Cover Page

Signed Declaration

Waste License Registration Number:	W0131-01
Licensee:	Advanced Environmental Solutions (AES) (Ireland) Limited TA Midlands Waste Disposal Ltd.
Reporting year:	2012

I Declare that;

"All the data and information presented in this report has been checked and certified as being accurate. The quality of the information is assured to meet licence requirements"

Signature

Environmental Officer

Annual Environmental Report

AES Navan (Midlands Waste Disposal Ltd)
Waste Transfer Station

January - December 2012

Waste Licence Registration Number: W0131-01

Licensee: Advanced Environmental Solutions (AES) (Ireland) Limited
TA Midlands Waste Disposal Ltd.

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

Attention: Office of Environmental Enforcement
EPA regional Inspectorate,
McClumiskey House
Richview,
Clonskeagh,
Dublin 14.

Prepared by: ANUA Environmental

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REVISION CONTROL TABLE

User is Responsible for Checking the Revision Status of This Document.

Rev. Nr.	Description of Changes	Prepared by:	Checked by:	Approved by:	Date:
0	Issue to Client	RC	PC	CG	

Client: Bord na Móna.

Keywords: Waste Transfer Station, Annual Environmental Report (AER), waste recovery and disposal, environmental monitoring.

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 2012.

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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 3rd 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).

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.

ANUA Environmental was commissioned 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 31st 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 January 2012 up to 31st December 2012.

1.1 Site Description

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.

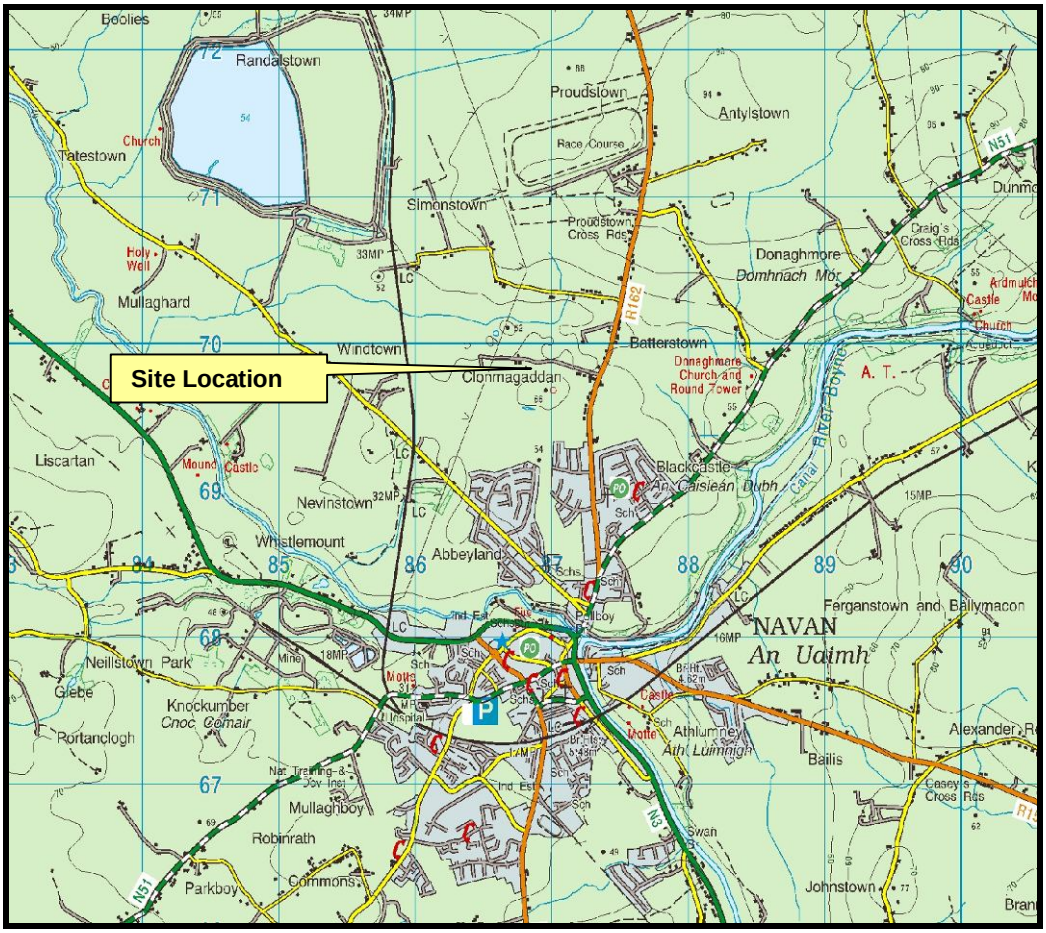


Figure 1-1: Site Location map of the AES Facility, Navan, Co. Meath

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 Saturday 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 Waste Processing 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 Waste Processing 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 recovery 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 processing and/or 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 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.

2.1 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

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:

2.2 Waste Quantities and Composition

The incoming and outgoing waste volumes to Nenagh Waste Transfer Station are presented in Table 2.1 & 2.2.

Table 2-1: Incoming Waste to AES Navan in 2012

EWC Code	Waste Description	Incoming Waste (Tonnes)
20 03 01	Mixed municipal Waste (Domestic residual waste)	16,795.20
20 03 01	Mixed Municipal Waste (Domestic Mixed dry recyclables)	3,344.68
20 03 07	Bulky Waste (Domestic)	1,724.58
20 01 08	Biodegradable canteen and kitchen waste	707.14
15 01 07	Glass packaging	160.54
Total Household Waste		**22,732.14**
04 02 22	Wastes from processed textile fibres *(wastes from the textile industry)*	23.58
15 01 01	Paper and cardboard packaging	2,047.76
15 01 02	Plastic packaging	110.78
15 01 03	Wooden packaging	275.20
15 01 05	Composite packaging	2.50
15 01 07	Glass Packaging	298.22
16 01 03	End-of-Life Tyres	0.46
16 05 05	Gases in pressure containers other than those mentioned in 16 05 04*	0.14
16 06 01	Lead Batteries*	0.12
18 01 04	Wastes whose collected and disposal is not subject to special requirements in order to prevent infection (for example dressings, plaster casts, linen, disposable clothing, diapers)	216.54
19 01 02	Ferrous metals removed from bottom ash	99.24
19 08 01	Screenings *(from waste water treatment plants not otherwise specified)*	191.06
19 1212	Other wastes (including mixtures of materials) from mechanical treatment of wastes other than those mentioned in 19 12 11*)	72.48
20 01 01	Paper and cardboard (separately collected fraction, municipal sources)	0.48
20 01 36	Discarded electrical and electronic equipment other than those mentioned in 20 01 21*, 20 01 23* and 20 01 35*(separately collected fraction, municipal sources)	12.76
20 01 38	Wood other than that mentioned in 20 01 37*	355.26
20 01 39	Plastics (separately collected fraction, municipal sources)	61.00
20 01 40	Metals (separately collected fraction, municipal sources)	395.86
20 02 01	Biodegradable garden and park wastes(including cemetery waste)	30.62

20 03 01	Mixed Municipal Waste (Commercial Sources)	10,016.98
20 03 01	Mixed Municipal Waste (Recyclate from Commercial Sources)	392.1
20 03 03	Street cleaning residues	2,018.72
20 03 07	Bulky waste (commercial sources)	1,828.54
Total Commercial and Industrial Waste		**18,450.4**
17 01 01	Concrete	25.44
170107	Mixture of concrete, bricks, tiles and ceramics other than those mentioned in 17 01 06*	75.08
17 02 01	Wood from Construction and demolition wastes	49.14
17 02 02	Glass from Construction and demolition wastes	29.00
17 04 02	Aluminium (from C & D sources)	0.34
17 04 07	Mixed metals from construction and demolition wastes	95.66
17 04 11	Cables other than those mentioned in 17 04 10*	7.22
17 05 04	Soil and stones other than those mentioned in 17 05 03* (from C & D sources)	1,059.06
17 08 02	Gypsum-based construction and demolition materials other than those mentioned in 17 08 01*	40.52
17 09 04	Mixed construction and demolition wastes other than those mentioned in 17 09 01*, 17 09 02* and 17 09 03*	8,585.94
Total Construction and Demolition Waste		**9,967.4**
Total Incoming Waste		**51,149.94**

