# **Annual Environmental Report**

AES Nenagh
Waste Transfer Station

January 2012

**Through** 

December 2012

Waste Licence Registration Number: W0240-01

Licensee: Advanced Environmental Solutions (AES)

(Ireland) Limited

Location of Activity: Solsborough, Springfort Cross,

Nenagh,

**County Tipperary** 

Attention: Office of Environmental Enforcement

**EPA** Headquarters,

P.O. Box 3000,

Johnstown Castle Estate,

Co. Wexford.

Prepared by: ANUA Environmental





## **REVISION CONTROL TABLE**

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

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

Abstracts: This report presents the Annual Environmental Report for a Waste Transfer Station in Nenagh, Co. Tipperary 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 Solsborough, Springfort Cross, Nenagh, Co. Tipperary on 29<sup>th</sup> July 2009. The Waste Licence reference number is W0240-01.

The facility is currently licensed to accept a maximum of 24,750 tonnes of waste per annum (10,529 tonnes of Household waste, 12,730 tonnes of Commercial waste and 1,491 tonnes of Construction and Demolition waste). The site is located in Springfort Cross, west of Nenagh town.

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, Nenagh, Co. Tipperary and Rosslare, Co. Wexford.

ANUA Environmental was retained to prepare and submit the Annual Environmental Report (AER) for the facility in compliance with Condition 11.8 and Schedule E of the Waste Licence. This report addresses Condition 11.8 of the waste licence for the facility.

#### Condition 11.8 states that:

"The licensee shall submit to the Agency, by the 31<sup>st</sup> March of 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 E: Annual Environmental Report of this licence 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 Licence for the facility. This AER covers the reporting period from 1<sup>st</sup> January 2012 up to and including the 31<sup>st</sup> December 2012.

#### 1.1 Site Description

As previously referred to, AES operates a Waste Licence (W0240-01) for its Waste Transfer Station at Solsborough, Springfort Cross, Nenagh, Co. Tipperary.

Waste accepted includes mixed municipal, dry recyclables and C&D wastes. Activities associated with the facility are limited to the transfer and bulking of domestic and commercial waste, and a small amount of construction and demolition (C&D) waste. There are limited segregation facilities onsite. Wastes are segregated mechanically using a grab machine and baled using Baler. Segregated waste is then transported to larger AES sites for further processing including; segregation, baling and sale to overseas brokers. Any non-recyclable waste is sent for SRF recovery and / or disposed of at landfill.

#### 2.0 WASTE MANAGEMENT RECORD

## 2.1 Waste activities carried out at the facility

Waste activities at the facility are restricted to those outlined in *Part 1 - Activities Licensed* of *the Waste Licence.* 

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

- Class 11. Blending or mixture prior to submission to 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 a 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 biological processes). (P)
Class 3 Recycling or reclamation of metals and metal compounds:
Class 4 Recycling or reclamation of other inorganic materials:
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.

#### 2.2.1 Waste Recovery Report

A Waste recovery report is required in compliance with Condition 11.14. Report on the contribution of the facility to the achievement of waste recovery objectives stated in Condition 2.2.2.2 and as otherwise may be stated in National and European Union waste policies, as a minimum, including the following:

- (i) the recovery of metals
- (ii) the recovery of C&D derived waste materials

(iii) the recovery/treatment of biowaste (including contribution of facility to the pretreatment targets in the EU Landfill Directive)the separation and recovery of other recyclable materials

Table 2-1: Incoming waste to Nenagh Waste Transfer Facility 2012

EWC Code	Waste Description	Incoming Waste (Tonnes)					
20 03 01	Mixed municipal Waste (domestic residual waste)	8,490.92					
20 03 01	Mixed Municipal Waste (Domestic Mixed dry recyclables)	3,578.61					
20 03 07	Bulky Waste (Domestic)	535.67					
15 01 01	Paper and cardboard packaging	548.19					
15 01 02	Plastic packaging	221.79					
15 01 03	Wooden Packaging	54.89					
15 01 04	Metallic Packaging	28.35					
15 01 07	Glass Packaging	324.13					
18 01 04	Healthcare wastes (non clinical)	71.29					
20 01 08	Biodegradable kitchen and canteen wastes	1077.22					
20 01 39	Plastics (separately collected fraction, municipal sources)	516.37					
20 01 40	Metals ((separately collected fraction, municipal sources)	134.16					
20 02 01	Biodegradable garden and park wastes(including cemetery waste)						
20 03 01	Mixed Municipal Waste (Commercial Sources)	8,430.21					
20 03 01	Mixed Municipal Waste (Commercial Recyclables)	1,002.29					
20 03 03	Street Cleaning residues	277.70					
20 03 07	Bulky waste (commercial sources) 143.88						
17 02 01	Wood from Construction and demolition wastes	103.46					
17 09 04	Mixed construction and demolition wastes other than those	135.82					
	mentioned in 17 09 01*, 17 09 02* and 17 09 03*						
Total Incomi	ng Waste	25,681.81					

Table 2.2 presents the waste recovered/ disposed from the facility.

Table 2-2: Outgoing Waste recovered / Disposed from Nenagh Waste Transfer Station

EWC Code	Outgoing Waste	Waste Recovery / Disposal Destination	Waste Recovery / Disposal Destination Address	Licence / Permit No.
	(Tonnes)	. Name		
15 01 01 Paper	225.10	AES Tullamore	Cappancur, Tullamore,	W0104-02
and cardboard			County Offaly	
packaging				
15 01 02 Plastic	132.06	Lenviron Ltd TA	Clermont Business Park,	WFP-LH-11-
Packaging		Leinster	Haggardstown, Dundalk, Co.	0002-01
		Environmentals	Louth	
15 01 03 -	23.50	Thomas O Neill	1	WFP/LK/2012/0
Wooden		(Timber Recycling	Limerick	5B/R1
Packaging		Ltd)		
	95.8	CJ SHeeran	Mountrath Sawmills Shannon	P0337-01
			Street Mountrath	
15 01 07 - Glass	503.26	Rehab Glassco	Site 4 Oberstown Business	WFP-KE-09-
Packaging			Park Naas	0357-01

