	Bord na Mona Wick, Ireland
Within the Country	20 02 01	107.88	biodegradable waste	D1		Washed	Kilnagly Upper Carbury Co. Wick, Ireland	Kilnagly Upper Carbury Co. Wick, Ireland	Kilnagly Upper Carbury Co. Wick, Ireland	Kilnagly Upper Carbury Co. Wick, Ireland
Within the Country	20 03 01	332.0	mixed municipal waste	R13		Washed	AES Portlaoise, W0194-02	Laois, Ireland	Laois, Ireland	Laois, Ireland
Within the Country	20 03 01	38.28	mixed municipal waste	R13		Washed	Wilson Waste, Co. Wick, Ireland	Wick, Ireland	Wick, Ireland	Wick, Ireland
Within the Country	20 03 01	558.7	mixed municipal waste	R13		Washed	AES Tullamore, W0104-02	Capinure and Est. Changane Co. Wick, Ireland	Capinure and Est. Changane Co. Wick, Ireland	Capinure and Est. Changane Co. Wick, Ireland