Table 2-2: Outgoing waste from AES Navan 2012

EWC Code	Outgoing Waste (Tonnes)	Waste Recovery / Disposal Destination Name	Waste Recovery / Disposal Destination Address	Licence / Permit No.
15 01 01 – Paper and cardboard packaging	1595.72	(MLM) ACN Europe (UK)	Adamson House, Towers Business Park, Wilmslow Road, Didsbury, Manchester M20 2YY	Not Applicable TFS Reg – IRE/G022/12
	261.32	Irish Packaging recycling ltd	Ballymount Road, Walkinstown, Dublin 12	W0263-01
15 01 02 Plastic Packaging	116	Irish Packaging Recycling ltd	Ballymount Road, Walkinstown, Dublin 12	W0263-01
	18.4	Leinster Environmental	Clermont Business Park, Haggardstown, Dundalk, Co. Louth	WFP-LH-11-0002-01
15 01 03 – Wooden Packaging	4.6	Irish Packaging recycling ltd	Ballymount Road, Walkinstown, Dublin 12	W0263-01
	44.64	Paddy Daly	Kilmainham, Kells, Co. Meath	Not Applicable
	3.66	Wilton Waste Ltd	Kiffagh Crosserlough Ballyjamesduff Co. Cavan	WFP-CN-10-0005-01
15 01 04 - Metallic Packaging (Aluminium cans)	70.06	Wilton Waste Ltd	Kiffagh Crosserlough Ballyjamesduff Co. Cavan	WFP-CN-10-0005-01
15 01 07 - Glass Packaging	482.04	Glassdon Recycling (One51)	52, Creagh Road, Toomebrdige, Co. Antrim, BT41 3SE	LN/08/103
16 01 03 – End-of-Life Tyres	25.82	Ecological Waste Management Ltd	Clermont Business Park, Dundalk, Co Louth	WFP-LH-09-0004-01
	4.6	Wilton Waste Ltd	Kiffagh Crosserlough Ballyjamesduff Co. Cavan	WFP-CN-10-0005-01
16 05 05 – Gases in pressurised containers other than those mentioned in 16 05 04*	1.86	Wilton Waste Ltd	Kiffagh Crosserlough Ballyjamesduff Co. Cavan	WFP-CN-10-0005-01
	1.38	Commons Fuels Ltd	Navan Co Meath	NOT APPLICABLE
16 06 01* - Lead Batteries	0.74	Irish metal Refineries	Unit 2, Duleek Business Park, Duleek, Co. Meath	WFP-09-03-01
	0.36	KMK Metals	Cappincur Industrial Estate Daingean Road Tullamore	W0113-04

EWC Code	Outgoing Waste (Tonnes)	Waste Recovery / Disposal Destination Name	Waste Recovery / Disposal Destination Address	Licence / Permit No.
	4.64	Wilton Waste Ltd	Kiffagh Crosserlough Ballyjamesduff Co. Cavan	WFP-CN-10-0005-01
17 01 07 - Mixture of concrete, bricks, tiles and ceramics other than those mentioned in 17 01 06*	699.56	Drehid Waste Management Facility, Bord na Mona PLC	Killinagh Upper, Carbury Co. Kildare	W0201-03
	3142	Damian Fitzsimons	Harristown , Navan, Co. Meath	WFP/MH/10/0004/01
17 02 01 –Wood from C & D sources	1894.1	Wilton Waste ltd	Kiffagh Crosserlough Ballyjamesduff Co. Cavan	WFP-CN-10-0005-01
17 04 02 – Aluminium from C & D sources	0.78	Wilton Waste ltd	Kiffagh Crosserlough Ballyjamesduff Co. Cavan	WFP-CN-10-0005-01
17 04 11 – Metal Cable from C & D sources	4.62	Irish Metal Refineries	Unit 2, Duleek Business Park, Duleek, Co. Meath	WFP-09-03-01
	9.06	Wilton Waste ltd	Kiffagh Crosserlough Ballyjamesduff Co. Cavan	WFP-CN-10-0005-01
17 05 04 – Soil and Stones from C&D sources	117.1	Drehid Waste Management Facility, Bord na Mona PLC	Killinagh Upper, Carbury Co. Kildare	W0201-03
	113.72	Padraic Thornton Waste Disposal Ltd TA Thorntons Recycling	Thorntons Recycling Centre, Killeen Road, Ballyfermot, Dublin 10	W0044-02
	735.18	Damian Fitzsimons	Harristown , Navan, Co. Meath	WFP/MH/10/0004/01
17 06 05*- Construction materials containing Asbestos	0.78	Rilta Environmental Ltd	Rathcoole, Co. Dublin	W0192-03
17 08 02 – Gypsum based construction and demolition materials (non-hazardous)	70.88	Baron recycling Ltd (BRL)	31 the Dales Cookstown, Co. Tyrone, RT80 8TF	LN/09/113
17 09 04 – Non-Hazardous Mixed C&D wastes	1026.3	Panda Waste Ltd,	Rathdrinagh Beauparc Navan Co. Meath	W0140-04
19 05 03 – Off specification compost	88.64	Enrich Environmental (Peter Joseph Barry)	Larch Hill Stud, Kilcock, Co Meath	WFP-MH-08-0004-01
19 12 03 – non ferrous metals (from mechanical treatment)	10.62	Irish Metal Refineries	Unit 2, Duleek Business Park, Duleek, Co. Meath	WFP-09-03-01

EWC Code	Outgoing Waste (Tonnes)	Waste Recovery / Disposal Destination Name	Waste Recovery / Disposal Destination Address	Licence / Permit No.
19 12 09 – minerals (for example sand, stones)	7561.4	Drehid Waste Management Facility, Bord na Mona PLC	Killinagh Upper, Carbury Co. Kildare	W0201-03
19 12 12 –Other waste (Including mixtures of materials) from Mechanical treatment	3404.08	Bord na Mona PLC, Drehid Waste Management Facility	Killinagh Upper, Carbury, Co. Kildare	W0201-03
	2376.8	Enrich Environmental (Peter Joseph Barry)	Larch Hill Stud, Kilcock, Co Meath	WFP-MH-08-0004-01
	4475.3	Greyhound recycling & recovery Ltd	Crag Avenue Clondalkin Ind. Est. Clondalkin Dublin 22	W0205-01
	937.82	Padraic Thornton Waste Disposal Ltd TA Thorntons Recycling	Thorntons Recycling Centre, Killeen Road, Ballyfermot, Dublin 10	W0044-02
	11,164.42	Indaver Ireland	Carranstown, Duleek, County Meath	W0167-02
	25.06	Wilton Waste ltd	Kiffagh Crosserlough Ballyjamesduff Co. Cavan	WFP-CN-10-0005-01
	1043.2	Panda Waste Ltd,	Rathdrinagh Beauparc Navan Co. Meath	W0140-04
	221.72	Oxigen Environmental ltd	Merrywell Industrial Estate Ballymount Road Lower Clondalkin Dublin 22	W0208-02
	121.56	Knockharley Landfill , Greenstar Holdings Ltd	Knockharley Navan Co Meath	W0146-03
20 01 08 – Biodegradable Kitchen & Canteen Waste	663.9	Thorntons Kilmainhamwood Composting	Ballynalurgan Kilmainhamwood Kells Co. Meath	W0195-02
	194	Enrich Environmental (Peter Joseph Barry)	Larch Hill Stud, Kilcock, Co Meath	WFP-MH-08-0004-01
20 01 36 – Discarded Electrical and electronic equipment (non-hazardous	2.34	Irish Metal Refineries	Unit 2, Duleek Business Park, Duleek, Co. Meath	WFP-09-03-01
	7.2	KMK Metals,	Cappincur Industrial Estate Daingean Road Tullamore	W0113-04
20 01 39 – Municipal Plastics	9.94	Irish Packaging recycling ltd	Ballymount Road, Walkinstown, Dublin 12	W0263-01
	27.28	Leinster Environmental	Clermont Business Park, Haggardstown, Dundalk, Co. Louth	WFP-LH-11-0002-01

