ANNUAL ENVIRONMENTAL REPORT

AES TULLAMORE WASTE TRANSFER STATION

JANUARY 2011
THROUGH
DECEMBER 2011

Waste Licence Registration Number: W0104-02

Licensee: Advanced Environmental Solutions (AES) Ireland Ltd

Location of Activity: Cappincur, Tullamore, County Offaly

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

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ANUA
Bord na Móna - with nature

AES

REVISION CONTROL TABLE

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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 AES Tullamore Waste Transfer Station in Cappincur, Tullamore, Co. Offaly to the Environmental Protection Agency. The report covers the annual reporting period of 2011.

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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 Cappincur Industrial Estate, Tullamore, Co. Offaly on 5th October 2009. The Waste Licence reference number is W0104-02.

The facility is currently licensed to a maximum of 50,000 tonnes of waste per annum.

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

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

ANUA Environmental was commissioned to prepare and submit the Annual Environmental Report (AER) for the facility in compliance with Condition 11.7 of the Waste Licence. This report addresses Condition 11.7 of the Waste Licence for the facility.

This report addresses Condition 11.7 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 E: Annual Environmental Report of this license and shall be prepared in accordance with any relevant guidelines issued by the Agency''.

This report addresses the items listed in Schedule E: Annual Environmental Report of the Waste License for the facility. This AER covers the reporting period from 1st Jan. 2011 up to 31st December 2011.

1.1 Site Description and Activities

AES operates a Waste License (W0104-02) for its Waste Transfer Station at Cappincur Industrial Estate, Tullamore, Co. Offaly. 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.

The site is located in the Cappincur Industrial Estate towards the east of Tullamore town, off the L-02025 road to Daingean – Figure 1.1.

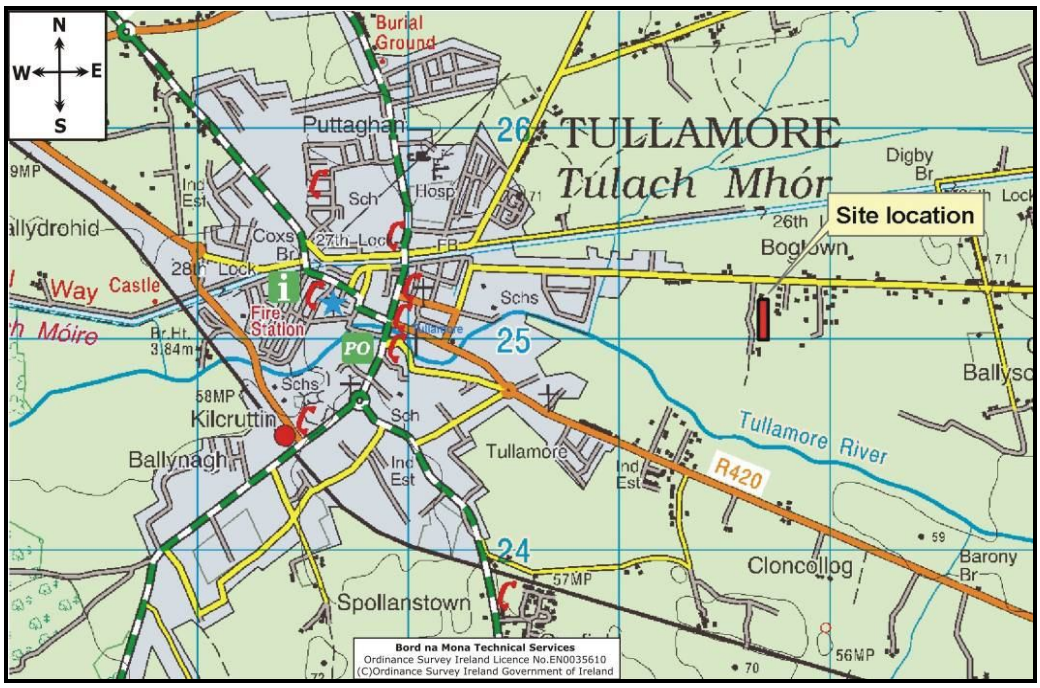


Figure 1.1 Site location map of the AES facility, Tullamore, Co. Offaly.

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 07:00 to 23:00 Monday to Saturday inclusive. Waste is not accepted at the facility on Sundays or Bank Holidays.

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 waste quantities accepted on-site. Details including the waste type, EWC code, vehicle registration number, and customer are recorded on the system as per the requirements of Condition X of the waste licence.

After weighing, waste loads are brought to the enclosed 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, W0104-02. Different waste streams are accepted to different parts of the building to maximise the sorting and segregation of waste types. For example mixed dry recyclables are accepted into the recycling processing building which is accessed from the south-western end of the building. Mixed Solid waste (MSW) and commercial skip waste is deposited in the waste processing building and accessed through the north-eastern entrance.

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 Processing Building 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. The categories of waste deemed suitable for segregations and recycling is dependent on available markets for such materials. Materials commonly accepted for recycling include; steel & iron, cardboard & newsprint, timber, soil & stone (suitable for backfill material), green waste, plasterboard, plastics, glass and occasional empty gas cylinders.

Household mixed dry recyclables are collected by AES and accepted at the facility, where the waste is segregated by mechanical and manual means into various waste streams. Bulked recylcate is then forwarded off-site for further recycling/reprocessing 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 is subsequently transported for authorised disposal. All outgoing waste being transported from the facility is weighed and recorded at the weighbridge. An individual weigh docket is printed for each waste load which records the waste type, EWC, vehicle registration, time & date, and onward waste destination.

2.0 EMISSIONS FROM THE FACILITY

Emissions as per Schedule B of the Waste License, W0104-02. Surface-water, ground-water, dust and noise monitoring results are discussed in Section 6 of this report.

Foul water produced at the facility is tankered off site for final disposal. A total of 541.65 tonnes was tankered off site during the 2011 reporting period.

3.0 WASTE MANAGEMENT RECORD

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

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

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

3.1 Waste Activities carried out at the Facility.

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

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

Class 11 Blending or mixing prior to submission of any activity referred to in a preceding paragraph of this Schedule.

Class 12 Repacking prior to submission to any activity referred to in a preceding paragraph of this Schedule.

Class 13 Storage prior to submission to any activity referred to in preceding paragraph of this Schedule, other than temporary storage, pending collection, on the premises where the waste concerned was produced.

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

Class 2 Recycling or reclamation of organic substances which are not used as solvents (including composing and other organic processes) (P).

Class 3	Recycling or reclamation of metals or metal compounds:
Class 4	Recycling or reclamation of other inorganic materials:
Class 11	Use of waste obtained from any activity referred to in a preceding paragraph of this Schedule:
Class 12	Exchange of waste for submission to any activity referred to in a preceding paragraph of this Schedule.
Class 13	Storage of waste intended for submission to any activity referred to in a preceding paragraph of this Schedule, other than temporary storage, pending collection, on the premises where such waste is produced:

3.2 Waste Quantities and Composition.

A summary of incoming wastes accepted at the facility in 2011 is shown in Table 3.1 below while outgoing waste (sent for onward processing/recovery/disposal) is shown in Table 3.2 overleaf.

