ANNUAL ENVIRONMENTAL REPORT – 2009
AES ROSSLARE WASTE TRANSFER STATION
ST. HELEN'S, ROSSLARE HARBOUR, COUNTY WEXFORD
WASTE LICENCE REG. NO. W0229-01
ORIGINAL
MARCH 2010

BORD NA MÓNA

AES

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Abstract: This report presents the Annual Environmental Report for AES Rosslare Waste Transfer Station, St Helen's, Rosslare Harbour, Co. Wexford to the Environmental Protection Agency. The report covers the annual reporting period of 2009.

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1. INTRODUCTION

The Environmental Protection Agency (EPA) issued Goff Recycling Limited with a waste licence for its Waste Transfer Station at St. Helen's, Kilrane, Rosslare Harbour, Co. Wexford, on 9th March 2007. The waste licence reference number is W0229-01. This licence was transferred to Advanced Environmental Solutions (Ireland) Ltd. on 26th August 2008.

The facility is currently licensed to accept a maximum of 23,000 tonnes of waste per annum (5,400 tonnes of Household waste, 8,600 tonnes of Commercial waste, 4,000 tonnes of Non-hazardous Construction and Demolition (C&D) waste and 5,000 tonnes of Non-hazardous Industrial waste). The site is located in St Helen's, south-west of Rosslare Harbour.

In May 2007, Bord na Móna PLC acquired Advanced Environmental Solution (AES) Ireland Ltd., one of Irelands leading waste management companies which services 5,000 commercial customers and 60,000 domestic customers. The acquisition was a key part of the Bord na Móna PLC's diversification strategy and one which tied in perfectly with the existing Bord na Móna PLC areas of operation.

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. Goff Recycling Ltd previously operated this waste recovery and transfer station. It was acquired by AES (Ireland) Ltd. during September 2008 and still trades as Goff Recycling.

Fehily Timoney & Company (FTC) 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 31st 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 1st January 2009 up to 31st December 2009 and provides a summary of all waste licence-related activities on site during this period.

1.1. Site Description and Activities

As previously referred to, AES operates a waste licence (W0299-01) for its Waste Transfer Station at St. Helen's, Kilrane, Rosslare Harbour, Co. Wexford. Operations at the facility include the acceptance of domestic, commercial, industrial and construction and demolition waste, which is sorted and segregated for onward recycling/recovery in accordance with the waste licence for the facility. Waste deemed unsuitable for recycling/recovery is segregated and compacted for disposal off-site.

The site location map is included in Appendix I. Monitoring location maps are included in the specific reports in Appendix II.

1.1.3 Waste Handling Procedure

Waste is accepted at or dispatched from the AES Rosslare facility only between the hours of 08.00 to 18.00 Monday to Friday inclusive and 8.00 to 13.00 on Saturdays. The facility is operated only during the hours of 06.00 to 20.00 Monday to Friday inclusive and 8.00 to 14.00 on Saturdays. All waste accepted at the facility for disposal is removed from the facility within 48 hours of its arrival on-site (during bank holidays/weekends waste is removed within 72 hours).

Current waste acceptance procedures involve the use of a computer based programme called Integrated Waste System (IWS). The software is linked to the on-site weighbridge and is used for recording of waste quantities accepted on-site. The vehicle registration number, customer and product is inputted into the system and from this detail, the source of the waste can be obtained.

After weighing, each waste load is brought to the enclosed Recycling Plant Building where it is deposited on the floor for visual inspection to ensure that all wastes comply with the requirements of the Waste licence, W0229-01. The Yard Foreman is responsible for carrying out visual waste inspections and for maintaining a written record of all loads. Only after visual inspection, can the waste be identified for disposal or recovery.