EWC Code	Outgoing Waste (Tonnes)	Waste Recovery / Disposal Destination Name	Waste Recovery / Disposal Destination Address	Licence / Permit No.
	26.26	ROC recycling solutions ltd NI	8A Keady Road, Cornonagh, Newry, Co. Armagh, BT35 9EL	WMEX 22/80; WMEX22/79
20 01 40 – Municipal Metals	79.30	Erin recyclers Ltd	Deepwater Quay Finisklin Sligo Harbour Sligo	WFP-SO-11-0003-03
	4.42	Irish Metal Refineries	Unit 2, Duleek Business Park, Duleek, Co. Meath	WFP-09-03-01
	191.8	Multimetals Recycling Ltd	Conway Port Industrial Estate Bollarney The Murrough Wicklow	WFP-WW-09-0014-02
	706.62	Wilton Waste ltd	Kiffagh Crosserlough Ballyjamesduff Co. Cavan	WFP-CN-10-0005-01
20 02 01 – garden and Park wastes (including cemetery wastes)	369.80	Bord na Mona PLC, Kilberry	Kilberry, Athy, Co Kildare	W0198-01
	51.46	Enrich Environmental (Peter Joseph Barry)	Larch Hill Stud, Kilcock, Co Meath	WFP-MH-08-0004-01
20 03 01 – Mixed Municipal Waste (Commercial)	772.98	Enrich Environmental (Peter Joseph Barry)	Larch Hill Stud, Kilcock, Co Meath	WFP-MH-08-0004-01
20 03 01 Mixed municipal waste – Kerbside recyclables	783.40	AES Tullamore	Cappancur Industrial Estate, Daingean Road, Tullamore, Co. Offaly	W0104-02
	159.58	Irish Packaging recycling ltd	Ballymount Road, Walkinstown, Dublin 12	W0263-01
	58.1	Mulleadys Ltd	Cloonagh Drumlish Co. Longford	W0169-01
	3145.2	Padraic Thornton Waste Recycling Ltd	Thorntons Recycling, MDR-MRF, Unit 51 Henry Road, Parkwest Business park, Dublin 12	WFP-DC-10-0021-02/13/MK/01
20 03 03 – Street Cleaning residues	1293.04	Drehid Waste Management Facility	Killinagh Upper, Carbury Co. Kildare	W0201-03
Total Waste	**50,427.16**			

3.0 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 inn 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.

Table 3-1: Quantities of foulwater removed from site during the reporting period (m^3)

Month	2005	2006	2007	2008	2009	2010	2011	2012
Jan	120	88	352	216	208	368	417	366
Feb	120	128	312	120	232	200	647	169
Mar	120	232	176	128	112	304	225	117
Apr	80	144	64	80	136	208	190	356
May	112	232	88	72	168	96	150	184
Jun	56	120	208	152	104	160	215	553
Jul	80	36	304	272	232	585	186	345
Aug	40	80	168	196	304	268	143	386
Sep	120	200	88	160	184	1,351	481	307
Oct	176	232	80	240	232	415	791	463
Nov	192	192	120	192	1,304	1,108	453	424
Dec	232	248	136	136	456	173	332	427
Total	**1,456**	**2,032**	**2,096**	**2,064**	**3,672**	**5,236**	**4,230**	**4097**

4.0 RESOURCE AND ENERGY CONSUMPTION

4.1 Resource Consumption Summary

Resources consumed at the AES Navan 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 688,810.77 Litres and Green Diesel Consumption was 82,000 Litres. The Kerosene usage for the site during 2012 was 4,329 Litres.

The total electrical consumption at the site was 235,126 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 4,097 m3 was directed to Navan WWTP.

4.2 Raw Materials Consumption & Waste Generation

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.

In early 2012, 10 No. Waste collection vehicles servicing the Dublin area were redeployed to a commercial yard in Dublin which has lead to considerable efficiencies in diesel consumption. Previously drivers would arrive in Navan and drive their waste trucks to the Dublin region whilst now staff drive by car to Dublin and commence the waste collection route from Dublin thereby reducing the distance travelled, the working hours and the litres of diesel consumed. In total 99,160 litres (790,628l in 2011 Vs 691,468l in 2012) of fuel was saved due primarily to this measure.

Other contributory factors to the reduction in fuel consumption were;

- The opening of Indaver Carranstown Waste to Energy Facility (redeployment of MSW away from Drehid landfill) . this led to the removal of 1 No. articulated truck off the road in August 2012
- The general reduction in commercial activity in comparison to 2011

In addition in 2012, AES installed driver behaviour software into a number of waste collection vehicles servicing the Navan area on a trial basis. This software called Ecotrak is provided by CMS Supatrak and reports typical fuel savings of 7-12%. All drivers attended Ecodrive training and each waste truck is fitted with a GPS linked tracking device which records data such as clutch use, accelerator use, litres of fuel consumed, distance travelled, idling times etc. All drivers driving style and behaviour is fed to a central system and reviewed on a daily/weekly basis. Each driver is given a score out of 100 at the start of each day and the target is to maintain the high score throughout the day. Based on the successful trial at the Navan facility this software will be rolled out to other waste depots in 2013.

Please refer to the Proposed Schedule of Objective & Targets for 2013 (Section 5.2 – Table 5.2) for further proposals being developed to minimise raw material consumption and waste generation.

5.0 ENVIRONMENTAL OBJECTIVES & TARGETS

5.1 Progress against Targets for 2012

Details on progress made against the Targets for 2012 are presented in Table 5.1.

Table 5-1: Progress against Targets set in 2012

Ref.	Objective	Target	Timescale	Status
1	Maximise Recovery of Recyclables	Roll out Household Brown Bin in 2012	Aug-12	Complete in some areas with population centres greater than 5000
2	Diversion of biodegradable waste from landfill	Roll out Household Brown Bin in 2012	Aug-12	Complete in some areas with population centres greater than 5000
		The quantity of BMW sent to Landfill will be calculated on a quarterly basis to ensure that Diversion Targets are met.	Dec-12	Ongoing
3	Environmental Monitoring	As per Waste Licence: Should any limits be exceeded, corrective actions to be implemented.	Dec-12	Ongoing
4	Efficiency of Fuel Consumption	Streamline Routes. Computer programme to manage collection route to ensure maximum efficiency of labour and raw materials	Dec-12	Streamlining is ongoing as new customers/routes are added and will be reviewed continuously.
		Drivers to complete EcoDrive Training	Dec-12	Complete
		Continued use of Dipetane Fuel Additive to improve fuel economy, reduce emissions, extend oil life and reduce engine wear.	Dec-12	Ongoing
		Trial new fuel saving device called Eco-Trak which records fuel usage, journey time, MPG, idling time, odometer details, average load and carbon (t) usage	Jun-12	Complete
		Investigate the feasibility of locating a truck parking premises in the Dublin region to minimise unnecessary fuel usage	May-12	Total fuel saving in 2012 due to this measure = 99,160 litres
5	Upkeep of Environmental Management System	Ongoing review of procedures, objectives & targets, records, training and aspects register.	Dec-12	Ongoing – NSAI conducted a surveillance audit at Navan facility in June 2012 and the site was found to be in compliance with the ISO14001 standard with no non-conformances noted.

5.2 Schedule of Objectives and Targets for 2013

The proposed schedule of Objectives and Targets for 2013 is presented in Table 5.2.

Table 5-2: Proposed Schedule of Objectives and Targets for 2013

Ref	Objective	Target	Timescale	Person Responsible
1	Diversion of biodegradable waste from landfill	Household Brown Bin Service to be rolled out to population centres of greater than 25000 people in line with the new European Union (Household Food Waste and Bio -Waste) Regulations 2013 (S.I. No. 71 of 2013). draft household	Dec-13	MD
		Recovery rates through onsite processing is set to be increased by 10% in 2013 with the diversion of organic fines for composting and an increased volume of residual waste to be sent for SRF production	Dec-13	MD
2	Environmental Monitoring	Eliminate the frequently of breach of Emission limit values in Dust emissions.	Dec-13	CG/MD/IH
3	Energy Efficiency	Change from using hot water at bin wash to using cold water	Mar -13	MD/IH
		Commence route optimisation project for AES Navan this includes steam-lining routes to minimise route distances, reduce the frequency of route overlaps. Target to reduce fleet by one truck through route streamlining.	Dec-13	IH
		Introduce Spilt body waste collection vehicles in urban areas allowing 2 waste streams to be collected simultaneously and therefore reducing the number of trucks on the routes	Jun-13	IH
		Remove all Articulated lorries off the road and subcontract all articulated haulage to a third party	Dec-13	MD/IH/CoB
4	Environmental Training & Awareness	As per training matrix and schedule. Ensure all off-site waste personnel have access to AES procedures and work instructions	Dec-13	MD/IH
5	Upkeep of Environmental Management System	Maintain ISO14001:2004 accreditation, Ongoing review of procedures, objectives & targets, records, training and aspects register.	Dec -13	Enviro Team

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 2012.

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

- Noise — Annually
- Dust Deposition — Three times per year
- Storm Water — Weekly & Quarterly
- Emissions to Sewer — Quarterly
- Bioaerosol Monitoring — Annually
- Groundwater — Bi-annually

Section 5.0 presents a summary of the Environmental Management Programme. This section reviews the reports on the previous year (2012) and present proposals for the current year (2013).

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 22nd and 23rd of August 2012 (Report Ref. ECS4129).

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.

Table 6-1: Noise Monitoring Locations

Map Reference No.	Location Type	Description
N1	Boundary	South-west corner of site
N2	Boundary	North-west corner of site
N3	Boundary	North-east 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.)