EWC Code	Outgoing Waste (Tonnes)	Waste Recovery / Disposal Destination Name	Waste Recovery / Disposal Destination Address	Licence / Permit No.
17 02 01 –Wood from C & D sources	37.42	Thomas O Neill (Timber Recycling Ltd)	18 Upper William Street Limerick	WFP/LK/2012/0 5B/R1
	117.86	Clonmel Waste Disposal Ltd	Lawlesstown Clonmel Co. Tipperary	WFP-TS-11- 0001-01
17 04 07 –Mixed Metals from C & D sources	134.18	Hegarty Metals Processors (International ) Ltd	Ballysimon Road Limerick	WFP-LKC-11- 001-01
17 09 04 – Non- Hazardous Mixed C&D wastes	45.6	O'Dwyer Construction	Bordnacrusha Thurles, Co. Tipperary	WP/TN/16
20 01 08 – Biodegradable Kitchen &	700.4	Acorn Recycling Ltd	Ballybeg Composting Facility, Ballybeg, Littleton, Co. Tipperary	W0249-01
Canteen Waste	110.26	Milltown Composting Systems Ltd.	Milltownmore, Fethard, Co. Tipperary	W0270-01
	92.22	Bord na Mona PLC Drehid Waste Management Facility (compost plant)	Killinagh Upper, Carbury Co. Kildare	W0201-03
20 01 40 – Metals from Municipal Sources	26.71	Hegarty Metals Processors (International ) Ltd	Ballysimon Road Limerick	WFP-LKC-11- 001-01
20 03 01 - Mixed Municipal	58.84	Clonmel Waste Disposal Ltd	Lawlesstown Clonmel Co. Tipperary	WFP-TS-11- 0001-01
Waste (Commercial)	4,133.26	Bord na Mona PLC Drehid Waste Management Facility (landfill)	Killinagh Upper, Carbury Co. Kildare	W0201-03
	1,935.24	Kyletalesha Landfill, Laois Co. Co.	Clonsoughy Kyleclonhobert Portlaoise Co. Laois	W0026-03
	528.26	Oxigen Environmental Ltd	Merrywell Industrial Estate Ballymount Road Lower Clondalkin Dublin 22	W0208-02
	5,702.40	Gortadroma Landfill Site, Limerick Co. Co.	Gortadroma Ballyhahill Co. Limerick	W0017-04
	881.96	Nurendale Ltd. T/A Panda Waste Services	Rathdrinagh, Beauparc, Navan, Co. Meatl	W0140-04
	408.9	Padraic Thornton Waste Disposal Ltd.	T/A Thorntons Recycling, Unit S3B Henry Road, Park Dublin 12	WFP-KE-10- 0061-01
	623.52	Midland Waste Disposal Ltd (AES Navan)	Proudstown Road, Clonmagadden, Navan, Co Meath	W0131-02
20 03 01 Mixed Municipal Waste (Domestic)	174.26	Bord na Mona PLC Drehid Waste Management Facility (landfill)	Killinagh Upper, Carbury Co. Kildare	W0201-03
	1,868.86	Kyletalesha Landfill, Laois Co. Co.	Clonsoughy Kyleclonhobert Portlaoise Co. Laois	W0026-03
	34.04	Oxigen Environmental Ltd	Merrywell Industrial Estate Ballymount Road Lower Clondalkin Dublin 22	W0208-02

EWC Code	Outgoing Waste (Tonnes)	Waste Recovery / Disposal Destination Name	Waste Recovery / Disposal Destination Address	Licence / Permit No.
	1,620.46	Gortadroma Landfill Site, Limerick Co. Co.	Gortadroma Ballyhahill Co. Limerick	W0017-04
20 03 01 Mixed municipal waste – Commercial Kerbside recyclables	3,794.32	AES Tullamore	Cappancur Industrial Estate, Daingean Road, Tullamore, Co. Offaly	W0104-02
20 03 01 Mixed municipal waste – Domestic Kerbside recyclables	761.57	AES Tullamore	Cappancur Industrial Estate, Daingean Road, Tullamore, Co. Offaly	W0104-02
20 03 03 – Street Cleaning Residues	260.94	Drehid Waste Management Facility	Killinagh Upper, Carbury Co. Kildare	W0201-03
Total Waste	25,031.20 To	onnes		

#### 3.0 EMISSIONS FROM THE FACILITY

Waste water removed from the grit traps, leachate tank and oil interceptor was tankered off-site for treatment by Thornton's Recycling and Enva Ireland. The total removal was 13.64 Tonnes for the 2012 calendar year.

Storm water, emissions to sewer, dust and noise emissions monitoring results are discussed in Section 6.0 of this report and the monitoring locations map is included in *Appendix 1*.

#### 4.0 RESOURCE AND ENERGY CONSUMPTION

## 4.1 Resource Consumption Summary

Resources consumed at the Nenagh Waste Transfer Station are recorded. The total consumption of Road Diesel was 432,000 litres and Green Diesel was 26,837 Litres.

The total electrical consumption at the site was 29,283 kWh during the reporting period.

## 4.2 Energy Efficiency Audit Report Summary

To comply with Condition 7.1 of the Waste Licence an Energy Efficiency Audit was carried out in August 2010 and the full report was submitted to the EPA Agency in the Annual Environmental Report for the year ending 2010.

#### 4.3 Water Consumption

During the reporting period Water consumption is estimated to be 1,564 cubic meters of water. Water usage onsite is primarily attributed to the washing of wheelie bins and waste skips. In 2013 it is planned to install a rainwater harvesting tank for this purpose (and to be topped up with mains water as required). It is anticipated that this will significantly reduce the quantities of water used onsite

#### 4.4 Raw Materials Consumption & Waste Generation

A Route optimisation project was conducted on waste collection routes from AES Nenagh in 2010. All routes are therefore reviewed and streamlined on an annual basis as new customers are generated. In order for route optimisation to be successful all bins were micro chipped and are linked to a central software packaging (Routeman). The inclusion of the above measure has consequently reduced fuel consumption and generated other efficiencies within the business including labour, working time etc. Route streamlining will again be conducted in 2013 to ensure the efficiencies are maintained and improved.