Within the Recycling Plant Building the waste is sorted according to its recycling potential and is either deemed suitable for further onward recycling/recovery or compacted within one of the ejector trailers on-site and transported off-site for final disposal (non-recoverable waste) to an authorised landfill. The categories of waste deemed suitable for segregation and recycling is dependent on available markets for such materials. Materials commonly accepted for recycling Steel/Iron, Cardboard/ Newsprint, Timber, Construction & Demolition (suitable for backfill material), Plastic, Glass and on-occasion empty gas cylinders. Household mixed recyclables are collected and accepted at the facility, where the waste is forwarded off-site for further recovery. All waste deemed unsuitable for recycling/recovery is loaded into and compacted within ejector trailers on-site. All compacted wastes are covered and subsequently transported for authorised disposal. All waste being transported from the facility is weighed and recorded at the weighbridge. An individual weigh docket is printed for each waste load.

2. EMISSIONS FROM THE FACILITY

During the reporting period wastewater collected from site from bunds, interceptors, silt traps, bin/vehicle washing sump, weighbridge sump and underground storage tank

- 7/09/2009: 10,000l (Enva)
- 8/07/2009: 8,000l (Enva)
- 23/03/2009: 2100kg (M & T Plant Hire)

An estimate of storm water emissions from the facility can not be determined as flow is not monitoring. Weekly chemical analysis of storm water samples is undertaken.

3. WASTE MANAGEMENT RECORD

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

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

These waste classifications, subsequent to inspection, can be further categorised as been either suitable for recycling/recovery offsite or disposed to off-site authorised disposal facilities. Hazardous waste is not accepted at the AES Rosslare Waste Transfer Station. 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 or not acceptable 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 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 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

In accordance with Condition 11.9 of the waste licence, details of all wastes arriving at and departing from the facility are recorded. The details, which are maintained in a full record on site, include:

- The tonnages and EWC code for the waste materials imported and/or sent off-site for disposal/recovery
- The names of the agent and carrier of the waste and their waste collection permit details, if required (to include issuing authority and vehicle registration number)
- Details of the ultimate disposal/recovery destination facility for the waste and its appropriateness to accept the consigned waste stream, to include its permit/licence details and issuing authority, if required
- Written confirmation of the acceptance and disposal/recovery of any hazardous waste consignments sent off-site
- Details of all wastes consigned abroad for Recovery and classified as "Green" in accordance with the EU Transfrontier Shipment of Waste Regulations (Council Regulation EEC No. 259/1993, as amended). The rationale for the classification must form part of the record.
- Details of any rejected consignments
- Details of any approved waste mixing
- The results of any waste analyses required under *Schedule C: Control and Monitoring* of this licence
- The tonnages and EWC Code for the waste materials recovered/disposed on-site

In accordance to requirements of the Waste licence, W0229-01, a summary of the waste recovered/disposed at the facility over the period from 1st January 2009 to 31st December 2009 is presented in Table 3.1 & 3.2.

Table 3.1: Incoming Waste to AES Rosslare Waste Transfer Station

EWC Code	Incoming Waste
15 01 01 BC – Cardboard	104.78
15 01 01 C – Cardboard	1652.08
15 01 01 MX - Cardboard	363.52
15 01 02 PL – Plastic	21.82
15 10 2P LW – Plastic	0
15 01 03 – Wooden packaging	0
15 01 04 – Metal Packaging	0
15 01 06 – Metal Packaging	24.61
15 01 07 - Glass Packaging	0
17 01 02 –C&D	923.61
17 02 01 – Wood	273.44
17 02 02 – Glass	2.82
17 04 07 - Mixed metals	75.33
17 06 05 – C&C containing asbestos	0
17 08 02 –C&D	0
17 09 04 –C&D	939.77
19 05 03 – Off specification compost	111.5
19 08 05 – Sludge	0
19 12 09 – Sand & stones	0
20 01 02 – Glass	0
20 01 11 – Textiles	28.79
20 01 39 - Plastics	0
20 03 01 C – Municipal Waste	7463.4
20 03 01 D – Municipal Waste	1040
20 03 01 K – Municipal Waste	2007.14
Grand Total	15032.61