Table 3.1: Incoming Waste to AES Tullamore Waste Transfer Facility 2011

EWC Code	Incoming Waste (Tonnes)
150101 BC – Bailed Cardboard	5337.773
150101 C – Loose Cardboard	901.908
150101 MX –Mixed Paper & Cardboard	374.798
150102 PL – Plastic Packaging	1136.814
150104 – Metallic Packaging	1.56
150105 -	9.22
150106 – Mixed Paper	22.94
150107 – Glass Packaging	487.5
070514 – solids wastes from MFSU of pharmaceuticals	13.37
170102 –Bricks	11.66
170201 – Wood from C&D	587.13
170407 – Mixed Metals	679.33
170504– Soil and Stones	32.28
170802 – Gypsum-based construction materials other than those mentioned in 17 08 01	19.13
170904 – Mixed C&D wastes other than those in 17 09 01, 17 09 02, 17 09 03	2165.71
180104 – wastes whose collection and disposal is not subject to special requirements in order to prevent infection (eg: dressings, plaster casts, linen, disposable clothing, diapers)	224.32
190503 – Off-Specification Compost	242.43
191210 – Combustible Waste (refuse derived fuel)	117.7
191212 – Other wastes (including mixtures of materials) from mechanical treatment of wastes other than those mentioned in 19 12 11	70.1
200101NP – Newsprint	571.67
200102 – Domestic Glass	2.46

Table 3.1 continued: Incoming Waste to AES Tullamore Waste Transfer Facility 2011	
EWC Code	**Incoming Waste (Tonnes)**
200139 HPL – Hard plastics	111.78
200201 – Garden Waste	26.26
200301 C – Commercial Mixed Municipal Waste	11964.86
200301 D – Domestic Waste	6369.58
200301 K – Kerbside Blue Bin Contents	23492.61
200307 – Bulky Waste	0.65
Grand Total	**54,975.53**

Table 3.2 Outgoing Waste Recovered / Disposed from AES Tullamore Waste Transfer Station				
EWC Code	**Outgoing Waste**	**Destination Name**	**Destination Address**	**License No.**
150101BC	76.28	International Recycling	Heath House, 5 Woolgate Court, st Benedicts st., Norwich, England. NR2 2AP.	
	173.68	Irish Packaging Recycling	Ballymount Road, Walkinstown, Dublin 12	WPR 021/02
	6,510.01	(MLM)ACM Europe (UK)	Adamson House, Towers Bus.Pk. Wilmslow Rd., Didsbury, Manchester, UK. M20 2YY	
150102BPL	1052.7	Asia Global Trade Ltd	Suite 5, 30 lancaster Gate London, W2 3PL	
	551.09	Alternate Waste Solutions	Unit 2, Britannia Bus Pk., Point Plesant Ind, Est. Wallsend, Tyne & Wear	EA.WML/73274
	220.86	Cherry Polymers	Unit 5, Nutts Corner Business pk., Dundrod rd. Crumlin Co. Antrim BT294SR	WMEX01/31
	107.28	Dannelle	Tinypark, Quinagh, Co. Carlow	WP01/08
	122.20	International Recycling	Heath House, 5 Woolgate Court, St Benedict's Street, Norwich NR2 4AP UK	
	14.08	JFC Plastics	Weir Rd., Tuam, Co. Galway	
	429.06	Leinster Environmental	Clermont Business Park, Haggardstown, Dundalk, Co. Louth	WP2008/06
	0.52	Polymer Recovery	Portarlington Ind Est, East Canal Rd, Portarlington, Co. Laois	WFP-LS-09-0007-01
	329.52	PEUTE Paper Recycling	Baanhoekweg 4, 3313 LA Dordrecht, Holland	OPK 2002
	508.92	Shabbra	Killycard Industrial Est., Castleblaney, Co. Monaghan	WFP 08-0022-01
	71.34	Weirwaste W.E.R.S	Tuam Business Park, Weir Road, Tuam, Co. Galway	WCP-MO-09-0608-02
	187.48	WRC Recycling	Auchans Farm, Johnstone, Renfrewshire, PA6 7EE Scotland	
150104	664.98	Hammond Lane	Garrycastle, Athlone, Co. Westmeath	WP173-2008
	29.74	Tandom metallurgical Group	Congleton, Cheshire, England.	
150106	620.94	Boost Recycling	47 Swaffham Rd., Burwell Cambridge,UK. CB25 0AN	
	609.42	Cellmark	Benelux BV, Heuel 7, NL 5664, Geldrop, Netherlands	
	24.80	Eastbound	Troon, Scotland. KA109AQ	
	2147.46	N.N.VOPC	Merksplas, Antwerp, Belgium	
	12514.92	PEUTE Paper Recycling	Baanhoekweg 4, 3313 LA Dordrecht, Holland	OPK 2002
150107	18.64	John Gannon & Sons	Hazelwood, Kilbeggan, Co Westmeath,Ireland	
	384.66	Glassco	Unit 4 osberstown Ind Est, Naas, Co. Kildare	WFP-KE-08-0357-01
150109	0.38	Textile Recycling	504A Grants Drive, Greenogue Ind Est, Dublin 24	
170107	299.46	Drehid WMF	Killinagh Upper, Carbury, Co. Kildare	W0201-03
170201	751.11	Thornton Waste Disposal	Killeen Rd. Ballyfermot, Dublin 10	W0044-02
170407	653.94	Erin Recycling	Deepwater Quay, Finisklin, Sligo Harbour, Co. Sligo	WPSO-08-93
	61.56	Hammond Lane	Garrycastle, Athlone, Co. Westmeath	WP173-2008

Table 3.2 Contd. Outgoing Waste Recovered / Disposed from Cappincur Waste Transfer Station				
EWC Code	**Outgoing Waste**	**Destination Name**	**Destination Address**	**License permit**
170501	34.90	Drehid WMF	Killinagh Upper, Carbury, Co. Kildare	W0201-03
170802	12.74	Gypsum Recycling Ireland	Millennium Hse, Tullamore, Co. Offaly	WMP-238/006
170904	591.88	AES Navan	Proudstown Road, Navan, Co. Meath	W0131-02
	1118.03	AES Portlaoise	Kyletalesha, Portlaoise, Co. Laois	W0194-02
	308.42	Derryclure Landfill	OCC, Derrylure, Portlaoise Rd., Tullamore, Co. Offaly	W0029-02
	15.10	Drehid WMF	Killinagh Upper, Carbury, Co. Kildare	W0201-03
190503	61.54	AES Portlaoise	Kyletalesha, Portlaoise, Co. Laois	W0194-02
	45.82	O'Toole Composting	Ballintrane, Fennagh, Co. Carlow, Ireland	WP 01-07
191212	24.66	Greenstar	Millennium Business Park, Grange, Ballycoolin,	W0183-01
	2568.46	Greyhound	Crag Avenue, Clondalkin Ind Est., Dublin 22	W0205-01
	210.76	Laois Landfill	Kyletalesha, Portlaoise, Co. Laois	W0026-03
200101	25.70	Cellmark	Benelux BV, Heuel 7, NL 5664, Geldrop, Netherlands	
	91.56	Erin Recyclers Ltd	Deepwater Quay, Finisklin, Sligo Harbour, Co. Sligo	WPSO-08-93
	435.48	Failand Paper services Ltd.	11 Triangle South, Clifton, Bristol UK BS8 1EY	
	31.52	Irish Packaging Recycling	Ballymount Road, Walkinstown, Dublin 12	WPR 021/02
200135	0.78	KMK Metals Recycling	Cappincur Industrial Estate, Daingean Road, Tullamore, Co Offaly	W0113-03
200139	16.82	JFC Plastics	Weir Rd, Tuam, Co. Galway	
	101.92	Leinster Environmental	Clermont Business Park, Haggardstown, Dundalk, Co. Louth	WP2008/06
	1.38	Polymer Recovery	Portarlington Ind Est, East Canal Rd, Portarlington, Co. Laois	WFP-LS-09-0007-01
200201	20.44	BNM Kilberry	Kilberry, Co. Kildare	W0198-01
200301	16248.58	Drehid WMF	Killinagh Upper, Carbury, Co. Kildare	W0201-03
	4362.16	Laois Landfill	Kyletalesha, Portlaoise, Co. Laois	W0026-03
	178.40	Oxigen Environmental Ltd	Merrywell Ind Est, Ballymount, Dublin 18.	W0208-02
200303	15.56	Drehid WMF	Killinagh Upper, Carbury, Co. Kildare	W0201-03
Grand Total	**55,659.64**			