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	Status
1	Diversion of		On-going
Ī -	biodegradable waste	be extended in 2012.	gg
	from landfill	Pay-by-Lift service being offered	On-going
		to Household customers to	3 3
		incentives the use of the more	
		cost effective recycling and brown	
		bins.	
		The quantity of BMW sent to	On-going
		Landfill will be calculated on a	
		quarterly basis to ensure	
		Diversion Targets are met.	
2	Environmental	As per Waste Licence: Should	On-going
	Monitoring	any limits be exceeded, corrective	
		actions to be implemented	
		Investigate the feasibility of	Complete - Binwash area SEW
		extending the bin wash area to	agreed in June 2012, Binwash
		allow a truck to be parked for	extension was constructed and
		washing	Completed by August 2012
		Review Surface water drainage	Maintenance plan for Surface
		network and maintenance of site	water drainage was revisited in
		storm water interceptors	June 2012, Policy of monthly
			cleaning of filters introduced, daily checklist of yard maintenance
			used to ensure yard it kept clean.
			Silt traps and interceptors
			desludged twice yearly instead of
			annually
3	Efficiency of Fuel	Streamline Routes. Computer	Streamlining is ongoing and will
	Consumption	programme being acquired for	be reviewed continuously as new
	'	AES Group to manage collection	routes/customers are added
		route to ensure maximum	
		efficiency of labour and raw	
		materials.	
		Investigating options for	On-going
		increased fuel efficiency through	
		engine modification e.g. Addition	
	Endamental	of water vapour to inlet to cool air.	0
4	Environmental	As per training matrix and	On-going
-	Training	Schedule.	On going
5	Upkeep of Environmental	Ongoing review of procedures, objectives & targets, and aspects	On-going.
	Management	register.	
	System	register.	
6	Vehicle Maintenance	Vehicle Maintenance Contractor	Currently with procurement for
	Programme to be	to be hired for AES Group to	tendering.
	reviewed	provide a more reliable and	
	107104104	traceable service.	
7	Completion of SEW	Construct the Firewater Retention	This Project is on hold due to
Ī -		Wall in accordance with the	AES Strategic plans to acquire
		agreed SEW submitted to the	additional land to the west and
		EPA in 2011	north of the site.
<u> </u>		•	•

## 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	Household Brown Bin Service to be maintained in 2013	Dec-13	LA	
	waste from landfill	Pay-by-Lift service being offered to Household customers to incentivise the use of recycling and brown bins.	Dec-13	LA	
		The quantity of BMW sent to Landfill will be calculated on a quarterly basis to ensure that Diversion Targets are met.	Dec-13	LA	
2	Increase the provision of waste services to Urban customers	Roll out of glass collection in urban Limerick routes	Dec-13	LA	
3	Environmental Monitoring	Eliminate the frequently of breach of Emission limit values in Dust and Surface water emissions.	Dec-13	LA/LG/CG	
4	Energy Efficiency - Water conservation	Collection of rain water from roof run-off for re-use	Jun-13	LA/LG	
	Energy Efficiency - Efficiency	Streamline Routes in line with the previous route optimisation project as new customers are added.	Dec-13	Logistics Manager	
	of Fuel Consumption	Introduce Spilt body waste collection vehicles in North Tipperary allowing 2 waste streams to be collected simultaneously and therefore reducing the number of trucks on the routes	Jun-13	Logistics Manager	
		Introduce driver behaviour software into the waste collection vehicles (Supertrak) to increase fuel efficiency	Aug-13	LA/LG	
5	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	LA/CG/LG/NM Enviro Team	
6	Upkeep of Environmental Management System	pkeep of Environmental Ongoing review of procedures, objectives & targets, records, training and			
7	Completion of Specified Engineering Works	Construct the Firewater Retention Wall in accordance with the agreed SEW submitted to the EPA in 2011	Dec-13	LA	

#### 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 Licence for the facility. 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 Quarterly

3. Storm Water Emissions4. Emissions to SewerMonthly & Quarterly

Sections 6.5 and 6.6 present a summary of the Environmental Management Programme and the Pollutant Release and Transfer Register for the facility.

## 6.1 Noise Monitoring Report Summary

In compliance with the requirements of the Waste Licence, W0240-01, annual noise monitoring at the Nenagh Waste Transfer Station was undertaken. Monitoring was carried out on the 22nd and 23rd of August 2012 (Report ECS4240– Noise).

LAeq, LA10 LA90 values and 1/3 Octave band analyses was determined at all four site boundary locations (N1 – N4) and at two noise sensitive locations (NSL1 and NSL2). The noise monitoring locations are presented in Table. 6.1. The noise monitoring locations are indentified in Appendix I.

**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
NSL1	Sensitive	Between garage and house, across the road and ca. 20m from entrance to AES
NSL2	Sensitive	House, ca. 150m west of AES

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

Table 6-2: Noise Monitoring Results (Limit Value = 55dB(A) Leq)

Location No.	Measurement Period (mins.)	Time	LA <sub>eq</sub> dB(A)	LA <sub>10</sub> dB(A)	LA <sub>90</sub> dB(A)	L <sub>AFMax</sub> dB(A)	Comments / Site Observations Summary
N-1	30	12:15	53	56	47	70	Site –AES trucks entering yard & engines left running while on weighbridge. Reversing alarms, chains rattling, doors banging, sorting of refuse can be heard from the waste storage area. Power washing of wheelie bins (50m).  Background – Dominant traffic on Limerick Road. Construction on Dark Road – occasional banging buckets can be heard.
N-2	30	11:42	52	50	41	78	Site – Power washing from the yard. Banging of chains on AES skips. Banging noise from waste storage area.  Background – Constant Traffic on Limerick road. Intermittent bird calling from birds sitting on wires above meter location, bird calls constant in area.
N-3	30	15:25	55	57	46	70	Site – Engine of trucks left running in yard as vehicles wait to enter waste storage area. Sorting of recyclables in waste storage area - Reversing alarms, chains rattling.  Background – Heavy traffic on Dark Road – (29 cars, 3 vans, 2 jeeps & trucks & 1 tractor).
N-4	30	11:07	52	55	46	701	Site – Power washing of wheelie bins in the yard can be heard in background. Banging of customer car door & boot in the main reception car park.  Background – Dominant traffic on Dark, Kilcolman and Limerick Roads.  Occasional angle grinding & banging noise from O'Brien's garage.
NSL-1	30	14:10	54	54	46	76	Site – Vehicles entering yard. (4 AES trucks, 4 cars, 1 jeep, 1 transit with a trailer).  General hum of operations within reception shed – power washing & skips banging.  Background – Heavy traffic on Limerick, Kilcolman and Dark Roads. Intermittent banging noise from O'Brien's garage (40m). Construction on Dark Road – occasional banging buckets can be heard & reverse beeping noise.
NSL-2	30	14:47	51	53	45	79	Site – Faint background noise from site: constant power washing & occasional banging & reversing alarms. AES & non-AES vehicles entering/exiting site.  Background – Constant heavy traffic on Limerick and Kilcolman Roads.

The noise levels ( $L_{eq}(A)$ ) at the four boundary locations and the two noise sensitive locations were all below the limit of 55 dB(A). Tonal noise was not detected at any of the boundary locations.