The full set of results is presented in Table 6.2 overleaf.

Table 6-2: Noise Monitoring results 2012

Map Ref	Date	Start Time	Duration	LA_{eq} dB(A)	LA_{10} dB(A)	LA_{90} dB(A)	$L_{AF\ Max}$ dB(A)
N1	22-8-12	10:54	30 min	52	54	46	74
	22-8-12	14:00	30 min	54	57	47	75
	23-8-12	12:20	30 min	54	57	41	74
N2	22-8-12	14:28	15 min	53	55	47	72
	23-8-12	08:55	15 min	54	55	43	76
	23-8-12	10:34	15 min	56	58	46	76
N3	22-8-12	15:53	15 min	51	53	40	66
	23-8-12	09:26	15 min	46	45	34	73
	23-8-12	11:07	15 min	48	47	40	71
N4	23-8-12	10:00	15 min	59	62	39	79
	23-8-12	11:41	15 min	58	60	47	84
	23-8-12	14:00	15 min	55	58	49	74
N5 Sarsfield GAA	22-8-12	09:38	30 min	44	47	40	62
	22-8-12	12:15	30 min	46	48	42	72
	22-8-12	15:16	30 min	47	48	42	68
N6 The Paddocks	22-8-12	11:31	30 min	47	50	42	64
	22-8-12	14:35	30 min	48	50	42	60
	22-8-12	17:07	30 min	48	51	42	61

Noise monitoring location N2 which is located near the workshop displayed one exceedance (56dB(A)) of the EPA guideline limit, which was due to a lorry parking within 2 meters of the sound level meter with its reversing alarm and air brakes sounding.

Noise monitoring location N4 which is located at the rear of the facility, displayed two exceedances of the EPA guideline limit (59 & 58dB(A)), which was primarily due to the operation of a Volvo loading shovel that was unloading building material on a hardstanding area outside the main reception shed.

Tonal noise was not detected at any of the noise monitoring locations.

The AES facility at Proudstown, Navan, Co. Meath was not causing any nuisance noise to the receiving environs on the date and time the noise monitoring assessment took place.

6.2 Ambient Monitoring Summary

In compliance with the requirements of the Waste License, W0131-02, dust monitoring at the AES Navan 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).

Table 6-3: Dust Monitoring Locations

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

Four dust sample jars were installed and days between; 7th Feb - 6th Mar (Round 1), 10th May-11th June (Round 2) and 17th July - 17th August (Round 3). The results for the monitoring are presented in Table 6.4 below.

Table 6-4: Dust monitoring results (mg/m2/day)

Report Ref.		ECS3821	ECS3930	ECS4028
		Round 1	Round 2	Round 3
Monitoring Location	Depositional Dust Limit	Deposition Rate 7th Feb - 6th Mar	Deposition Rate 10th May-11th Jun	Deposition Rate 17th July - 17th Aug
D1	350	186	167	**766**
D2	350	**421**	**586**	**2,726**
D3	350	**391**	**1,226**	339
D4	350	72	221	105

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

As can be seen in Table 6.4, exceedences were noted at locations D2 and D3 for Round 1 and 2 of the depositional dust monitoring events and D1 and D2 for the final round of depositional dust monitoring.

D1 – It was noted on field sheets upon sample collection that the sample jar contained a considerable amount of green algae.

D2 – This sample jar is exposed to passing traffic entering/exiting the Kilsaran quarry. The results of directional dust monitoring confirm that the highest results were received in the north and East (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 and East (towards quarry traffic) facing dust jar.

The results of depositional dust monitoring at location D4 were within the limit (350 mg/m^3/day).

6.3 Storm Water & Emissions to Sewer 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.

Table 6-5: Storm Waste & Emissions to Sewer Monitoring Locations

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.

Table 6-6: Emissions to Sewer Monitoring results

Report Ref.	**ECS4127**	**ECS4128**	**ECS4129**	**ECS4130**
Parameter	**Sewer Sample Quarter 1**	**Sewer Sample Quarter 2**	**Sewer Sample Quarter 3**	**Sewer Sample Quarter 4**
pH (pH units)	5.1	5.9	5.82	9.96
TOC (mg/l)	559	547	1035	272
BOD (mg/l)	2250	1,088	2250	506
COD (mg/l)	3475	2,810	3920	1008
TSS (mg/l)	218	388	316	152
Sulphate (mg/l)	205.25	402.83	216	47
Copper (mg/l)*	0.018	0.054	0.044	39
Zinc (mg/l)	0.711	0.769	1.253	392
OFG (mg/l)	64	20	12	8.3
**DRO (mg/l)	3350	1.37	1.36	250
**Mineral Oil (mg/l)	170	0.06	<0.01	<10
MBAS (mg/l)	2.18	0.15	0.17	0.25

* The concentration of mineral oil was not determinable due to sample matrix interference.
** Sub-Contracted Test

Table 6-7: Storm water monitoring results

Report Ref.	**ECS4127**	**ECS4128**	**ECS4129**	**ECS4130**
Parameter	Quarter 1	Quarter 2	Quarter 3	Quarter 4
pH (pH units)	Note 1	7.2	7.21	Note 1
Conductivity (µs/cm)		20	77	
BOD (mg/l)		<2	6	
COD (mg/l)		16	22	
TSS (mg/l)		5	8	
Total N (mg/l)		<1	4	
Ammonia (mg/l)		0.27	3.1	
Storm-Water Monitoring Results GWE-3				
Report Ref.	ECS3821	ECS3930	ECS4028	ECS4029
Parameter	Quarter 1	Quarter 2	Quarter 3	Quarter 4
pH (pH units)	Note 1	7.3	6.91	Note 1
Conductivity (µs/cm)		26	53	
BOD (mg/l)		<2	6	
COD (mg/l)		20	14	
TSS (mg/l)		<5	11	
Total N (mg/l)		<1	2.8	
Ammonia (mg/l)		0.37	1.6	

Note 1 - Results for GWE-3 and GWE-2 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 22nd of August 2012.

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: Location of bioaerosol Sampling Positions

Sampling Station	Identity	Boundary Location	GPS Ref. Note 1
Location 1	SR - A/B	Sensitive Receptor Housing estate south east of site.	IN87003 69613
Location 2	UW - A/B	Upwind boundary 30 m north west of the AES Boundary site	In 86476 69911
Location 3	DW - A/B	Downwind location (South of GAA Club House to NE of Site)	IN 87196 69976

Note 1 – Irish Grid is the unit of reference

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

Table 6-9: results of total bacterical Monitoring (report Ref: ECS4129

Location	Time	Total No. of Colonies	Concentration cfu/m^3
UW-A	10:55 – 11:20	13	15.3
UW-B	14:00 – 14:25	16	18.8
Average		14.5	17.1
SR-A	11:40 – 12:05	3	5.9
SR-B	14:40 – 15:05	5	3.5
Average		4	4.7
DW-A	10:12 – 10:37	0	0
DW-B	12:30 – 12:55	57	67.1
Average		28.5	33.6

Table 6-10: results of Aspergillus Monitoring Report Ref: ECS4129

Sampling Location	Time	Total No. of Colonies	Concentration cfu/m^3
UW-A	10:55 – 11:20	0	0
UW-B	14:00 – 14:25	0	0
Average		*0*	*0*
SR-A	11:40 – 12:05	0	0
SR-B	14:40 – 15:05	0	0
Average		*0*	*0*
DW-A	10:12 – 10:37	0	0
DW-B	12:30 – 12:55	0	0
Average		*0*	*0*

Bioaerosols were not detected in blank samples; Blank 1 (Bag) and Blank 2 (DWA). This would suggest that the results of the monitoring event were carried out in accordance with the ANUA SOP for Bioaerosol monitoring (TS-A-12) and the results are therefore deemed representative, with no cross contamination reported.

Results of bioaerosols indicated that Total Bacteria levels were present at the upwind of site (17.1 cfu/m^3), downwind (33.6 cfu/m^3) of site and at the Sensitive Receptor (4.7 cfu/m^3).

Aspergillus fumigatus was not detected at the upwind, downwind or sensitive receptor locations.

Comparing the results (averaged figures) of the upwind location to that of the sensitive receptor, there was a decrease from; 17.1cfu/m^3 to 4.7cfu/m^3. It is therefore reasonable to suggest that activity at the AES facility are causing elevated levels of bioaerosols at Sensitive Receptors

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.

As there was no access to groundwater's on the AES site during the monitoring period, a grab sample was extracted from a well via a tap (Kilsaran well) located in the neighbouring industrial facility. This monitoring point is agreed with the Agency and represents the quality of the groundwater's underlying the AES Navan facility.