4.0 RESOURCE AND ENERGY CONSUMPTION

4.1 Resource Consumption Summary

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.

The total gasoil for the facility , including plant and heating oil was 11654 Litres.

The total electrical consumption at the site was 82,200 kWh during the reporting period. During the same period the total volume of wastewater that was tankered offsite to a Wastewater Treatment Facility was 541.65 tonnes.

4.2 Energy Efficiency Audit Report Summary

To comply with Condition 7.1 of the Waste Licence an Energy Efficiency Audit Report was submitted to the EPA during 2009. In 2011, the findings of the report were implemented, where feasible. Please refer to the Progress against Targets for 2011 in Table 5.1 for more details.

4.3 Raw Materials Consumption & Waste Energy.

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

5.0 ENVIRONMENTAL OBJECTIVES & TARGETS

5.1 Progress against Targets for 2011

Details on progress made against the Targets for 2011 are presented in Table 5.1.

Table 5.1: Progress against Targets for 2011

Ref.	Objective	Target	Progress
1	Training & Environmental Awareness	Continue roll out of EMS procedures to staff and contractors at AES Tullamore.	Achieved and on-going
2	Environmental Management System	To maintain EMS to ISO 14001 standard	On-Going
3	Energy Efficiency Audit	To review the Energy Efficiency Audit report and implement findings to reduce energy usage at the facility	Findings have been reviewed and selected measures have been implemented.
4	Dust Suppression	To install a dust suppression system inside the waste transfer building	Ongoing
5	Vehicle Record	Manvik to take over AES Fleet maintenance, ensure records are maintained on ViewWise	Not yet implemented. Ongoing.
6	Upgrading Materials Sorting Equipment	To investigate to upgrade of sorting equipment	Not feasible due to space restrictions within processing building. To be reviewed in the future
7	Roll out of Brown Bin	To continue the roll out of the 3 bin system	Complete in Westmeath, Athlone, Moate, Mullingar. Other areas under investigation
8	Vehicle Re-Routing	Re-routing of waste collection routes to improve efficiency	Re-routing is an ongoing objective
9	Glass Bin	Roll out of a glass bin collection service to be trialled in Tullamore town	Achieved
10	Review Nuisance Controls	Review controls on site for litter, dust, vermin	On-Going
11	On-site Waste Reduction	Continue to encourage on-site recycling, and recycling office waste	On-Going
12	Vehicle Safety/Enviro Procedures	Review the safety and environmental procedures in place in relation to vehicles	Achieved

5.2 Schedule of Objectives and Targets for 2012

Table 5.2: Proposed Schedule of Objectives and Targets for 2012

Ref	Objective	Target	Timescale	Response	Status
1	Environmental Management System	To Maintain EMS to ISO 140001 Standard	On-Going	Team PH/CG/HB/COB/MS	On-Going
		Conduct monthly EMS meetings	Apr-12		To maintain momentum for EMS team
2	Energy Efficiency Audit	Review the Energy Efficiency Audit report & implement findings to reduce energy usage	May-12	PH/CG	On-Going
3	Roll out of Brown Bin	To continue the roll out of 3 bin system	On-Going	PH	On-Going
4	Vehicle Re-routing	Re-routing of waste collection routes to improve efficiency	On-Going	COB	On-Going as new customers join AES
5	Glass Bin	Roll out of glass bin collection service to be trialed in Mullingar town	May-12	PH	On-Going
6	Minimise Dust Nuisance offsite	Erect Netting around perimeter fencing	Jun-12	PH	On-Going
7	On-site waste reduction	Continue to encourage on-site recycling, recycling office waste	Dec-12	Team	On-Going
8	Ensure Compliance with Waste Licence	Review Waste licence to accommodate increased tonnages at the facility	Dec-12	PH/CG	Duty Capacity Study commissioned January 2012. Use findings to assist in compiling a proposal to carry out review of Licence to increase the tonnage though-put at facility

A report on the progress against the proposed Objectives and Targets for 2012 will be presented in the AER in 2012.

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, W0104-02. The following sections 6.1 to 6.3 present the results of monitoring for the year 2011.

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

1) Noise Quarterly
2) Dust Deposition Three times per year
3) Groundwater Quarterly
4) Surface-water Quarterly

Sections 6.0 present a summary of the Environmental Management Programme. These sections review the reports on the previous year (2011) and present proposals for the current year (2012).

6.1 Noise Monitoring Report Summary

In compliance with the requirements of the Waste License, W0104-02, noise monitoring at the Cappincur Waste Transfer Station was undertaken on a quarterly basis. This changed during October 2011, following correspondence between the Agency (EPA) and AES (Ref: W0104-02/AP061D), which confirmed that is was satisfactory to conduct noise monitoring on an annual basis. It was for this reason that quarter 4 noise monitoring was not undertaken at AES Tullamore. Monitoring was carried out on the 6th January (ECS3819), 21st April (ECS3929), and 15th July 2011 (ECS3979). 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	Location
N1	Boundary	North Western corner of site beside the main entrance
N2	Boundary	North Eastern corner of site beside the workshop
N3	Boundary	South Eastern corner at the back of the site.
N4	Boundary	South Western Corner at the back of the site beside the dog pound
NSL	Noise Sensitive Location	Private dwelling, attached to petrol station, on opposite side of main road, 300m from AES site.

Table 6.2 below shows the LAeq recorded at each monitoring location for each of the three monitoring events carried out during 2011.

Table 6.2 Noise Monitoring Results

Report Ref		**ECS3819**	**ECS3929**	**ECS3979**
Location	**Duration (mins)**	**6th January**	**21thApril**	**15th July**
		LAeq dB	**LAeq dB**	LAeq (dB)
N1	30	**64**	**60**	**60**
N2	30	**62**	**61**	**60**
N3	30	51	**57**	**56**
N4	30	55	**62**	**61**
N5 (NSL)	30	55	51	52

Note 1: Results highlighted in bold represent exceedence of Waste Licence limits (55dB(A)).