## 6.2 Ambient Monitoring Summary

In compliance with the requirements of the Waste Licence, W0240-01, dust monitoring at the Nenagh Waste Transfer Station was carried out four times during the 2012 reporting period. There are four dust monitoring locations on site as detailed in Table 6.3. (See *Appendix 1 – map of monitoring locations*).

**Table 6-3: Dust Monitoring Locations** 

Monitoring Location	Description
D1	South western corner of the facility
D2	North western corner of facility
D3	North eastern corner of facility
D4	South eastern corner of the facility

Four Bergerhoff dust gauges were continuously exposed for a 29 day period between the 16<sup>th</sup> January – 16<sup>th</sup> February (Quarter 1), for 28 days from 21<sup>st</sup> May – 18<sup>th</sup> June (Quarter 2), for 32 days from 16<sup>th</sup> August – 17<sup>th</sup> September (Quarter 3), and finally for 32 days from 11<sup>th</sup> October – 12<sup>th</sup> November 2012 (Quarter 4). The results for monitoring are presented in Table 6.4.

Table 6-4: Dust Monitoring Results (mg/m2/day)

Monitoring Location	Dust Deposition Limit	Deposition Rate (Quarter 1) Report: ECS4162	Deposition Rate (Quarter 2) Report: ECS4240	Deposition Rate (Quarter 3) Report: ECS4291	Deposition Rate (Quarter 4) Report: ECS4367
D1	350	137	252	178	226
D2	350	332	160	533	113
D3	350	772	92	242	183
D4	350	368	559	301	118

The dust deposition results at the D1, monitoring location is in compliance with the limit of 350 mg/m²/day in all four monitoring events.

The results were elevated above the EPA limits at;

D3 (772 mg/m²/day) attributed to the presence of large quantity of solids, moss & insects.

D4 (368 mg/m²/day) attributed to the presence large solid content & few insects.

D4 (559 mg/m<sup>2</sup>/day) attributed to the presence of large quantity of solids & moss.

D2 (533 mg/m²/day) attributed to the presence Very high solids & bird faeces content.

## 6.3 Storm Water & Emissions to Sewer Monitoring Report Summary

In accordance with Schedule C.2.3 of the Waste Licence W0240-01, the facility is required to carry out an assessment of the Storm Water emissions from the site on a weekly, monthly and quarterly basis and an assessment of the Emissions to Sewer from the site on a monthly and quarterly basis. The Emissions to Sewer sample includes runoff from the Waste Transfer Building and runoff from the Truck Wash located at the south-side of the waste building. The Storm Water and Emissions to Sewer monitoring locations are described in Table 6.5 and the locations are indentified in *Appendix 1*.

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

Monitoring Location	Description
Storm Water	Discharge pipe from the Oil Interceptor
Emissions to Sewer	Outside the Waste Transfer Building – to the North-East side of the site

The results from the weekly and monthly monitoring at the Storm Water location are presented in Table 6.6 overleaf. Quarterly Monitoring also occurred at this location. Emission limits for Storm Waters are not specified in the Waste Licence.

Table 6-6: Storm Water Weekly & Monthly Results

Parameter	05/01 /2012	09/02 /2012	08/03 /2012	02/04 /2012	10/04 /2012	16/04 /2012	25/04 /2012	03/05 /2012	09/05 /2012	16/05 /2012	24/05 /2012	18/06 /2012	17/09 /2012	26/09 /2012	12/11 /2012	05/12 /2012
pH (pH Units)	7.2	7.5	7.4	7.3	7.2	7.3	7	7.4	7.3	7.4	7.5	7.5	7.3	7.1	7.3	7.1
Conductivity (µS/cm)	-	315	871	695	258	419	403	545	447	519	463	218	325	165.2	390	542
COD (mg/l)	42	46	474	-	-	-	188	103	105	81	61	60	72	-	82	142
Suspended Solids (mg/l)	9	13	60	11	8	20	82	21	34	24	8	49	32	13	117	82
Mineral Oils (µg/l)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ammonia-N (mg/l)	-	-	-	-	-	-	3.4	8.1	6.9	10	6.8	0.96	-	-	-	-

The results of the quarterly Storm Water monitoring events are presented in Table 6.7, below

**Table 6-7: Quarterly Storm Water Results** 

Donomotor	Quarter 1	Quarter 2	Quarter 3	Quarter 4
Parameter	Report – ECS4162	Report – ECS4240	Report – ECS4291	Report – ECS4367
pH (pH Units)	7.3	7.5	7.4	8.1
Conductivity (µS/cm)	563	218	199.35	834
On-site Inspection	Cloudy / Grey in colour, Few suspended solids	Cloudy in colour, some suspended solids	Cloudy in colour, few suspended solids	Cloudy in colour, some suspended solids
Odour	Slight odour	Slight odour	Slight effluent odour	No odour
COD (mg/l)	122	60	85	56
Suspended Solids (mg/l)	23	49	67	108
Mineral Oils (μg/l)	<10	<0.010	<0.010	<0.010
Ammonia-N (mg/l)	4.48	0.96	0.1	0.16

Table 6.8 below contains the monthly and quarterly results for the Emissions to Sewer samples and the emission limits are specified in accordance with Schedule B.3 of the Waste Licence W0240-01.

Table 6-8: Average Monthly and Quarterly Emission to Sewer Results

Parameter	Emission Limit Values	Feb 2012	Quarter 1 ECS4162	April 2012	May 2012	Quarter 2 ECS4240	July 2012	Quarter 3 ECS4291	Sept 2012	Quarter 4 ECS4367	Nov 2012	Dec 2012
pH (pH Units)	6 to 10	5.8	7.1	5.4	5.7	5.8	6.9	6.8	7	6.6	6.9	6.6
On-site Visual Inspection	-	-	Brown in colour, few suspended solids	-	-	Black in colour, some suspende d solids	-	Dark brown / grey in colour, some suspended solids, oily sheen on surface	-	Dark brown colour, high suspended solids, oily sheen.	-	-
Odour	-	-	Slight odour	-	-	Slight odour	-	Oily odour	-	Oily odour	-	-
COD (mg/l)	3000	1,470	941	7,240	3,645	4,605	819	555	1,070	1,137	345	842
BOD (mg/l)	1000	-	505	-	-	2,550	449	262	-	470	-	-
Suspended Solids (mg/l)	1000	149	206	638	230	1,083	177	115	375	364	174	384
Sulphates (mg/l)	500	-	180.93	-	-	209	104	114	-	64	-	-
Detergents (mg/l)	100	-	0.18	-	-	0.09	0.11	0.18	-	0.14	-	-
Oils, Fats & Greases (mg/l)	100	-	7	-	-	166	11	6	-	32	-	-
Ammonia-N (mg/l)	50	-	38.00	•	120	76.00	37	5.4	-	6.2	-	-
Phosphates (mg/l)	-	-	1.09	-		4.10	0.88	<0.16	-	0.43	-	-
Mineral Oils (µg/l)	-	-	<10	-		3.420	<10	<10	-	1720	-	-

#### 6.4 Tank and Pipeline Testing & Inspection Reports

In accordance with the requirements of the company's Waste Licence (W0240-01) AES is required to conduct a bund integrity test, as stated under Condition 6.9.