Table 3.2 Quantities of Waste Recovered/Disposed at Facility during 2009

EWC Code	Outgoing Waste *(tonne)*	Waste Recovery / Disposal Destination Name	Waste Recovery / Disposal Destination Address	Licence/ Permit No.
15 01 01 BC – Cardboard	900.92	(MLM) ACN Europe (UK),	Adamson House, Towers Business Park, Wilmslow Road, Didsbury, Manchester M20 2YY	
15 01 01 B - Cardboard C	255.7	International Recycling Ltd.,	Health House, 5 Woodgate Court, St. Benedicts Street, Norwich NR2 4AP, UK	AEA/791992/B
15 01 01 B - Cardboard C	31.58	Irish Packaging Recycling,	Ballymount Road, Walkinstown, Dublin 12	WPR 021/02
15 01 01 MX – Cardboard	161.5	Irish Packaging Recycling,	Ballymount Road, Walkinstown, Dublin 12	WPR 021/02
15 01 02 PL – Plastic	92.06	Leinster Environmental	Clermont Business Park, Haggardstown, Dundalk, Co. Louth	WP 2008/06
17 01 02 –C&D	1401.03	Goff Developments Ltd.	Jacketstown, Drinagh, Co. Wexford	WP/06/30
17 01 02 –C&D	193.58	Goff Developments Ltd.	Jacketstown, Drinagh, Co. Wexford	WP/06/30
17 02 01 – Wood	515.56	Shreedwood Ltd.,	Littleton, Thurles, Co. Tipperary	WP/TN/101
17 02 02 – Glass	17.34	Urban & Rural Recycling	Creeg, Ballycogley.	WP/06/36(A)
17 04 07 - Mixed metals	216.4	MSM Recycling	Cookstown Industrial Est., Tallaght, Dublin 24	W0079-01
19 05 03 – Off specification compost	93.51	Bord na Mona	Kilberry, Athy, Co. Kildare	W0198-01
19 12 09 – Sand & stones	665.12	Drehid WMF	Killinagh Upper, Carbury, Co. Kildare	W0201-03
19 12 12 – Other waste from mechanical treatment	6711.51	Drehid WMF	Killinagh Upper, Carbury, Co. Kildare	W0201-03
20 03 01 C – Municipal Waste	21.78	Wexford CoCo Landfill	Holmestown, Barntown, Co. Wexford	W0191-01
20 03 01 C – Municipal Waste	960.8	AES Portlaoise	Kyletalesha, Portlaoise, Co. Laois	W0194-02
20 03 01 K – Municipal Waste	78.98	Mr. Binman Clearpoint,	Ballylynch, Carrick-on-Suir, Co. Tipperary	WP 035-02
20 03 01 K – Municipal Waste	1742.93	Dungarvan MRF	Shandon, Dungarvan, Co. Waterford	W0189-01
20 03 01 K – Municipal Waste	923.43	AES Tullamore	Cappincur Industrial Est. Daingean Rd, Tullamore Co. Offaly	W0104-02
Grand Total	**14983.73**			

4. RESOURCE AND ENERGY CONSUMPTION

4.1. Resource Consumption Summary

Some resources consumed at AES Rosslare Waste Transfer Station are recorded. During the reporting period water usage on-site is not metered and has not been recorded, therefore, calculation of water usage is not possible at present.

Road diesel consumption was 247,475 Litres.

The total electrical consumption at the site was 88,850 kWh during the reporting period. During the same period wastewater produced at the facility (collected from site from bunds, interceptors, silt traps, bin/vehicle washing sump, weighbridge sump and underground storage tank) was recorded as 18,000 litres (Enva) and 2100 kg (M & T Plant Hire).

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 2008. The findings of the report will be implemented, where feasible. Please refer to the Proposed Targets & Objectives for 2010 in Table 5.2 for more details.

4.3. Water Consumption

The volume of wastewater produced at the facility and transported off-site is presented above in Section 4.1.