Noise exceedences of the EPA guideline limit (55 dB(A)) were noted at locations N1 & N2 for all monitoring events. As these locations are to the front of the site the primary cause of these exceedences may be attributed to heavy traffic on the nearby Tullamore Bypass adjacent Daingean Road.

Noise exceedences of the EPA guideline limit (55 dB(A)) were noted at locations N3 & N4 for most monitoring events. These locations are situated at the rear of the site. Primary contributors to these excedences were; traffic entering/exiting the rear of the site, traffic on the Tullamore bypass and dog barking from the nearby dog pound.

The dominant source of noise detected at the NSL was passing traffic (cars, vans, jeeps and lorries). Tonal noise was not detected during any of the monitoring events. Activity within the AES facility is not audible from this monitoring location during any of the monitoring events.

6.2 Ambient monitoring Report Summary

In compliance with the requirements of the Waste License, W0104-02, dust monitoring at the Tullamore Waste Transfer Station was carried out three times during the 2011 reporting period. There are four dust monitoring locations on site, detailed in Table 6.3, and the locations are indentified in Appendix 1

Table 6.3 Dust Monitoring Locations	
Sample Name	**Location**
D1	North western corner of the facility
D2	North eastern corner of facility
D3	South western corner of facility
D4	South eastern corner of the facility

Four dust sample jars were installed for a 29 day period; 6th Jan. – 4th Feb (Round 1), for a 31 day period 10th May – 10th June (Round 2) and finally for a 31 day monitoring period 5th July – 5th August (Round 3). The results for the monitoring are presented in Table 6.4 below.

Table 6.4: Dust Monitoring Results (mg/m^2/day)				
Report Ref.		**ECS3819**	**ECS3929**	**ECS3979**
Monitoring Location	**Depositional Dust Limit**	**Deposition Rate 6th Jan - 4th Feb**	**Deposition Rate 10th May -10th Jun**	**Deposition Rate 5th Jul - 5th Aug**
		Round 1	**Round 2**	**Round 3**
D1	350	134	167	189
D2	350	290	**544**	189
D3	350	93	217	78
D4	350	134	**2704**	128

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

As can be seen in Table 6.4, there were no exceedences noted for the January / February and July / August. depositional dust monitoring events.

During the May/June monitoring event, location D2 (544 mg/m^2/day) exceeded the license limit. This exceedence was attributed to passing traffic on the Tullamore Bypass (120m approx.) and Tullamore Daingean Road (12m approx). This dust sample jar was not screened from these nearby roads and was therefore subject to dust created from grit particles becoming entrained in tyres of passing vehicles.

During the May/June monitoring event, location D4 received an extremely elevated result (2,704mg/m^2/day). This result is not deemed representative of dust emissions from site at this location as the sample jar was heavily contaminated with green algae growth which had formed dark green globules of algal solids within the dust jar.

6.3 Groundwater Monitoring Report Summary

In accordance with the requirements of the company's Waste Licence, W0104- 02, AES are required to conduct monitoring of the Groundwater underlying the Tullamore facility on a quarterly basis. Monitoring was carried out at the three monitoring locations detailed in Table 6.5 and outlined in monitoring map attached in Appendix 1.

TABLE 6.5: LOCATION OF GROUND WATER SAMPLING WELL

Sample Point	Location	Grid Reference
GW-1	North-east corner of site	235683 E 225122 N
GW-2	South-east corner beside bin storage area	235717 E 225243 N
GW-3	South-west beside loading bay	235648 E 225156 N

Groundwater monitoring was undertaken on 10th January (ECS3819), 10h May (ECS3929), 5th July (ECS3979) and 20th October (ECS4027) and the results are presented in Table 6.6.

Table 6.6 Groundwater Monitoring Results 2011					
GW-1					
This well became damaged at the start of 2011 and was therefore not sampled. A new well wa drilled during February 2012 to replace the old damaged well.					
GW-2					
Report Ref.	**ECS3819**	**ECS3929**	**ECS3979**	**ECS4027**	**GTV's** [Note1]
Parameter	**Round 1**	**Round 2**	**Round 3**	**Round 4**	
pH (pH units)	7.4	7.42	7.34	7.4	***6.5-9.5***
Temperature (^{o}C)	11.0	10.2	11	12.1	-
Odour	Faint Odour	Faint Odour	No Odour	No Odour	-
Conductivity (µS/cm)	627	646	721	580	***800-1875***
Ammonia as N (mg/l)	0.12	**0.14**	0.11	0.08	***0.05-0.136****
DRO (µg/l)	<10	<10	<10	<10	-
Mineral oil (µg/l)	-	-	<10	<10	-
GW-3					
Report Ref.	**ECS3819**	**ECS3929**	**ECS3979**	**ECS4027**	GTV's [Note1]
Parameter	**Round 1**	**Round 2**	**Round 3**	**Round 4**	
pH (pH units)	7.4	7.47	7.37	7.3	***6.5-9.5***
Temperature (^{o}C)	11.5	11.7	13.8	12	-
Odour	No Odour	No Odour	No Odour	No Odour	-
Conductivity (µS/cm)	593	543	539	537	***800-1875***
Ammonia as N (mg/l)	0.05	0.06	0.03	0.02	***0.05-0.136****
DRO (µg/l))	<10	<10	<10	<10	-
Mineral oil (µg/l)	-	-	<10	<10	-

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

Note 2 : Results highlighted in bold represent exceedences of Waste Licence limits.

The results of the quarterly groundwater monitoring events indicated a slightly elevated concentration of Ammonia (0.14mg/l) at GW2 above its respective GTV (0.05-0.136mg/l) during round 2 monitoring conducted on the 10th May 2011. All remaining parameters tested for each monitoring event were within their respective GTV's.

6.4 SURFACE-WATER MONITORING REPORT SUMMARY.

In accordance with the requirements of the Waste Licence, W0104-02, the facility is required to conduct monitoring of surface-water on a quarterly basis. Surface water is sampled at one location as detailed in Table 6.7 below and included in Appendix 1 (map of monitoring locations).

Table 6.7 Surface water monitoring location

Monitoring Location	Description
SW-1 (Formerly SW-2)	South west corner of facility (Discharge Point) (Southern Boundary)

Surfacewater monitoring was undertaken on 18th February, 10th May, 5th July and 20th October 2011 and the results are presented in Table 6.8.

Table 6.8 Surface Water Monitoring Results.(SW-1)

Parameter	Quarter 1 18th Feb	Quarter 2 10th May	Quarter 3 5th Jul	Quarter 4 20th Oct	Waste licence Discharge limit Note 1
Report Ref.	**ECS3819**	**ECS3929**	**ECS3979**	**ECS4027**	
pH (pH units)	7.5	7.72	7.7	7.57	**6-9**
Conductivity µS/cm @ 25°C	544	446	375	654	**1000**
On-Site Visual Inspection	V.Pale Yellow/Clear No SS	Clear No SS	Clear, Very few S.Solids	Clear/Grey, No S.Solids	-
Odour	None	None	None	Slight	-
BOD (mg/l)	<2	<2	3	4	**5**
COD (mg/l)	16	16	<10	23	-
Suspended Solids (mg/l)	**36**	<5	<5	5	**25**
Ammonia as N (mg/l)	0.93	0.12	0.79	**1.02**	**1**
Chloride (mg/l)	42	22	36	34	**250**
Mineral Oil (µg/l)	<10	<10	<10	<10	**5**

Notes 1: Surface Water limits for discharge point only, outlined in Schedule C of Waste Licence (Ref No. W0104-02)

Notes 2: Results highlighted in bold represent parameters which have exceeded their respective limits.