Condition 6.9 of the Waste Licence states:

"The integrity and water tightness of all underground pipes, tanks, bunding structures and containers and their resistance to penetration by water or other materials carried or stored therein shall be tested and demonstrated by the licensee within six months of the date of grant of this licence. The testing shall be carried out by the licensee at least once every three years thereafter and reported to the Agency on each occasion. This testing shall be carried out in accordance with any guidance published by the Agency. A written record of all integrity tests and any maintenance or remedial work arising from them shall be maintained by the licensee".

Integrity and Water tightness testing of underground pipes, tanks and containers was carried out as part of the upgrade of the drainage system on site which was completed in February 2010. The Construction Quality Assurance Validation Report for these specified engineering works was submitted to the Agency on the 5<sup>th</sup> of August 2010.

Integrity Testing of the following bunds was carried out on the 28<sup>th</sup> November to the -15<sup>th</sup> December 2012 and found to be compliant (Report Ref; ECS4377).

1. Diesel Storage Bund

The next bund integrity test is due to be carried out in the 2015 reporting period.

## 6.5 Environmental Management Programme

The EPA issued Advanced Environmental Solutions (Ireland) Ltd. with a Waste Licence for its Waste Transfer Station at Springfort Cross, Nenagh, Co. Tipperary on 29th July 2009. The Certification of Accreditation of EMS to ISO 14001 standards was granted in 2010.

In Table 5.2: Proposed Schedule of Objectives and Targets for 2012, monthly Environmental Management System meetings will be undertaken along with an ongoing review of procedures, objectives & targets, and aspects register.

#### 7.0 SITE DEVELOPMENT/INFRASTRUCTURAL WORKS

#### 7.1 Current Infrastructure in Place

The facility is currently licensed to accept a maximum of 24,750 tonnes of waste per annum (10,529 tonnes of Household waste, 12,730 tonnes of Commercial waste and 1,491 tonnes of Construction and Demolition waste).

On the 30th October 2009, AES submitted a letter to the EPA Ref. Submission of Details on Duty & Standby Capacity - AES Nenagh (Reg. No. W0240-01), as per Condition 3.19.2, with details on Duty & Standby Capacity in tonnes per day, of all waste handling and processing equipment to be used at AES Nenagh. Summary details on Duty & Standby Capacity are presented in Table 7.1.

Table 7-1: Details on Duty and Standby Capacity

Waste Processing Equipment									
1	Weighbridge								
2	Excavator								
3	3 Skid Steer								
Waste cap	pability per day of 125 tonne per day or 32,500 tonne per annum.								

AES Nenagh has a contract in place with an Auto Maintenance Company, Walkers Municipal Services, to regularly inspect and service company vehicles and site machinery. The contractor visits the site twice weekly to inspect the fleet. A record of all inspections and services is maintained. A qualified mechanic is also employed on-site.

#### 7.2 Site Development Works during 2012

The Binwash area was extended during 2012 the work was completed in August of 2012.

#### 7.3 Proposed Development Works for 2013

During 2013, it is proposed that a civic amenity area will be installed on the south east corner of the site. Waste streams to be accepted include: Paper & Cardboard, Timber, Glass, Steel, Plastic, Textiles (Clothing) and Mixed Waste.

## 7.4 Review of Decommissioning Management Plan

As part of Condition 10 of Waste Licence W0240-01, AES are required to submit a Decommissioning Management Plan for the Nenagh facility to the EPA.

The objective of this Decommissioning Management Plan is to determine a plan for decommissioning, rendering safe or removing for disposal/recovery, any soil, subsoil, building, plant and/or equipment, any waste materials or substances contained therein or there on the site, that may result in environmental contamination or degradation.

The full Decommissioning Management Plan was completed in January 2010 and has been previously submitted to the Agency in the Annual Environmental Report for the year ending 2009.

#### 8.0 ENVIRONMENTAL LIABILITIES

AES (Ireland) Ltd. is a wholly owned subsidiary of Bord na Móna and has access to the reserves of its parent company.

The environmental liabilities (environmental damage and remedial actions) are those considered to be restricted to the confines of the AES Nenagh facility, therefore, any costs incurred in addressing same will be limited to the removal and safe disposal of the waste remaining onsite following an emergency event (e.g. fire or spillage event) or 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 (Ireland) Ltd. and Bord na Móna have arranged insurance cover to cover liability arising from damage to property and injury to parties as a result of sudden and unforeseen environmental impairment. AES (Ireland) Ltd. 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.

For further details please refer to Decommissioning Management Plan, previously submitted to the Agency in the Annual Environmental Report for the year 2009.

#### 8.1 Environmental Liabilities Risk Assessment Review

The Environmental Liabilities Risk Assessment Report was completed and submitted to the Agency in April 2011.

## 9.0 INCIDENTS & COMPLAINTS

## 9.1 Complaints Summary

No complaints were made during 2012 period.