Please refer to Objective & Targets 2010 (Table 5.2) for proposals being developed to minimise water demand and the volume of trade effluent discharge, in compliance with Condition 7.3, which include investigating the feasibility of the collection and re-use of rainwater for vehicle washing.

4.4. Raw Materials Consumption & Waste Generation

Please refer to Objective & Targets 2010 (Table 5.2) for proposals being developed to minimise raw material consumption and waste generation. Proposals include:

- Induct staff and contract cleaners on waste segregation and minimisation. Display signs on segregated bins (residual & recyclable) outlining waste to be deposited in each. Install battery bin and ink/toner cartridge bins in main office and organise collection
- Induct yard staff on waste segregation and minimisation. Display signs on segregated bins (residual & recyclable) outlining waste to be deposited in each
- Once organic waste collections commence, install organic waste bins in canteen and yard
- Investigate the feasibility of the usage of "Ad-Blue" in vehicles currently not utilising this additive. As the fleet is updated with newer vehicles, the use of "Ad-Blue" shall be rolled out to a greater number of vehicles
- Maximise throughput of picking line to maximise the recovery of recyclables and to minimise disposal of waste
- Increase Customer Awareness in relation to waste segregation
- Roll-out of domestic and commercial brown bin on a phased basis
- Streamline Routes. Computer programme being acquired for AES Group to manage collection route to ensure maximum efficiency of labour and raw materials

5. ENVIRONMENTAL OBJECTIVES & TARGETS

5.1. Progress against Targets for 2009

Details on progress made against the Targets for 2009 are presented in Table 5.1.

Table 5.1: Progress against Targets for 2009

Ref No	Objective	Target	Status
1	To investigate the feasibility of decreasing diesel consumption	To complete a trial of the use Dipetane, an additive for diesel, to investigate the feasibility of its use in decreasing diesel consumption.	It was found that the use of Dipetane was not cost effective as it only produced a small reduction in diesel consumption.
2	Installation of upgraded Dust Suppression System	Install upgraded Dust Suppression System within Waste Transfer Building	The trommel was covered to reduce dust emissions. A quote was obtained in December 2009 for a Dust and Odour Suppression System. Two more quotes are to be obtained in 2010. Please see Objectives & Targets for 2010.
3	Maximise recovery of recyclables	Maximise throughput of picking line to maximise the recovery of recyclables and to minimise disposal of materials	The trommel was replaced with a larger and more efficient system in December 2009. Please see Objectives & Targets for 2010.
4	Internal Waste Awareness Campaign	Increase awareness among staff of importance of waste segregation	Although there is increased waste awareness among staff, there is a requirement for improved waste management in the offices, canteen and yard. Please see Objectives & Targets for 2010.
5	Diversion of biodegradable waste from landfill	To begin trialling domestic brown bins for the segregation and collection of biodegradable waste	Collections are due to commence in 2010 in accordance with local Bye-Laws. Please see Objectives & Targets for 2010.

5.2. Schedule of Objectives and Targets for 2010

The proposed schedule of Objectives and Targets for 2010 is presented in Table 5.2.