As can be seen from Table 6.6 above, results indicated a slightly elevated concentration of suspended solids (36mg/l) above the Waste License Discharge Limit (25mg/l) for the quarter 1 monitoring event.

In addition a slightly elevated ammonia concentration (1.02 mg/l) was recorded above the Waste License limit (1mg/l) during the quarter 4 monitoring event.

All remaining parameters were within their respective Waste License Limits for each monitoring event.

6.5 Bund Integrity Testing & Inspection Reports

Condition 6.7 of the Waste License states;

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

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

1. Oil / Chemical Storage Bund
2. Diesel Storage Bund

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

6.6 Environmental Management Programme

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

- Household glass bin being rolled out in Mullingar town.
- Continued roll-out of the household brown bin.
- To maintain EMS and ISO 140001standard.
- To conduct monthly meetings, to maintain momentum within the EMS team.
- Conduct a review of waste licence to increase the tonnage though-put at the facility.
- To install a dust suppression system inside the waste transfer building and erect netting around perimeter of facility to minimise dust emissions to neighbouring environs.

7.0 SITE DEVELOPMENT & INFRASTRUCTURAL WORK

7.1 Current Infrastructure in-place

The facility is currently licensed to accept a maximum of 50,000 tonnes of waste per annum. The site has calculated the duty capacity and stand-by capacity for the plant. The current waste handling and processing equipment is capable of handling up to as follows:

MRF Line (in current configuration), 100 tonnes per day, Industrial bailer, 200 tonnes per day, C&D area, 140 tonnes per day. Total = 88,000 tonnes per annum (i.e. assuming all MRF line material is bailed). The machinery and equipment currently on-site during 2011, is presented in Table 7.1

Table 7.1 Summary list of plant machinery on site

Details	Number
Roro Trucks	6
Skip Trucks	7
RCV Trucks	7
Glass Truck	1
Rigid Cardboard Tuck	1
Vans	6
Diggers	2
Cherry Picker	1
Road Sweeper	1
Bobcats	2
Forktrucks	3
Baler	1
Shredder (Paper)	1
Shunter	1
MRF	1

7.2 Site Development Works during 2011

There were no site development works carried out during the 2011 reporting period.

7.3 Proposed Development Works for 2012

It is proposed to carry out the following site development works at the AES Tullamore facility;

1. Decommission GW! and drill new GW1 monitoring well along northern boundary.
2. Install a diesel tank on the southern boundary onsite - see attached.
3. Erect netting along boundary fencing to prevent windblown items.
4. Routine maintenance - conduct repairs to guttering and patch areas of yard with concrete.

8.0 ENVIRONMENTAL LIABILITIES (FINANCIAL PROVISIONS)

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

AES and Bord na 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 FACILITY MANAGEMENT

9.1 New Procedures developed during 2011

9.2 Review of Nuisance Controls

The current procedures were in place during 2011 for Nuisance control and are fit for purpose (summarised below). No new controls are proposed for 2012. In compliance with Waste Licence, W0104-02 environmental nuisance are controlled to ensure they cause minimal impact on the immediate area.

- Waste destination for disposal may be stored within the Waste Transfer station and is generally removed from the facility within 48 hours of its arrival on-site during normal working times and within 72 hours of its arrival on-site during bank holidays. This is a waste handling procedure as part of the odour management system on-site.
- A daily inspection of the environmental nuisance controls for Vermin, Birds, Flies, Mud, Dust, Odour and litter is carried out. Nuisance inspection sheets are documented on-site on a weekly basis. A contract with a pest control company is in place to minimise environmental nuisance caused by vermin.
- All vehicles delivering waste to and removing waste and materials from the site are appropriately covered.

9.3 Incidents & Complaints Summary

All environmental incidents and complaints are recorded at the facility. During the 2011 reporting period, no complaints were received at the AES Tullamore facility.

The facility had the following incidents which were reported to the Agency;

Quarter 1

Noise exceedance at N1, N2 on 6th Feb 2011.
Surface water exceedence at SW-1 in Suspended Solids on the 18th February 2011.

Quarter 2

Noise exceedence at N1, N2, N3, N4 on 21st April 2011.
Dust exceedance at D2 & D4 (10th May-10th June 2011).
Groundwater exceedence at GW-2 in Ammonia on 10th May 2011.

Quarter 3

Noise exceedence at N1, N2, N3, N4 on 15th July 2011.

Quarter 4

Surface Water exceedance at SW-1 in Ammonia on 20th October 2011.

9.4 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''.

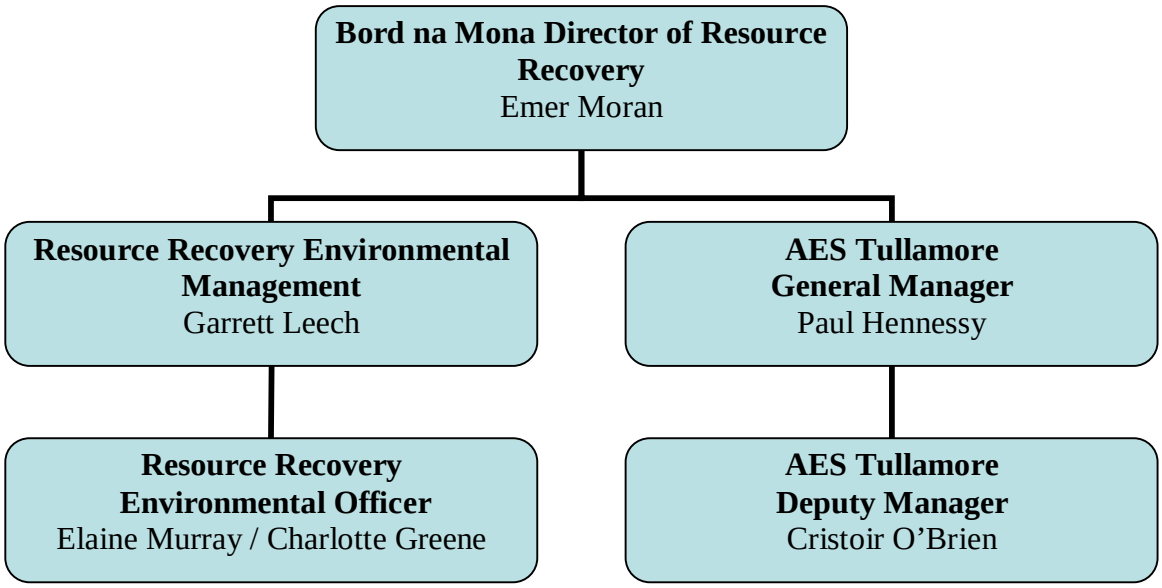
The accident prevention and emergency response has been prepared for the following:

- 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
- EPL 5.1_Emergency Contact List

These documents are attached in Appendix 2.