## 9.2 Reported Incidents Summary

All environmental incidents are recorded at the facility. Seven incidents were recorded during the 2012 reporting period. Summary details are presented in Table 9.1

Table 9-1: Summary of Incidents

Date 9-1. Summary C	Incident Summary Details
22/03/2012 EPA Ref: W0240- 01/nc05db.	<ul> <li>Four Non-compliances were recorded during Quarter 4 report 2011:</li> <li>Exceedance of the emission limits value (ELV) for ammonia at 83 mg/l N versus ELV of 50 mg/l.</li> <li>Exceedance of the emission limits value (ELV) for Biochemical oxygen demand at 3,824 mg/l O2 versus ELV of 1000 mg/l O2.</li> <li>Exceedance of the emission limits value (ELV) for Chemical oxygen demand at 6470 mg/l O2 versus ELV of 50 mg/l O2.</li> <li>Exceedance of the emission limits value (ELV) for pH at 5.8 versus ELV range of 6 to 10.</li> <li>The Agency also noted that the COD value and the Suspended solids at the SW-1 emission to surface water point were elevated which the agency considered to be environmentally significant</li> <li>All the above non-compliances were addressed, with corrective action outlined, in correspondence from AES on 11th April 2012.</li> </ul>
07/06/13 EPA Ref: W0240-1/nc06JF	<ul> <li>One Observation and one non-compliance were found during a site visit on the 31/05/12:</li> <li>The inspectors notice that the water that was used to clean out the wheel bins was running off into twp drains which are surface water discharge drains. The inspectors state that the quality of the discharge was not acceptable due the runoff from the bin washing.</li> <li>During the inspection it was noted that the piping used to take the grab sample for the emission to sewer sample was not positioned correctly for a representative sample to be taken from this location, the pipe was moved and is now considered to be capable of taking a representative sample.</li> <li>All the above non-compliances were addressed, with corrective action outlined, in correspondence from AES on 8th June 2012.</li> </ul>
04/10/13 Dust Exceedance	<ul> <li>Dust levels at D2 location was above the ELV 599 mf/m2/day ELV limit 350mg/m2/day Monitoring dates were 16/08/12 to 17/09/12.</li> <li>The above incident was addressed with an incident form and corrective action by AES on 4th October 2012.</li> </ul>
23/10/13 Odour Incident	<ul> <li>Strong pungent odour detected after skip was emptied turned out to have contained a quantity of concentrated garlic extract</li> <li>The above incident was addressed with an incident form and corrective action by AES on 30th October 2012.</li> </ul>

## 9.3 Accident Prevention and Emergency Response

Condition 9.1 of the Waste Licence states:

"The licensee shall, within six months of date of grant of this licence, 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, within six months of date of grant of this licence, ensure that a documented Emergency Response Procedure is in place 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
- ♦ EPL 5.1 EMERGENCY CONTACT LIST.doc

These documents were previously submitted to the Agency in the Annual Environmental Report for the year 2010.

## **10.0 FACILITY MANAGEMENT**

## 10.1 Management & Staffing Structure

The Environmental Organisation and the Site organisations structure for the site are presented in Figure 10.1 and 10.2.

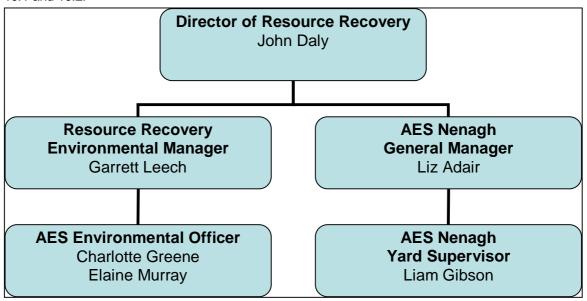


Figure 10.1: Environmental Organisation Structure

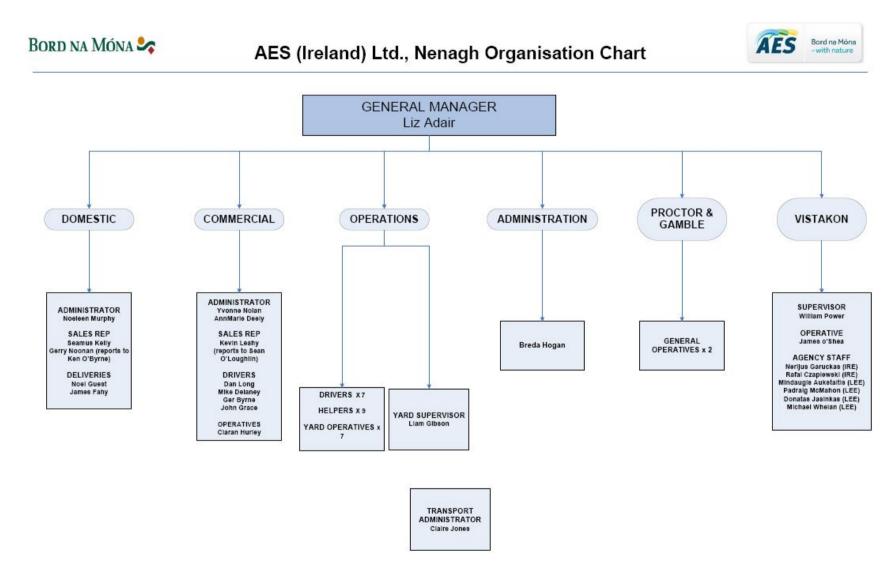


Figure 10.2: AES Nenagh Organisation Chart

## 10.2 Public Information Programme

A Public Information Program is in place for the site, namely EP 16.0 Programme for Public Information. The full details are included in the Annual Environmental Report for 2010.

## 10.3 Procedures Developed During 2012

Since the EPA issued Advanced Environmental Solutions (Ireland) Ltd. with a Waste Licence for its Waste Transfer Station at Springfort Cross, Nenagh, Co. Tipperary on 29<sup>th</sup> July 2009, an Environmental Management System was established for AES Nenagh in 2009 and received ISO14001 certification on the 14<sup>th</sup> of January, 2010. AES we audited by the NSAI in January 2013 and have retained the accreditation for another 3 years.