Table 5.2: Proposed schedule of Objectives and Targets for 2010

Ref No	Objective	Target	Timescale	Response	Status
1	Improved Waste Management	Office - Induct staff and contract cleaners on waste segregation and minimisation. Display signs on segregated bins (residual & recyclable) outlining waste to be deposited in each. Install battery bin and ink/toner cartridge bins in main office and organise collection.	Mar-10	EoN/JC	Ongoing
		Site - Induct yard staff on waste segregation and minimisation. Display signs on segregated bins (residual & recyclable) outlining waste to be deposited in each.	Mar-10	EoN/JC	Ongoing
		Once organic waste collections commence, install organic waste bins in canteen and yard.	Dec-10	EoN/JC	Ongoing
2	Review Energy Efficiency Audit Report	Implement findings, where feasible.	Jun-10	EoN/JC	Ongoing
3	Increase usage of "Ad-blue" in Fleet Vehicles to reduce emissions	Investigate the feasibility of the usage of "Ad-Blue" in vehicles currently not utilising this additive. As the fleet is updated with newer vehicles, the use of "Ad-Blue" shall be rolled out to a greater number of vehicles.	Dec-10	EoN	Ongoing
4	Maximise recovery of recyclables	Maximise throughput of picking line to maximise the recovery of recyclables and to minimise disposal of waste	Dec-10	EoN	Ongoing
		Increase Customer Awareness in relation to waste segregation	Dec-10	EoN	Ongoing
5	Diversion of biodegradable waste from landfill	Roll-out of domestic and commercial brown bin on a phased basis.	Dec-10	EoN	Ongoing
6	Environmental Monitoring	As per Waste Licence: Should any limits be exceeded, corrective actions to be implemented.	Dec-10	EoN/JC/ LC	Ongoing
7	Installation of up-graded Dust Supression System	Install upgraded Dust Suppression System within Waste Transfer Building	Sep-10	MW	Ongoing
8	Investigate options for the reduction and/or re-use of water on-site	Investigate the feasibility of the collection and re-use of rainwater for vehicle washing.	Aug-10	EoN	Ongoing
9	Efficiency of Fuel Consumption	Streamline Routes. Computer programme being acquired for AES Group to manage collection route to ensure maximum efficiency of labour and raw materials	Dec-10	Logistics Manager	Ongoing
10	Upkeep of Environmental Management System	Accreditation of EMS to ISO 14001	Jul-10	Enviro Team	Ongoing
		Monthly EMS Meetings	Dec-10	Enviro Team	Ongoing
		Ongoing review of procedures, objectives & targets, and aspects register	Dec-10	Enviro Team	Ongoing
11	Environmental Training & Awareness	As per training matrix and schedule	May-10	JC	Ongoing

6. 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 2009.

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

1. Noise — Annually
2. Dust Deposition — Three times per annum
3. Storm Water Emissions — Weekly & Quarterly

Sections 6.5 present a summary of the Environmental Management Programme for the facility.

6.1. Noise Monitoring Report Summary

In compliance with the requirements of the waste licence, W0229-01, annual noise monitoring at the AES Rosslare Waste Transfer Station was undertaken. Monitoring was carried out on the 13 May 2009.

L_{Aeq}, L_{A10} L_{A90} values and 1/3 Octave band analyses was determined at all four monitoring locations (N1 – N4). The noise monitoring locations are presented in Table. 6.1.

Table 6.1: Noise monitoring Locations

Map reference No.	Location Type	Location Description
N1	Boundary	South western corner beside the main office
N2	Boundary	North western corner beside bin storage area
N3	Boundary	North eastern corner beside bin storage area
N4	Boundary	South eastern corner behind the main office

The daytime L_{Aeq} recorded a the four boundary locations ranged from 53 dB at N4 – 60 dB at N2. The full set f results are presented in Table 6.2.

Table 6.2: Noise monitoring Results

Map reference No.	Measurement Period *(mins)*	Time	L_{Aeq} *(dB)*	L_{A10} *(dB)*	L_{A90} *(dB)*	L_{AfMAX} *(dB)*
N1	30	14.06	54	58	44	73
N2	30	15.15	60	61	42	89
N3	30	15.48	57	61	37	80
N4	30	14.39	53	57	38	74

Elevated noise levels were noted at two of the boundary locations (N2 and N3) during the monitoring period. The main source of noise recorded at the boundary locations N2 (60 dB) and N3 (57 dB) were, for the most part, due to trucks loading bins beside the noise meter which drove up the average noise level recorded and also the operation of a power washer in the facility.

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

The full noise report is included in Appendix II.

6.2. Ambient monitoring Summary

In compliance with the requirements of the waste licence, W0229-01, dust monitoring at the AES Rosslare Waste Transfer Station was undertaken. Monitoring was carried out on three times during the reporting period.