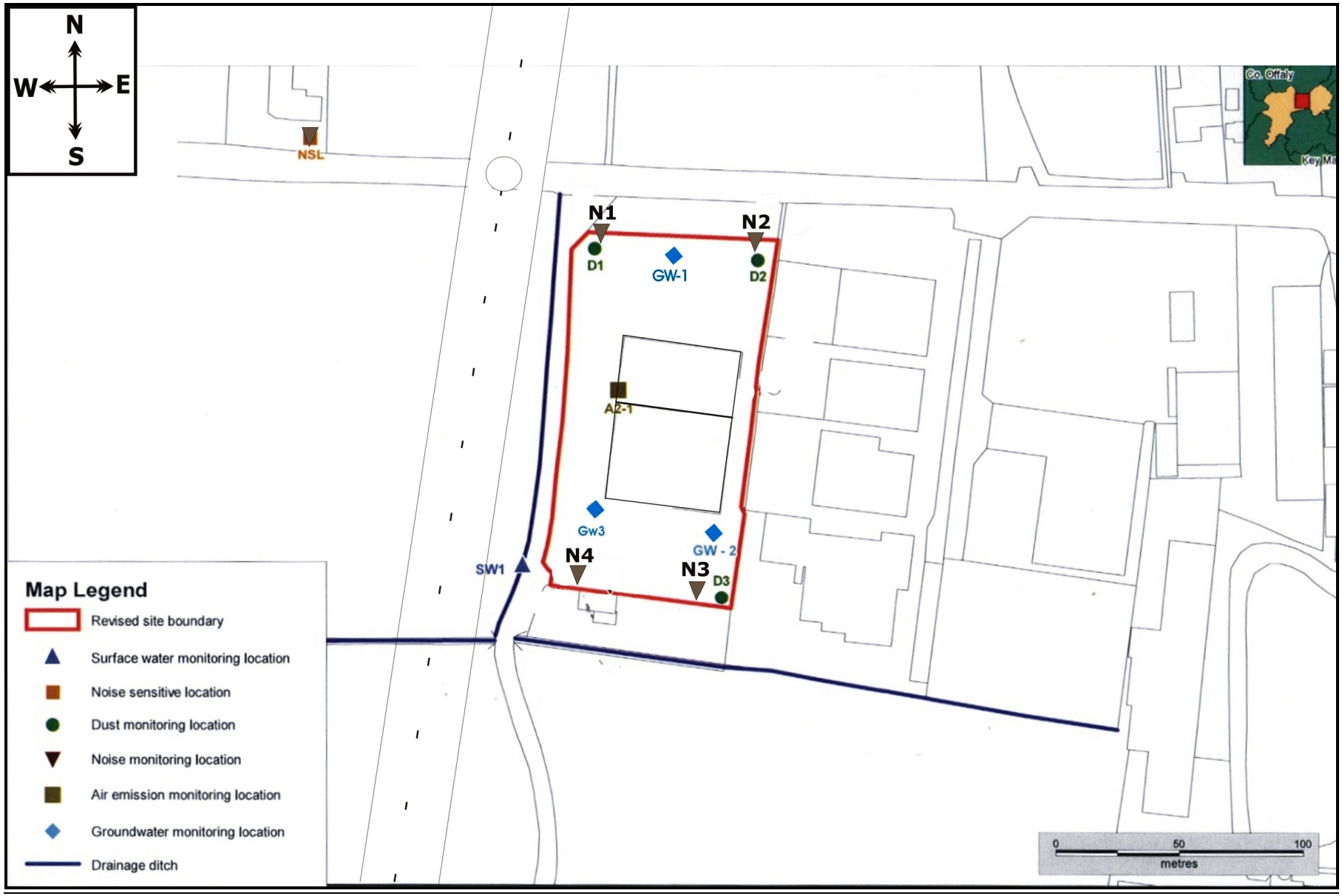
9.5 Staffing Structure

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


Bord na Mona Director of Resource Recovery
Emer Moran
Resource Recovery Environmental Management
Garrett Leech
AES Tullamore General Manager
Paul Hennessy
Resource Recovery Environmental Officer
Elaine Murray / Charlotte Greene
AES Tullamore Deputy Manager
Cristoir O'Brien

APPENDIX 1

Maps of Site Location & Monitoring Locations


N
W
E
S
NSL
N1
N2
D1
GW-1
D2
A2-1
Gw3
GW - 2
N4
N3
D3
SW1
Co. Offaly
Map Legend
Revised site boundary
Surface water monitoring location
Noise sensitive location
Dust monitoring location
Noise monitoring location
Air emission monitoring location
Groundwater monitoring location
Drainage ditch
0
50
100
metres

APPENDIX 2

Accident Prevention & Emergency Response

Emergency Response Plan		Document: EP 5.0-ERP-01
Document Approved by: Site Manager:	AES ADVANCED ENVIRONMENTAL SOLUTIONS (Ireland) **AES Tullamore** Emergency Response Plan	Revision: 0 Issue Date: 10/11/09 Page: Page 1 of 3
Title General Emergency Preparedness & Response		

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

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

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

Incident Contact List:

Emergency Contact List for AES Nenagh			
Service / Agency	**Address**	**Telephone Numbers**	**Fax / e-mail**
EPA Regional Inspectorate	Seville Lodge, Callan Road, Kilkenny	056-7796700	056-7796798 info@epa.ie
Offaly County Council	Aras an Chontae, Charleville Road, Tullamore, Co. Offaly	057-93467800	webmaster@offalycoco.ie
Southern Regional Fisheries Board	Anglesea Street Clonmel, Co. Tipperary	052-80055	052-23971 enquiries@srfb.ie
Eastern Regional Fisheries Board	15a Main Street, Blackrock, Co. Dublin	01-2787022	01-2787025 info@erfb.ie

Emergency Response Plan		Document: EP 5.0-ERP-01
Document Approved by: Site Manager	AES ADVANCED ENVIRONMENTAL SOLUTIONS IRELAND **AES Tullamore** Emergency Response Plan	Revision: 0 Issue Date: 10/11/09 Page: Page 2 of 3
Title **General Emergency Preparedness & Response**		

Procedure:

1. An Emergency Plan is prepared and maintained by AES Tullamore. This Plan details any emergency situation which could occur on site and the proposed response should this emergency occur. The Emergency Plan details procedures for the following occurrences:

Reference	Description
ERP 02	Spill Clean-up Procedure
ERP 03	Fire / Explosion Procedure
ERP 04	Malicious Damage Procedure
ERP 05	Unforeseen Emergencies

2. Should an emergency situation occur, the relevant response procedure documented within the Emergency Plan is implemented. Each procedure details the emergency situation, the proposed response should this emergency occur and the potential environmental impacts of this occurrence.

3. The Site Manager shall assume the role of Site Incident Controller, with responsibility for
   (i) assessing the scale of the incident
   (ii) informing emergency services
   (iii) directing rescue and fire-fighting operations.

   In the absence of the Site Manager, the Deputy Site Manager shall assume the role of Site Incident Controller.