#### 10.4 Review of Nuisance Controls

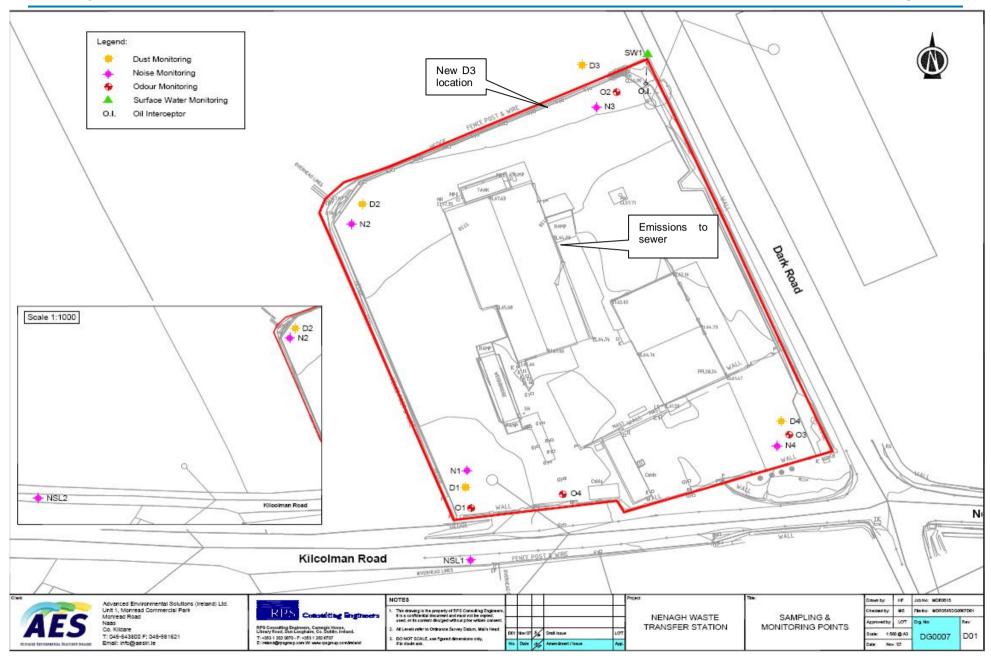
There are no nuisance/pest issues to report in 2012. AES Nenagh have a vermin control procedure in place, (Reference - WI 2.0 Site Inspection Procedure) with an associated Daily Environmental Nuisance Inspection Form (Reference - EWIF 2.2 Daily Environmental Nuisance Inspection Form). The full Procedure is included in the 2010 Annual Environmental Report submitted to the Agency in March 2011.

There are no proposed amendments for 2013 to nuisance controls.

**APPENDIX 1** 

**Drawings** 

**AES Nenagh - W0240-01** 



## **APPENDIX 2**

**Summary of Emissions and Waste Management** 

AES Nenagh – W0240-01

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4. WASTE IMPORTED/ACCEPTED ONTO SITE

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

| PRTR# : W0240 | Facility Name : Advanced Environmental Solutions (Ireland) Limited | Filename : W0240\_2012.xls | Return Year : 2012 |

## **Guidance to completing the PRTR workbook**

# **AER Returns Workbook**

	Version 1.1.16
REFERENCE YEAR	2012
1. FACILITY IDENTIFICATION	
Parent Company Name	Advanced Environmental Solutions (Ireland) Limited
Facility Name	Advanced Environmental Solutions (Ireland) Limited
PRTR Identification Number	W0240
Licence Number	W0240-01
Waste or IPPC Classes of Activity	alone name
No.	
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.
Address 1	Solsborough
Address 2	Springfort Cross
Address 3	Nenagh
Address 4	Co. Tipperary
	Tipperary
Country	Ireland
Coordinates of Location	-8.22389 52.85971
River Basin District	IEGBNISH
NACE Code	3900
Main Economic Activity	Remediation activities and other waste management services
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	
Production Volume	0.0
Production Volume Units	
Number of Installations	0
Number of Operating Hours in Year	0
Number of Employees	41
User Feedback/Comments	
Web Address	
0 PPTP 01 400 A0TIVITIES	
2. PRTR CLASS ACTIVITIES	A.C. Manua
Activity Number	Activity Name
5(c)	Installations for the disposal of non-hazardous waste
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 ?	

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

Guidance on waste imported/accepted onto site

Annual Environmental Report 2012 AES Nenagh - W0240-01

# 5. ONSITE TREATMENT & OFFSITE TRANSFERS OF WASTE

| PRTR# : W0240 | Facility Name : Advanced Environmental Solutions (Ireland) Limited | Filename : W0240\_2012.xls | Return Year : 2012 |

Please enter all quantities on this sheet in

28/03/2013 09:59

			Tonnes								<del>,</del>	3
			Quantity (Tonnes per Year)			Met	thod Used		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)
Transfer Destination	European Waste Code	Hazardo us		Description of Waste	Waste Treatment Operation	M/C/E	Method Used	Location of Treatment				
Within the Country	13 05 07	Yes	8.0	oily water from oil/water separators		M	Weighed	Offsite in Ireland	ENVA Ireland Ltd.,W0184- 01	Clonminam Industrial Estate,Portlaoise,Co. Laois,.,Ireland	ENVA Ireland Ltd.,W0184- 01,Clonminam Industrial Estate,Portlaoise,C o. Laois,.,Ireland	Clonminam Industrial Estate,Portlaoise,Co. Laois,.,Ireland
Within the Country	15 01 01	No	225.1	paper and cardboard packaging	D1	M	Weighed	Offsite in Ireland	AES Tullamore,W0104-02	Cappincur Industrial Estate, Daingean Road, Tullamore, Co. Offaly, Ireland	,,,	,,
Within the Country	15 01 02	No	132.06	plastic packaging	D1	M	Weighed	Offsite in Ireland	Leinster Environmentals,WP 2008/06	Clermont Business Park,Haggardstown,Dund alk,Co. Louth,Ireland		
Within the Country	15 01 03	No	95.8	wooden packaging	D1	M	Weighed	Offsite in Ireland	CJ SHeeran ,P0337-01	Mountrath Sawmills ,Shannon Street Mountrath,Co. Laois,.,Ireland		
Within the Country	15 01 03	No	23.5	wooden packaging	D1	M	Weighed	Offsite in Ireland	Thomas O'Neill (Timber recycling) Ltd,WFP/LK/2012/05B/R1	18 Upper William Street,Limerick,,Ireland		
Within the Country	15 01 07	No	503.26	glass packaging	D1	M	Weighed	Offsite in Ireland	Rehab Glassco Ltd,WFP- KE-08-0357-01	Unit 4 Osberstown Industrial Park,Caragh Road,Naas,Co. Kildare,Ireland		
Within the Country Within the	17 02 01	No	37.42	wood	D1	M	Weighed	Offsite in Ireland Offsite in	Thomas O'Neill (Timber recycling) Ltd,WFP/LK/2012/05B/R1 Thomas O'Neill (Grain	18 Upper William Street,Limerick,,Ireland 18 Upper William		
Country	17 02 01	No	117.86	wood	D1	М	Weighed	Ireland	Merchant) Ltd,WP LK 05(a)	Street,Limerick,.,.,Ireland		
Within the Country	17 04 07	No	134.18	mixed metals mixed construction and demolition wastes other than	D1	M	Weighed	Offsite in Ireland	Hegarty Metal Recycling Ltd.,WFP-LKC-11-001-01	Ballysimon Road,Limerick,.,.,Ireland		
Within the Country	17 09 04	No	45.6	those mentioned in 17 09 01, 17 09 02 and 17 09 03	D1	M	Weighed	Offsite in Ireland	John O'Dwyer - Construction Thurles Ltd,WP TN 16	Bord na Crusha, Thurles, Co. Tipperary, Ireland		
Within the Country	20 01 08	No	700.4		D1	M	Weighed	Offsite in Ireland	Acorn Recycling,W0249-01	Archerstown Industrial Estate, Thurles, Co. Tipperary, Ireland		
Within the Country	20 01 08	No	110.26	biodegradable kitchen and canteen waste	D1	М	Weighed	Offsite in Ireland	Miltown Compostng Ltd,W0270-01	Milltown More & Moorstown,Fethard,Co. Tipperary,.,Ireland		