Table 6-11: Location of Groundwater Monitoring well

Sample Point	Location
GW-1 (Groundwater)	(Kilsaran well) Tap on left hand wall of workshop in Kilsaran facility

Groundwater monitoring was undertaken in February and July 2012 and the results are presented in Table 6.12.

Table 6-12: Groundwater Monitoring results 2012

Parameter	Round 1	Round 2	IGV[Note1]	GTV[Note2]
	Report Ref. ECS4127	Report Ref. ECS4129		
pH (pH units)	7.9	7.22	*≥6.5 - ≤9.5*	*6.5-9.5*
Conductivity @ 25oC (mS/cm)	840	819	*1,000*	*800-1875*
COD (mg/l)	37	15	–	–
Chloride (mg/l)	29.35	25	*30*	*24 - 187.5*
Fluoride (mg/l)	0.11	<0.1	*1.0*	–
Ammonia as Ammonium (mg/l)	<0.03	<0.03	–	–
*Total Nitrogen mg/l	<1.00	<1.00	*5.65*	*8.47*
Nitrate as N(mg/l)	0.14	0.17	*25*	
Nitrate as NO3 (mg/l)	0.62	0.75	–	–
**Total Coliforms (MPN/100ml)	34.5	<1	–	–
**Faecal Coliforms (MPN/100ml)	0	0	–	–
*VOC's USEPA 524.2 (µg/l)	<10 Note 3	<10 Note 3	*0.010*	–

Note 1: 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.

Note 2 : 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 3: No other components listed on the VOC list (Appendix 2) were detected at concentrations greater than 0.010 mg/l

* Non INAB accredited test

** Sub-Contracted Test

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 on-site bunds was carried out between 01/11/12 and 07/11/12. The bunded areas included in this study were referenced as follows:

Permanent Concrete Bund

Bund No. 1: Concrete Bund for Main Diesel Storage Tank

Prefabricated Portable Bunds

Bund No. 2: Diesel Pump Bund
Bund No. 3: Black Plastic Bund located in Diesel Pump-House
Bund No. 4: Detergent Bund
Bund No. 5: Green Oil Storage Bund within Workshop.
Bund No. 6: Blue Oil Storage Bund within Workshop
Bund No. 7: Black Plastic Bund within Workshop
Bund No. 8: Grey Battery Bund within Workshop
Bund No. 9: Paint Bund within Fabrication Shed
Bund No. 10: Blue Steel Wheelie Bund within Workshop

Bund No. 11: Yellow Plastic Bund within Workshop
Bund No. **12:** Blue Steel Hydraulic Oil Bund Workshop

The permanent concrete bund and the prefabricated portable bunds were found to be **in compliance** with respective Integrity tests as outlined in the following Standards and Guidance Notes;

- EPA Guidance Note on "*Storage and Transfer of Materials for Scheduled Activities*" 2004
- British Standard *"Design of concrete structures for retaining aqueous liquids"* "B.S. 8007:1987 sections 9 (24 Hr Stabilisation Period)"
- B.S. 8007:1987 sections 9 and BS5410 (The fire protection of oil storage tanks containing distillate heating oils and similar oil products)
- EPA Guidance Note on "*Storage and Transfer of Materials for Scheduled Activities*" 2004
- CIRIA "Construction Industry Research And Information Association" guidance document *"Construction of Bunds for Storage Tanks"* sections 5.5, 5.5.1 and 5.5.2 as required for 6 hours

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:

- To maximise the recovery of organic waste, through the roll-out of the household brown bin during 2013.
- Reduce fuel consumption trhough route optimisation and introduction of split bin waste vehicles
- Increase roll out of Suptrak software
- Eliminate frequency of Emission limit value breach in dust montoring locations
- Continued environmental monitoring as per Waste licence W0131-02.
- To maintain ISO 140001 accreditation

7.0 SITE DEVELOPMENT/INFRASTRUCTURAL WORKS

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 pant. 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.

Table 7-1: Summary list of plant machinery & Duty Capacity at AES Navan

Equipment	Standby	Max. Standby Capacity
X2 Industrial compactors	1 x standby compactor (can be sed to compact newsprint and/or non rec. waste)	22 tonnes per hour each 528 tonnes/ day
X2 Tromelling line belt	Use of compactors on-site	20 tonnes per hour each 480 tonnes/ day
X1 Baler	Use of compactors on-site	10 tonnes per hour 120 tonnes/ day
X1 Bobcat	There is 1 Volvo Bobcat on-site	20 tonnes per hour 240 tonnes/ day
X3 Hitachi & 1 grab	Grab lifts & Bobcats, Samsung onsite can be used	20 tonnes per hour each 720 tonnes/ day
X1 Forklift	Bobcats on-site can be utilised	20 tonnes per hour 240 tonnes/ day
Samsung grab	Bobcats, Hitachi/ Grabs can be utilised	30 tonnes per hour 360 tonnes/ day
Conveyor Belt	Floor manual sorting areas & bobcats	10 tonnes per hour 120 tonnes/ day
Volvo & Cat loading shovel	Grabs on-site can be utilised	80 tonnes per day each 24 tonnes/ day
X2 Shredders	Compactors on-site can be utilised	50 tonnes per hour each 1200 tonnes/ day
Blender Unit for vertical composting	Use of ejector trailers	10 tonnes per hour 120 tonnes/ day
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 2012

In 2012 the following development works were undertaken:

- Erect cladding to the upper rear of the waste processing buildings
- Erect dust curtains in accordance with Waste licence
- Erect perimeter fencing where damage had occurred
- Repair/replace concrete floor within Waste processing building

.

7.3 Proposed Development Works for 2013

At present there are no major proposed developments works scheduled for 2013, however it is anticipated that routine maintenance works will be required to repair/replace portions of the concrete floor within the waste processing building. This is an annual maintenance requirement to ensure the integrity of the shed floor.

8.0 ENVIRONMENTAL LIABILITIES

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 Móna (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 & COMPLAINTS

9.1 Complaints Summary

All environmental incidents and complaints are recorded at the facility. During the 2012 reporting period, no complaints were received.

9.2 Reported Incidents Summary

All environmental incidents are recorded at the facility. Three incidents were recorded by the site during the 2012 reporting period, which were reported to the Agency.

- Dust emissions recorded from the facility during the period 7th Feb – 6th Mar 2012 at locations D2 & D3. These were reported to the Agency.
- Dust emissions recorded from the facility during the period 10th May – 11th Jun 2012 at locations D2 & D3. These were reported to the Agency.
- Dust emissions recorded from the facility during the period 17th July - 17th Aug 2012 at locations D1 & D2. These were reported to the Agency.

As the exceedences were primarily attributed to passing of traffic on the adjacent country road and from contamination of the dust jars, the only proposed corrective action was to cut back the hedgerows to prevent them overhanging into the dust jars. Alternative dust locations were conisderd though no suitable representative location has been located to date.

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 available on site.