4. Following an emergency, the Site Manager (or in his/her absence Deputy Site Manager) shall record the details of the incident. Environmental Incident Investigation and Reporting Form EPF 6.1 shall be completed which is located within the procedure for Environmental Incident Investigation and Reporting (EMS Environmental Procedure EP 6.0). Following the environmental incident, appropriate procedures shall be implemented accordingly i.e. Environmental Incident Investigation and Reporting Procedures EP 6.0, Environmental Non-

Conformance Procedures EP 7.0 and Environmental Corrective and Preventative Action Procedure EP 8.0.

5. This procedure shall be reviewed by the Environmental Management team, annually or after the occurrence of an emergency situation. Additional procedures may be prepared as identified by environmental reviews/audits, environmental compliance monitoring reports, personnel during routine working hours or other communications which bring potential emergency situations to the attention of the Environmental Management Team.

6. The Site Manager shall notify the Environmental Protection Agency as soon as possible after the occurrence of an incident as per procedure EP 15.0 Reporting

7. In the case of any incident which relates to discharges to water, the Site Manager shall notify the Local Authorities and the Southern Regional Fisheries Board as soon as practicable after the incident

8. On a weekly basis, all emergency response equipment shall be checked to ensure it is provided in agreed quantities and in suitable working order.

9. In the case that an emergency situation arises outside the hours of operation, the contact details for the designated person on call are displayed on the Facility Notice Board at the entrance to the site.

Emergency Response Plan		Document: EP 05-ERP-02
Document Approved by: Site Manager	AES ADVANCED ENVIRONMENTAL SOLUTIONS IRELAND **AES Tullamore** Emergency Response Plan	Revision: 0 Issue Date: 10/11/09 Page: Page 1 of 4

Title Spill Clean up procedure

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

- Protect Employees
- Protect the Environment
- Prevent Fugitive Emissions

Scope: This procedure applies to AES Tullamore.

Procedure:

Note:

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

Definitions:

Small Spill: Less than 5 litres

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

Massive Spill: Greater than 250 litres

1. Hazardous materials shall be handled (loaded, unloaded and moved) by a competent person using the correct equipment and appropriate protective clothing. Appropriate precautions should be taken at all times to minimise the risk of accidental spillage.

2. In the event of a spillage occurring, the Site Manager or the Deputy Site Manager shall initially investigate the following issues:

   - How long it has been since the incident occurred.
   - Consult the relevant data sheets (Material Safety Data Sheets or otherwise) for the method of spill containment and fire control of the affected material.
   - Contact the relevant emergency response number (local fire service, police, hospital and Environmental Protection Agency telephone numbers which are detailed on the Emergency Contact List.

Emergency Response Plan		Document: EP 05-ERP-02
Document Approved by: Site Manager	AES ADVANCED ENVIRONMENTAL SOLUTIONS IRELAND **AES Tullamore** Emergency Response Plan	Revision: 0 Issue Date: 10/11/09 Page: Page 2 of 4
Title Spill Clean up procedure		

- Locate the nearest fire suppression system as appropriate; Dry powder extinguishers for ABC fires [wood, paper, textiles, liquid fuels and gases] Foam extinguishers for AB fires [wood, paper, textiles and liquid fuels] Carbon Dioxide [liquid fuel fires and electrical equipment].

- Note the wind direction and any possible sources of ignition i.e. naked lights, machinery, electrical fittings, and combustible material and remove them from the area.

3. Evacuate the area (for large spills if necessary)

   - The Facility Manger or any other designated person from the Emergency Response Team shall ensure that all personnel are evacuated in a calm, efficient manner. Staff should be instructed to walk briskly to their designated evacuation locations.

   - If flammable material is involved in the spill, isolate equipment and materials that may be affected.

   - If deemed necessary, the Site Manager or any other designated person from the Emergency Response Team shall instruct for the appropriate emergency services to be contacted.

4. The spillage must be contained using absorbent material, socks, booms or absorbent granules to create a secure dike. The Site Manager or any other designated person from the Emergency Response Team shall ensure that all appropriate personal protective equipment is worn [as detailed in the Material Safety Data Sheet for the spilled material(s)].

5. If the spillage emanated from a drum, position the drum so that the ruptured section is in an upwards direction, thereby preventing a further leakage.

6. Once the spill has been contained the liquid shall either be pumped, or removed into a container using non-spark shovels and labelled appropriately (contents, name and date).

7. Clean up Operation.

Emergency Response Plan		Document: EP 05-ERP-02
Document Approved by: Site Manager	AES ADVANCED ENVIRONMENTAL SOLUTIONS IRELAND **AES Tullamore** Emergency Response Plan	Revision: 0 Issue Date: 10/11/09 Page: Page 3 of 4

Title Spill Clean up procedure

- Use non-sparking shovels and brushes to sweep the spilled material into containers.
- Start on the outside and work in towards the centre of the spill.
- Do not mix different types of waste.
- Drum the waste and seal the container or bag and double bag.
- Label the waste with the destination name, appropriate hazard label and name of waste giving as much information as possible on contents, plus concentrations of constituents, etc.
- If the spill occurred due to a damaged drum, place the ruptured drum into a salvage drum container, until disposal is arranged.
- Decontaminate personnel by using the washing facilities.

8. Any waste material resulting from a spillage clean-up shall be dispatched to an appropriate facility for disposal and/or recovery. If the affected material is considered hazardous, it is stored in a container and collected as soon as possible by a certified hazardous waste disposal contractor.

9. Following an emergency, the Site Manager shall record details of the incident. Following a comprehensive investigation into the source of the emergency situation, a corrective action shall be formulated as per EP 10.0

10. Offaly County Council and the EPA shall be informed if hazardous chemical or firewater infiltrates the drainage network.

11. The Site Manager must ensure that the resultant depleted spill kit (s) is /are replenished without delay. He must also ensure that replenishment stock is re-ordered straightaway.

12. On a weekly basis all spill response equipment shall be checked to ensure it is provided in agreed quantities and in suitable working condition.

Emergency Response Plan		Document: EP 05-ERP-03
Document Approved by: Site Manager	AES ADVANCED ENVIRONMENTAL SOLUTIONS IRELAND **AES Tullamore** Emergency Response Plan	Revision: 0 Issue Date: 10/11/09 Page: Page 1 of 2

Title Fire / Explosion Procedure

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

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

Scope: This procedure applies to AES Tullamore.

Procedure:

1. Employees shall only attempt to fight a fire if safe to do so. If an employee feels that they cannot tackle a fire safely and effectively, **EVACUATION OF ALL PERSONNEL IS THE PRIMARY PRIORITY.**

2. The Site Manager or Deputy Site Manager shall evacuate the area in a calm, efficient manner. All staff and contractors shall be instructed to walk briskly to the designated evacuation point.

3. In the event of a fire/explosion occurring, the Site Manager shall complete a role call to account for all employees and contractors that may be present on-site.