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				biodegradable						Killinagh
Within the				kitchen and				Offsite in	Drehid Waste Management	Upper,Carbury,Co.
Country	20 01 08	No	92.22	canteen waste	D1	M	Weighed	Ireland	Facility,W0201-03	Kildare,.,Ireland
Within the								Offsite in	Hegarty Metal Recycling	Ballysimon
Country	20 01 40	No	26.71	metals	D1	М	Weighed	Ireland	Ltd.,WFP-LKC-11-001-01	Road,Limerick,,Ireland
	2001.10	. 10	20.1 1		_5.				·	
Within the	00 00 04	NIa	50.04	mixed municipal	D4	N.4	Mainhad	Offsite in	Clonmel Waste Disposal	Lawlesstown, Clonmel, Co.
Country	20 03 01	No	58.84	waste	D1	M	Weighed	Ireland	Ltd,WFP-TS-11-0001-01	Tipperary,,,Ireland
NAME I AL								0""	5 111111 . 11	Killinagh
Within the				mixed municipal				Offsite in	Drehid Waste Management	Upper,Carbury,Co.
Country	20 03 01	No	4133.26	waste	D1	M	Weighed	Ireland	Facility,W0201-03	Kildare,,,Ireland
										Clonsoughy
										Kyleclonhobert
Within the				mixed municipal				Offsite in	Kyletalesha Landfill Laois	,Portlaoise,Co.
Country	20 03 01	No	1935.24	waste	D1	M	Weighed	Ireland	Co. Co.,W0026-03	Laois,.,Ireland
										Merrywell Industrial
										Estate, Ballymount
Within the				mixed municipal				Offsite in	Oxigen Environmental	Road,Ballymount ,Dublin
	20 02 01	No	E20.26	•	D1	N.A	Woighod			
Country	20 03 01	No	528.26	waste	D1	M	Weighed	Ireland	Ltd,W0208-02	22,Ireland
Within the				mixed municipal				Offsite in	Gortadroma Landfill Site	Gortadroma, Ballyhahill, Li
Country	20 03 01	No	5702.4	waste	D1	M	Weighed	Ireland	Limerick Co. Co.,W0017-04	merick,.,Ireland
										Rathdrinagh, Beauparc
Within the				mixed municipal				Offsite in	Nurendale Ltd. T/A Panda	Navan,Co.
Country	20 03 01	No	881.96	waste	D1	M	Weighed	Ireland	Waste Services, W0140-04	Meath,.,Ireland
· ·									Padraic Thornton Waste	
										Unit S3B ,Henry
AAP de la class								Official	Disposal Ltd. T/A Thorntons	Road, Park West
Within the	00 00 04	NI.	400.0	mixed municipal	D4		Martalia al	Offsite in	Recycling,WFP-KE-10-	Business
Country	20 03 01	No	408.9	waste	D1	M	Weighed	Ireland	0061-01	Park, Dublin, Ireland
										Proudstown
Within the				mixed municipal				Offsite in	Midland Waste Disposal Ltd	Road, Clonmagadden
Country	20 03 01	No	623.52	waste	D1	M	Weighed	Ireland	(AES Navan),W0131-02	Navan,Co Meath,.,Ireland
•										Killinagh
Within the				mixed municipal				Offsite in	Drehid Waste Management	Upper,Carbury,Co.
Country	20 03 01	No	174.26	waste	D1	M	Weighed	Ireland	Facility,W0201-03	Kildare,.,Ireland
										Clonsoughy
										Kyleclonhobert
Within the				mixed municipal				Offsite in	Kyletalesha Landfill Laois	,Portlaoise,Co.
Country	20 03 01	No	1868.86		D1	М	Weighed	Ireland	Co. Co.,W0026-03	Laois,.,Ireland
Country	20 03 01	140	1000.00	Wasic	Di	IVI	Weighted	IICIAIIA	00. 00.,00020 00	
										Merrywell Industrial
										Estate,Ballymount
Within the				street-cleaning				Offsite in	Oxigen Environmental	Road,Ballymount ,Dublin
Country	20 03 03	No	34.04	residues	D1	M	Weighed	Ireland	Ltd,W0208-02	22,Ireland
Within the				mixed municipal				Offsite in	Gortadroma Landfill Site	Gortadroma, Ballyhahill, Li
Country	20 03 01	No	1620.46	waste	D1	M	Weighed	Ireland	Limerick Co. Co.,W0017-04	merick,.,Ireland
			. 3200				3	- J	2 2 2 2 2 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	
										Cappancur Industrial
NAME OF STREET								0" "		Estate, Daingean Road
Within the				mixed municipal				Offsite in		Tullamore,Co.
Country	20 03 01	No	3794.32	waste	D1	M	Weighed	Ireland	AES Tullamore ,W0104-02	Offaly,.,Ireland
										Cappancur Industrial
										Estate, Daingean Road
Within the				mixed municipal				Offsite in		Tullamore,Co.
Country	20 03 01	No	761.57	waste	D1	M	Weighed	Ireland	AES Tullamore ,W0104-02	Offaly,,,Ireland
Country	20 00 01	140	701.37	wasio	<i>D</i> 1	171	vvoigneu	ITCIATIO	ALO Taliamore, VVOTO4-02	Killinagh
Within the				mixed municipal				Offsite in	Drehid Wasta Management	
Within the	20.02.04	No	000.04	mixed municipal	D1	N/I	Maiahad		Drehid Waste Management	Upper,Carbury,Co.
Country	20 03 01	No	260.94	waste	D1	M	Weighed	Ireland	Facility,W0201-03	Kildare,,Ireland
									Padraic Thornton Waste	Unit S3B ,Henry
									Disposal Ltd. T/A Thorntons	Road, Park West
Within the				oily water from				Offsite in	Recycling,WFP-KE-10-	Business
Country	13 05 07	Yes	5.64		D1	M	Weighed	Ireland	0061-01	Park, Dublin, Ireland
,							<b>J</b>			

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