10.0 FACILITY MANAGEMENT

10.1 Management & Staffing Structure

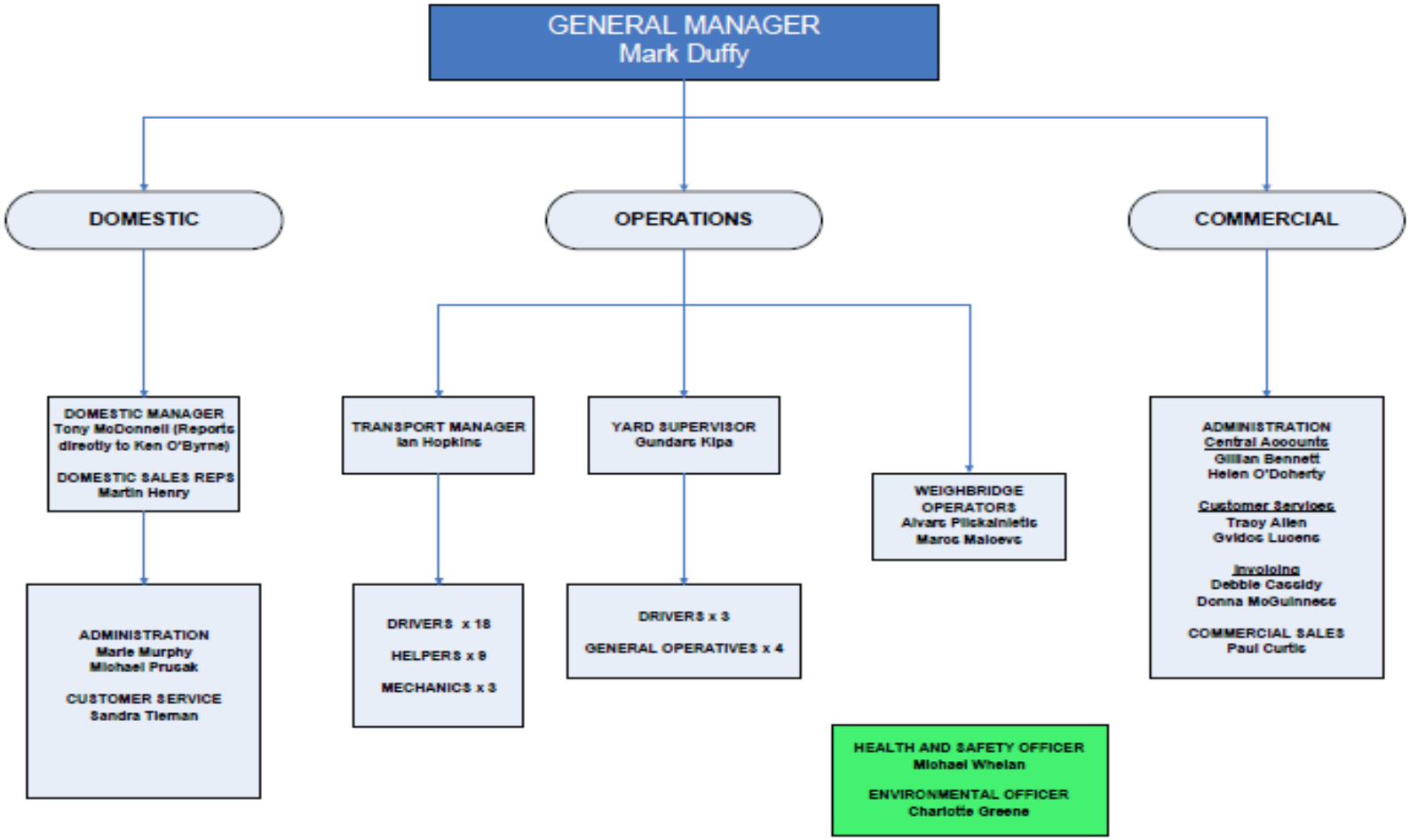
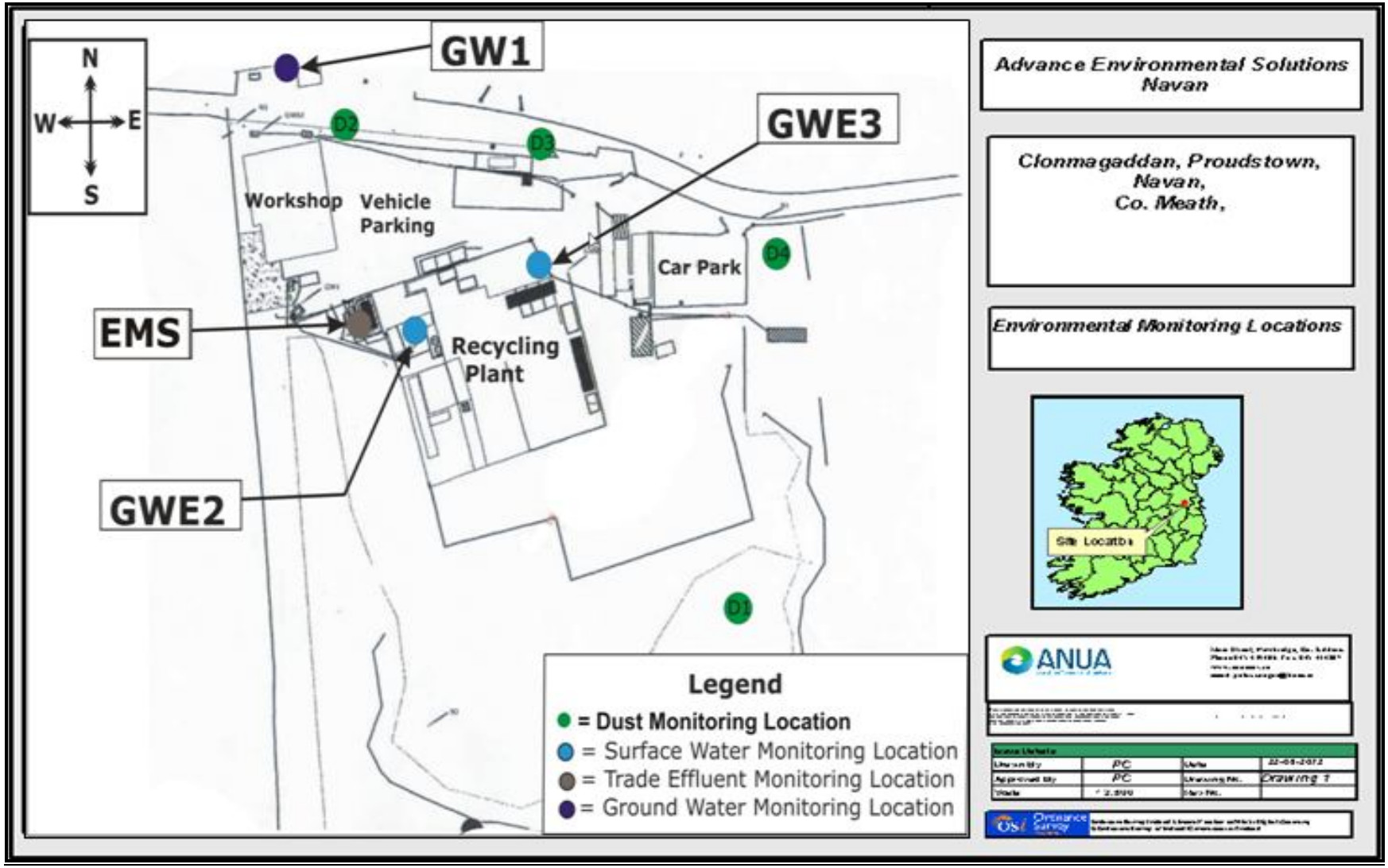


Figure 10.1 Environmental Organisation Structure

APPENDIX 1

Map of Monitoring Locations


GW1
GWE3
GWE2
EMS
N
W
E
S
D1
D2
D3
D4
Workshop
Vehicle Parking
Car Park
Recycling Plant
Legend
= Dust Monitoring Location
= Surface Water Monitoring Location
= Trade Effluent Monitoring Location
= Ground Water Monitoring Location
Advance Environmental Solutions Navan
Clonmagaddan, Proudstown, Navan, Co. Meath,
Environmental Monitoring Locations
Site Location
ANUA

APPENDIX 2

Summary of Emissions and Waste Management
(PRTR)

Environmental Protection Agency

Guidance to completing the PRTR workbook

AER Returns Workbook

Version 1.1.16

REFERENCE YEAR	2012

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
	Meath
Country	Ireland
Coordinates of Location	-6.68714 53.6705
River Basin District	IEEA
NACE Code	3832
Main Economic Activity	Recovery of sorted materials
AER Returns Contact Name	Charlotte Greene

AER Returns Contact Email Address	Charlotte.Greene@bnm.ie
AER Returns Contact Position	Environmental Officer
AER Returns Contact Telephone Number	045439492
AER Returns Contact Mobile Phone Number	0877697465
AER Returns Contact Fax Number	045439489
Production Volume	0.0
Production Volume Units	
Number of Installations	0
Number of Operating Hours in Year	0
Number of Employees	66
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?	
Have you been granted an exemption ?	
If applicable which activity class applies (as per Schedule 2 of the regulations) ?	
Is the reduction scheme compliance route being used ?	

4. WASTE IMPORTED/ACCEPTED ONTO SITE **Guidance on waste imported/accepted onto site**

Do you import/accept waste onto your site for on-site treatment (either recovery or disposal activities) ?	