There are four dust monitoring locations on site, detailed in Table 6.3.

The Waste Licence limit for dust deposition is given as 350mg/m^2/day as per Schedule B.5.

Table 6.3: Dust monitoring Locations

Monitoring Location	Description
A2-1	South Western corner beside Reception
A2-2	Middle of site beside power washer
A2-3	North western corner of facility
A2-4	North eastern corner of the facility

Four Bergerhoff dust gauges were continuously exposed for a 29 day period between the 15 January - 13 February, for a 33 days from 13 May – 15 June and finally 31 days from 17 July – 17 August 2009. The results for monitoring are presented in Table 6.4.

Table 6.4: Dust monitoring Results

Monitoring Location	Dust Deposition Limit	Deposition Rate *(15 January – 13 February)*	Deposition Rate *(13 May – 15 June)*	Deposition Rate *(17 July – 17 August)*
	(mg.m^2/day)			
D1	350	**470**	219	217
D2	350	221	163	98
D3	350	157	31	244
D4	350	**389**	Note 1	**396**

Note 1 – Dust gauge was missing during the monitoring period

The results were elevated above the EPA limits at D1 and D4 during the first round of monitoring. D4 was elevated above the EPA limit during the third round of monitoring. All the other results are under the licence limits.

The full dust monitoring reports are attached in Appendix II.

6.3. Surface water Monitoring Results Summary

In accordance with Waste Licence, W0229-01 Schedule C.2.3, AES Rosslare is required to carry out a Daily Visual Inspection, weekly sampling of pH, conductivity and suspended solids and quarterly sampling of COD, Ammonia and Mineral Oils from the surface water in the immediate environs of its Waste Transfer Facility.

Surface water monitoring locations are presented in Table 6.5.

Table 6.5: Surface Water Monitoring Locations

Monitoring Location	Description
SW-1	Located upstream of the AES facility
SW-2	North eastern corner of AES facility
SW-3	Located 10m immediately downstream of SW-2

Quarterly Monitoring occurred on the 15 January, 13 May, 17 August and finally on the 15 October. The results of Quarterly surface water monitoring are presented in Table 6.6. Emission limits for surface waters are not specified in the Waste Licence.

The full surface water monitoring reports are attached in Appendix II.

Table 6.6: Surface Water Monitoring Results

Parameter	Quarter 1			Quarter 2			Quarter 3			Quarter 4		
	SW-1	SW-2	SW-3	SW-1	SW-2	SW-3	SW-1	SW-2	SW-3	SW-1	SW-2	SW-3
On-site visual inspection	Clear colour, high SS	Clear colour, few SS, oily surface	Clear colour, few SS, oily surface	Clear colour, no SS	Clear colour, no SS, oily surface	Clear colour, no SS, oily surface	Clear colour, no SS	Clear colour, few SS, slight oily surface	Clear colour, high SS due to vegetation	Clear/ cloudy colour, some SS, no oily surface	Clear/ cloudy colour, high SS, oily surface	Cloudy colour, high SS due to vegetation, no oily surface
Odour	No odour	No odour	No odour	No odour	Slight odour	Slight odour	No odour	No odour	No odour	No odour	Very oily odour	Slight oily odour
COD mg/l	74	66	67	20	28	22	<10	<10	<10	29	30	43
** Mineral Oils µg/l Note 1	<10	266	477	<10	<10	<10	<10	<10	<10	<10	<10	<10
Ammonia mg/l as N	0.29	0.23	0.31	0.02	0.94	0.77	<0.02	0.16	<0.02	0.04	0.04	0.07

** - Subcontracted test

6.4. Tank and Pipeline Testing & Inspection Reports

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. 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

Tank and Pipeline Testing & Inspection Reports for the site are due in 2010.