4. The Site Manager shall identify the location of the fire/explosion risk through dialogue with the individual who discovered the fire and shall take one of the following actions:

5. Determine whether the fire can be **SAFELY** isolated utilising the available fire fighting equipment.

6. If the fire is not controlled with the fire fighting equipment available, the local fire brigade shall be notified immediately. Local fire, police and hospital telephone numbers are detailed on the Emergency Contact List. These details are displayed at reception and within the site office. The Site Manager or any other designated person from the Emergency Response Team should;

    a. Dial 112 for emergency services
    b. Request emergency service
    c. Give details of type of emergency and phone number in case call is inadvertently disconnected

d. Provide information requested by call recipient
e. Determine estimated time of arrival to site and communicate this information to the relevant member of ERT.
f. Hang up only when told to do so by call recipient
g. Fill out details required by emergency contact log as soon as it safe to do so.

7. If the fire can be safely isolated, locate the nearest fire suppression system as appropriate; Dry powder extinguishers for ABC fires [wood, paper, textiles, liquid fuels and gases] Foam extinguishers for AB fires [wood, paper, textiles and liquid fuels] Carbon Dioxide [liquid fuel fires and electrical equipment]. Only small localised fires should be extinguished in this manner.

8. Note the wind direction and any possible sources of ignition i.e. naked lights, machinery, electrical fittings, and combustible material and remove them from the area.

9. Personnel shall not re-enter buildings unless the Site Manager/Fire Officer deems it safe to do so.

10. Once the fire has been extinguished or the explosion controlled on site, personnel shall complete a clean-up operation as per EP05-ERP-02 using the available resources.

11. Effected areas shall be checked thoroughly in order to ensure that the fire is quenched. If the affected material is considered hazardous, it is stored in a container and collected as soon as possible by a certified hazardous waste disposal contractor.

12. Following an emergency, the Site Manager, or other designated responsible person shall record details of the incident as per EP 6.0 Incident Investigation Procedure

Emergency Response Plan		Document: EP 5.0-ERP-04
Document Approved by: Site Manager	AES ADVANCED ENVIRONMENTAL SOLUTIONS IRELAND **AES Tullamore** Emergency Response Plan	Revision: 0 Issue Date: 10/11/09 Page: Page 1 of 1

Title Malicious Damage Procedure

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

Scope: This procedure applies to AES Tullamore.

Procedure:

1. Where any occurrence of malicious damage is noted or where persons are observed causing malicious damage, the Site Manager shall be informed as soon as is practical.

2. Where malicious damage results in a significant environmental impact, or a potentially significant environmental impact, the Site Manager shall be advised who then undertakes to minimise and repair the damage caused.

3. Persons observed causing malicious damage shall be subjected to internal disciplinary action. The Site Manager, will report external persons to the Gardaí.

4. Following an emergency, the Site Manager, or other designated responsible person shall record details of the incident as per EP 6.0 Incident Investigation and Reporting.

Emergency Response Plan		Document: EP 5.0-ERP-05
Document Approved by: Site Manager	AES ADVANCED ENVIRONMENTAL SOLUTIONS IRELAND **AES Tullamore** Emergency response Plan	Revision: 1 Issue Date: 10/11/09 Page: Page 1 of 2

Title Unforeseen Emergencies and Fugitive emissions

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

Scope: This procedure applies to the AES Tullamore.

Procedure:

1. Following the occurrence of an incident requiring emergency action, the observant shall contact the Site Manager or in his absence most senior representative of management on-site.
2. Access situation and severity. Request emergency services where necessary. If calling for the emergency services, local Fire, police and hospital telephone numbers are detailed on the Emergency Contact List displayed within the Main Site Office, the Weighbridge Office and the Site Managers Office.

    a. Dial 112 for emergency services
    b. Request emergency service
    c. Give details of type of emergency and phone number in case call is inadvertently disconnected
    d. Provide information requested by call recipient
    e. Determine estimated time of arrival to site and communicate this information to the relevant member of ERT.
    f. Hang up only when told to do so by call recipient
    g. Fill out details required by emergency contact log as soon as it safe to do so.

3. Should the incident be determined to be capable of being addressed in-house under the guidance of the most senior representative of management on-site, the Environmental Emergency Response Team shall be mobilised paying due regard to the appropriate emergency response procedure (EP 05-ERP-1-5).

4. In the event the situation involves a Man Down, do not move the casualty until First Aid or Emergency Services give instruction.

5. Once ERT arrive at the incident, all contractors and visitors must be directed to the assembly point.

Emergency Response Plan		Document: EP 5.0-ERP-05
Document Approved by: Site Manager	AES Advanced Environmental Solutions Ireland **AES Tullamore** Emergency response Plan	Revision: 1 Issue Date: 10/11/09 Page: Page 2 of 2
Title Unforeseen Emergencies and Fugitive emissions		

6. In the event the Emergency Services are called, ERT will cordon off the area and ensure emergency services access is clear to the incident site.

7. Move all machinery not involved clear of the incident and switch engines off.

8. Once the situation is under control and has been deemed safe by the Site Manager or most senior member of management on site then the relevant report forms must be completed and the HSA informed where relevant.

9. In the event that the incident gives rise to an emission the Site Manager and the Emergency Response Team shall immediately
   - Isolate the source of any such emission
   - Carry out an immediate investigation to identify the nature, source and cause of the incident and any emission arising there from
   - Evaluate the environmental pollution if any caused by the incident
   - Identify and execute measures to minimise the emissions or malfunction and the effects thereof

6. Following an emergency, the Site Manager, or other designated responsible person shall record details of the incident as per procedure EP 6.0 Environmental Incident Investigation and Reporting. The Site Manger shall also identify and put in place measures to avoid reoccurrence and put in place any other appropriate remedial action. These corrective actions shall be documented as per procedure EP 8.0 Corrective and Preventive Action Procedure.

7. The Site Manager shall provide a proposal to the Agency for its agreement within one month of the incident occurring or as otherwise agreed by the Agency.

APPENDIX 3

Summary of Emissions and Waste Management (PRTR)

| PRTR# : W0104 | Facility Name : Advanced Environmental Solutions (Ireland) Ltd | Filename : W0104_2011(1).xls | Return Year : 2011 |

Guidance to completing the PRTR workbook

AER Returns Workbook

Version 1.1.13

REFERENCE YEAR	2011

1. FACILITY IDENTIFICATION

Parent Company Name	Advanced Environmental Solutions (Ireland) Ltd.
Facility Name	Advanced Environmental Solutions (Ireland) Ltd
PRTR Identification Number	W0104
Licence Number	W0104-02

Waste or IPPC Classes of Activity No.	class_name
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.
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.
4.12	Exchange of waste for submission to any activity referred to in a preceding paragraph of this Schedule.
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.
4.4	Recycling or reclamation of other inorganic materials.

Address 1	Cappincur Industrial Estate
Address 2	Cappincur
Address 3	Tullamore
Address 4	Co Offaly
	Offaly
Country	Ireland
Coordinates of Location	-7.36043 53.5185
River Basin District	IEGBNISH
NACE Code	3832
Main Economic Activity	Recovery of sorted materials
AER Returns Contact Name	Charlotte Greene
AER Returns Contact Email Address	charlotte.greene@anua.ie
AER Returns Contact Position	Environmental Officer
AER Returns Contact Telephone Number	045-439492
AER Returns Contact Mobile Phone Number	087-7697465
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	0
User Feedback/Comments	
Web Address	

2. PRTR CLASS ACTIVITIES

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

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

Is it applicable?	
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 ?