This question is only applicable if you are an IPPC or Quarry site

Transfer Destination	European Waste Code	Hazardous	Quantity (Tonnes per Year)	Description of Waste	Waste Treatment Operation	Method Used		Location of Treatment	Haz Waste : Name and Licence/Permit No of Next Destination Facility Non Haz Waste: Name and Licence/Permit No of Recover/Disposer	Haz Waste : Address of Next Destination Facility Non Haz Waste: Address of Recover/Disposer	Name and License / Permit No. and Address of Final Recoverer / Disposer (HAZARDOUS WASTE ONLY)	Actual Address of Final Destination i.e. Final Recovery / Disposal Site (HAZARDOUS WASTE ONLY)
						M/C/E	Method Used					
To Other Countries	15 01 01	No	1595.72	paper and cardboard packaging	R13	M	Weighed	Abroad	MLM CAN Europe (UK),N/A TFS Reg - IRE/G022/12	Adamstown Hse.,Towers business Pk,Wilmslow Rd Didsbury Manchester.,M20 2YY,United Kingdom		
Within the Country	15 01 01	No	261.32	paper and cardboard packaging	R13	M	Weighed	Offsite in Ireland	Irish Packaging Recycling,W0263-01	Ballymount Rd.,Walkinstown,Dublin 12,.,Ireland		
Within the Country	15 01 02	No	116.0	plastic packaging	R13	M	Weighed	Offsite in Ireland	Irish Packaging Recycling,W0263-01	Ballymount Rd.,Walkinstown,Dublin 12,.,Ireland		
Within the Country	15 01 02	No	18.4	plastic packaging	R13	M	Weighed	Offsite in Ireland	Leinster Environmental,WFP-LH-11-002-01	Clermont Business Pk,Haggardstown Dundalk,Co. Louth,.,Ireland		
Within the Country	15 01 04	No	70.06	metallic packaging	R13	M	Weighed	Offsite in Ireland	Wilton Waste ,WFP-CN-10-0005-01	Kiffagh,Crosserlough,Ballyjamesduff,Co. Cavan,Ireland		
To Other Countries	**15 01 07**	**No**	482.04	glass packaging	R13	M	Weighed	Abroad	Glassdon Recycling,LN/08/103	52 Creagh Rd,Toomebridge,Co. Antrim,BT41 3SE,United Kingdom		
Within the Country	16 01 03	No	4.6	end-of-life tyres	R13	M	Weighed	Offsite in Ireland	Wilton Waste ,WFP-CN-10-0005-01	Kiffagh,Crosserlough,Ballyjamesduff,Co. Cavan,Ireland		
Within the Country	16 05 05	No	1.86	gases in pressure containers other than those mentioned in 16 05 04	R13	M	Weighed	Offsite in Ireland	Wilton Waste ,WFP-CN-10-0005-01	Kiffagh,Crosserlough,Ballyjamesduff,Co. Cavan,Ireland		
Within the Country	16 05 05	No	1.38	gases in pressure containers other than those mentioned in 16 05 04	R13	M	Weighed	Offsite in Ireland	Commons Fuels,.	Commons Lane,Navan,Co. Meath,.,Ireland		
Within the Country	16 06 01	Yes	0.74	lead batteries	R13	M	Weighed	Offsite in Ireland	Irish Metal Refineries IMR,WFP-09-03-01	Unit 2,Duleek Bus. Pk.,Duleek Co. Meath,.,Ireland	Rilta Environmental Ltd.,W0192-03	Rathcoole Co. Dublin,.,Co. Dublin,.,Ireland
Within the Country	16 06 01	Yes	0.36	lead batteries	R13	M	Weighed	Offsite in Ireland	KMK Metals,W0113-03	Cappincur Ind Est,Daingean Rd Tullamore,Co. Offaly,.,Ireland	H.J. Enthoven & Sons,Licence No BL5598IR,Darleydale,Smelter South Darley,Matlock Derbyshire,DE4 2LP ,United Kingdom	H.J. Enthoven & Sons,Darleydale,Smelter South Darley,Matlock Derbyshire / DE4 2LP ,United Kingdom
Within the Country	17 01 07	No	699.56	mixture of concrete, bricks, tiles and ceramics other than those mentioned in 17 01 06	R13	M	Weighed	Offsite in Ireland	Drehid Waste Mgt Facility,W0201-03	Killinagh Upper,Carbury,Co. Kildare,.,Ireland		
Within the Country	17 01 07	No	3142.0	mixture of concrete, bricks, tiles and ceramics other than those mentioned in 17 01 06	R13	M	Weighed	Offsite in Ireland	Damian Fitzsimon Harristown,WFP/MH/10/0004/01	Harristown,Navan,Co. Meath,.,Ireland		
Within the Country	17 02 01	No	1894.1	wood	R13	M	Weighed	Offsite in Ireland	Wilton Waste ,WFP-CN-10-0005-01	Kiffagh,Crosserlough,Ballyjamesduff,Co. Cavan,Ireland		
Within the Country	17 04 02	No	0.78	aluminium	R13	M	Weighed	Offsite in Ireland	Wilton Waste ,WFP-CN-10-0005-01	Kiffagh,Crosserlough,Ballyjamesduff,Co. Cavan,Ireland		
Within the Country	17 04 11	No	9.06	cables other than those mentioned in 17 04 10	R13	M	Weighed	Offsite in Ireland	Wilton Waste ,WFP-CN-10-0005-01	Kiffagh,Crosserlough,Ballyjamesduff,Co. Cavan,Ireland		
Within the Country	17 04 11	No	4.62	cables other than those mentioned in 17 04 10	R13	M	Weighed	Offsite in Ireland	Irish Metal Refineries IMR,WFP-09-03-01	Unit 2,Duleek Bus. Pk.,Duleek Co. Meath,.,Ireland		
Within the Country	17 05 04	No	117.1	soil and stones other than those mentioned in 17 05 03	R13	M	Weighed	Offsite in Ireland	Drehid Waste Mgt Facility,W0201-03	Killinagh Upper,Carbury,Co. Kildare,.,Ireland		
To Other Countries	17 08 02	No	70.88	gypsum-based construction materials other than those mentioned in 17 08 01	R13	M	Weighed	Abroad	Baron Recycling Ltd (BRL),LN/09/113	31 the Dales ,Cookstown,RT80 8TF,Co. Tyrone,United Kingdom		

Within the Country	19 12 03	No	10.62	non-ferrous metal	R13	M	Weighed	Offsite in Ireland	Irish Metal Refineries IMR,WFP-09-03-01	Unit 2,Duleek Bus. Pk.,Duleek Co. Meath,.,Ireland
Within the Country	19 12 12	No	3404.08	other wastes (including mixtures of materials) from mechanical treatment of wastes other than those mentioned in 19 12 11	D1	M	Weighed	Offsite in Ireland	Drehid Waste Mgt Facility,W0201-03	Killinagh Upper,Carbury,Co. Kildare,.,Ireland
Within the Country	19 12 12	No	2376.8	other wastes (including mixtures of materials) from mechanical treatment of wastes other than those mentioned in 19 12 11	D1	M	Weighed	Offsite in Ireland	Enrich,WFP/MH/08/004/02.	Larchill Stud,Kilcock,Co. Meath,.,Ireland
Within the Country	19 12 12	No	4475.3	other wastes (including mixtures of materials) from mechanical treatment of wastes other than those mentioned in 19 12 11	R13	M	Weighed	Offsite in Ireland	Greyhound Recycling,W0205-01	Crag Avenue,Clondalkin,Dublin 22,.,Ireland
Within the Country	19 12 12	No	11164.42	other wastes (including mixtures of materials) from mechanical treatment of wastes other than those mentioned in 19 12 11	R13	M	Weighed	Offsite in Ireland	Indaver,W0167-02	Carranstown,Duleek,Co. Meath,.,Ireland
Within the Country	19 12 12	No	121.56	other wastes (including mixtures of materials) from mechanical treatment of wastes other than those mentioned in 19 12 11	D1	M	Weighed	Offsite in Ireland	Knockharley landfill,W0146-03	Knockharley ,Kentstown,Co. Meath,.,Ireland
Within the Country	19 12 12	No	221.72	other wastes (including mixtures of materials) from mechanical treatment of wastes other than those mentioned in 19 12 11	R13	M	Weighed	Offsite in Ireland	Oxigen,W0208-02	Merrywell Ind Est.,Ballymount,Dublin 22,.,Ireland
Within the Country	20 01 08	No	663.9	biodegradable kitchen and canteen waste	R13	M	Weighed	Offsite in Ireland	Thorntons Kilmainhamwood,W0195-02	Ballynalurgan Kilmainhamwood Kells ,Kilmainhamwood,Kells,Meath,Ireland
Within the Country	20 01 36	No	7.2	discarded electrical and electronic equipment other than those mentioned in 20 01 21, 20 01 23 and 20 01 35	R13	M	Weighed	Offsite in Ireland	KMK Metals,W0113-03	Cappincur Ind Est,Daingean Rd Tullamore,Co. Offaly,.,Ireland
Within the Country	20 01 39	No	9.94	plastics	R13	M	Weighed	Offsite in Ireland	Irish Packaging Recycling,W0263-01	Ballymount Rd.,Walkinstown,Dublin 12,.,Ireland
Within the Country	20 01 39	No	27.28	plastics	R13	M	Weighed	Offsite in Ireland	Leinster Environmental,WFP-LH-11-002-01	Clermont Business Pk,Haggardstown Dundalk,Co. Louth,.,Ireland
Within the Country	20 01 39	No	26.26	plastics	R13	M	Weighed	Offsite in Ireland	ROC Recycling Solutions Ltd,WMEX 22/80; WMEX 22/79	8A Keady Road ,Cornonagh,Newry,Co. Armagh BT35 9EL,United Kingdom
Within the Country	20 01 40	No	79.3	metals	R13	M	Weighed	Offsite in Ireland	Erin Recyclers Ltd.,WFP-SO-11-0003-03	Deepwater quay,Finisklin,Sligo Harbour,Co. Sligo,Ireland
Within the Country	20 01 40	No	4.42	metals	R13	M	Weighed	Offsite in Ireland	Irish Metal Refineries IMR,WFP-09-03-01	Unit 2,Duleek Bus. Pk.,Duleek Co. Meath,.,Ireland
Within the Country	20 01 40	No	191.8	metals	R13	M	Weighed	Offsite in Ireland	Multimetals Recycling Ltd.,WFP-WW-09-0014-01	The Murrough,Wicklow Town ,Co. Wicklow,.,Ireland
Within the Country	20 01 40	No	706.62	metals	R13	M	Weighed	Offsite in Ireland	Wilton Waste ,WFP-CN-10-0005-01	Kiffagh,Crosserlough,Ballyjamesduff,Co. Cavan,Ireland
Within the Country	20 03 01	No	783.4	mixed municipal waste	R13	M	Weighed	Offsite in Ireland	AES Tullamore,W0104-02	Cappincur Ind Est,Daingean Rd,Tullamore Co. Offaly,.,Ireland
Within the Country	20 03 01	No	58.1	mixed municipal waste	R13	M	Weighed	Offsite in Ireland	Mulleady Waste,W0169-01	Cloonagh,Drumlish,Co. Longford,.,Ireland
Within the Country	20 03 03	No	1293.04	street-cleaning residues	R13	M	Weighed	Offsite in Ireland	Drehid Waste Mgt Facility,W0201-03	Killinagh Upper,Carbury,Co. Kildare,.,Ireland
Within the Country	15 01 03	No	4.6	wooden packaging	R13	M	Weighed	Offsite in Ireland	Irish Packaging Recycling,W0263-01	Ballymount Rd.,Walkinstown,Dublin 12,.,Ireland

Within the Country	15 01 03	No	44.64	wooden packaging	R13	M	Weighed	Offsite in Ireland	Paddy Daly,.	Kilmainham,Kells,Co. Meath,.,Ireland		
Within the Country	15 01 03	No	3.66	wooden packaging	R13	M	Weighed	Offsite in Ireland	Wilton Waste ,WFP-CN-10-0005-01	Kiffagh,Crosserlough,Ballyjamesduff,Co. Cavan,Ireland		
Within the Country	16 01 03	No	25.82	end-of-life tyres	R13	M	Weighed	Offsite in Ireland	Ecological Waste Management Ltd.,WFP-LH-09-0004-01	Clermont Business Park,Haggardstown,Dundalk Co. Louth,.,Ireland		
Within the Country	16 06 01	Yes	4.64	lead batteries	R13	M	Weighed	Offsite in Ireland	Wilton Waste ,WFP-CN-10-0005-01	Kiffagh,Crosserlough,Ballyjamesduff,Co. Cavan,Ireland	H.J. Enthoven & Sons,Licence No BL5598IR,Darleydale,Smelter South Darley,Matlock Derbyshire,DE4 2LP ,United Kingdom	H.J. Enthoven & Sons,Darleydale,Smelter South Darley,Matlock Derbyshire / DE4 2LP ,United Kingdom
Within the Country	17 05 04	No	113.72	soil and stones other than those mentioned in 17 05 03	R13	M	Weighed	Offsite in Ireland	Padraic Thornton Waste Disposal Ltd TA Thortons Recycling,W0044-02	Thorntons Recycling Centre,Killeen Rd,Ballyfermot,Dublin 10,Ireland		
Within the Country	17 05 04	No	735.18	soil and stones other than those mentioned in 17 05 03	R13	M	Weighed	Offsite in Ireland	Damian Fitzsimon Harristown,WFP/MH/10/0004/01	Harristown,Navan,Co. Meath,.,Ireland		
Within the Country	17 09 04	No	1026.3	mixed construction and demolition wastes other than those mentioned in 17 09 01, 17 09 02 and 17 09 03	R13	M	Weighed	Offsite in Ireland	Panda Waste Recycling,W0140-04	Rathdrinagh,Beauparc,Navan Co. Meath,.,Ireland		
Within the Country	19 05 03	No	88.64	off-specification compost	R13	M	Weighed	Offsite in Ireland	Enrich,WFP/MH/08/004/02.	Larchill Stud,Kilcock,Co. Meath,.,Ireland		
Within the Country	19 12 12	No	937.82	other wastes (including mixtures of materials) from mechanical treatment of wastes other than those mentioned in 19 12 11	D1	M	Weighed	Offsite in Ireland	Padraic Thornton Waste Disposal Ltd TA Thortons Recycling,W0044-02	Thorntons Recycling Centre,Killeen Rd,Ballyfermot,Dublin 10,Ireland		
Within the Country	19 12 12	No	25.06	other wastes (including mixtures of materials) from mechanical treatment of wastes other than those mentioned in 19 12 11	R13	M	Weighed	Offsite in Ireland	Wilton Waste ,WFP-CN-10-0005-01	Kiffagh,Crosserlough,Ballyjamesduff,Co. Cavan,Ireland		
Within the Country	19 12 12	No	1043.2	other wastes (including mixtures of materials) from mechanical treatment of wastes other than those mentioned in 19 12 11	D1	M	Weighed	Offsite in Ireland	Panda Waste Recycling,W0140-04	Rathdrinagh,Beauparc,Navan Co. Meath,.,Ireland		
Within the Country	17 06 05	Yes	0.78	construction materials containing asbestos (18)	R13	M	Weighed	Offsite in Ireland	Rilta Environmental Ltd.,W0192-03	Rathcoole Co. Dublin,.,Co. Dublin,.,Ireland	Grossenasper Entsorgungsgesellschaft mbH & Co. KG,A60F00507,Bimohler Str.,57 A,24623,Grossenaspe ,Germany	Bimohler Str.,57 A,24623,Grossenaspe ,Germany
Within the Country	20 01 08	No	194.0	biodegradable kitchen and canteen waste	R13	M	Weighed	Offsite in Ireland	Enrich,WFP/MH/08/004/02.	Larchill Stud,Kilcock,Co. Meath,.,Ireland		
Within the Country	20 01 36	No	2.34	discarded electrical and electronic equipment other than those mentioned in 20 01 21, 20 01 23 and 20 01 35	R13	M	Weighed	Offsite in Ireland	Irish Metal Refineries IMR,WFP-09-03-01	Unit 2,Duleek Bus. Pk.,Duleek Co. Meath,.,Ireland		
Within the Country	20 02 01	No	369.8	biodegradable waste	R13	M	Weighed	Offsite in Ireland	BNM Kilberry,W0198-01	Kilberry,Co. Kildare,.,.,Ireland		
Within the Country	20 02 01	No	51.46	biodegradable waste	R13	M	Weighed	Offsite in Ireland	Enrich,WFP/MH/08/004/02.	Larchill Stud,Kilcock,Co. Meath,.,Ireland		
Within the Country	20 03 01	No	772.98	mixed municipal waste	R13	M	Weighed	Offsite in Ireland	Enrich,WFP/MH/08/004/02.	Larchill Stud,Kilcock,Co. Meath,.,Ireland		
Within the Country	20 03 01	No	159.58	mixed municipal waste	R13	M	Weighed	Offsite in Ireland	Irish Packaging Recycling,W0263-01	Ballymount Rd.,Walkinstown,Dublin 12,.,Ireland		
Within the Country	20 03 01	No	3145.2	mixed municipal waste	R13	M	Weighed	Offsite in Ireland	Padraic Thornton Waste Recycling Ltd.,WFP-DC-10-0021-02/13/MK/01	Thorntons Recycling MDR-MRF,Unit 51 Henry Road ,Parkwest Business park,Dublin 12,Ireland		
Within the Country	19 12 09	No	7561.4	minerals (for example sand, stones)	R13	M	Weighed	Offsite in Ireland	Drehid Waste Mgt Facility,W0201-03	Killinagh Upper,Carbury,Co. Kildare,.,Ireland		

* Select a row by double-clicking the Description of Waste then click the delete button