6.5. Environmental Management Programme

The Environmental Management Program (EMP) form part of the Objectives and Targets for the facility, presented in Table 5.1 & 5.2. Among the measures outlined in the Tables, it is proposed for the coming year:

- To obtain ISO 14001 certification for the facility
- Undertake an ongoing review of procedures, objectives & targets, and aspects register
- To hold Monthly EMS Meetings
- Investigate the feasibility of the collection and re-use of rainwater for vehicle washing
- To undertake an internal waste awareness campaign
- Increase Customer Awareness in relation to waste segregation

7. SITE DEVELOPMENT/INFRASTRUCTURAL WORKS

7.1. Current Infrastructure in Place

The facility is currently licensed to accept a maximum of 23,000 tonnes of waste per annum (5,400 tonnes of Household waste, 8,600 tonnes of Commercial waste, 4,000 tonnes of Non-hazardous Construction and Demolition (C&D) waste and 5,000 tonnes of Non-hazardous Industrial waste). The current operating Capacity is 440 tonnes per week.

Table 7.1: Summary list of Plant & Machinery

List of all Machinery & Equipment
Trommel
pickling line
Baler
Track Machine (360)
Loading Shovel
2 forklifts (1 equipment with grab, 1 for moving)

Most waste arriving on-site is already source segregated. Should the trommel breaks down, waste is sorted manually with track machine and by general operatives. Should the track machine or loading shovel were down, a replacement would be hired in.

The network of sites owned by AES and their proximity is a beneficial factor considering standby. Should the baler be down for an extended period, recyclable would be sent to AES Tullamore un-baled and baled there. Should the trommel remain out of action for a few days, waste would be re-directed to AES Portlaoise for segregation.

7.2. Site Development Works during 2009

During the 2009 reporting period the trommel was upgraded.

7.3. Proposed Development Works for 2010

During 2010 it is anticipated that the site will install an upgraded Dust Suppression System within Waste Transfer Building. This is detailed in Table 5.2: Proposed schedule of Objectives and Targets for 2010.

8. INCIDENTS & COMPLAINTS

8.1. Complaints Summary

All environmental complaints are recorded at the facility. 4 No complaints were received by the site during the 2009 reporting period. Summary details are presented in Table 8.1.

Table 8.1: Summary of Complaints

Date	Complaint Summary Details	Action Summary Details
10/05/2009	Odour	Odour check undertaken and a slight odour was observed
22/06/2009	Odour & litter	Odour check undertaken and a slight odour was observed. Check for litter. Completed litter picking on the road. Communicated with complainant regarding the corrective action
17/09/2009	Odour & Noise (reverse beepers)	Odour check undertaken the a slight odour was observed. Treated with odour control and informed the EPA. Ordered a verbal reversing beeper to mitigate noise complaint
15/10/2009	Odour	Odour check undertaken and a strong odour noted. Treated with odour control and informed the EPA.

8.2. Reported Incidents Summary

All environmental incidents are recorded at the facility. 3 No incidents were recorded by the site during the 2009 reporting period. Summary details are presented in Table 8.2.

Table 8.2: Summary of Incidents

Date	Incident Summary Details
20/07/2009	Waste lorry caught fire
24/09/2009	Elevated dust above licence limits
July/August	Elevated dust above licence limits

Full details of complaints and incidents are included in Appendix III.

8.3. 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 are included in full in Appendix IV.

9. FACILITY MANAGEMENT

9.1. Report on Financial Provisions

In 2008, Goff Recycling Limited was acquired by AES (Ireland) Ltd. which is a wholly-owned subsidiary of Bord Na Móna plc. AES Rosslare t/a Goff Recycling Ltd 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 facility, therefore, any costs incurred in addressing same will be limited to the removal and safe disposal of the waste remaining on-site following an emergency event (e.g. fire or spillage event) or the decommissioning and closure of the site. Such environmental liabilities cover should account foe 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 to cover the liability arising from damage to property and injury to parties as a result of sudden an 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.

9.2. Management & Staffing Structure

The management and staffing structure of the facility is described in Figure 9.1.

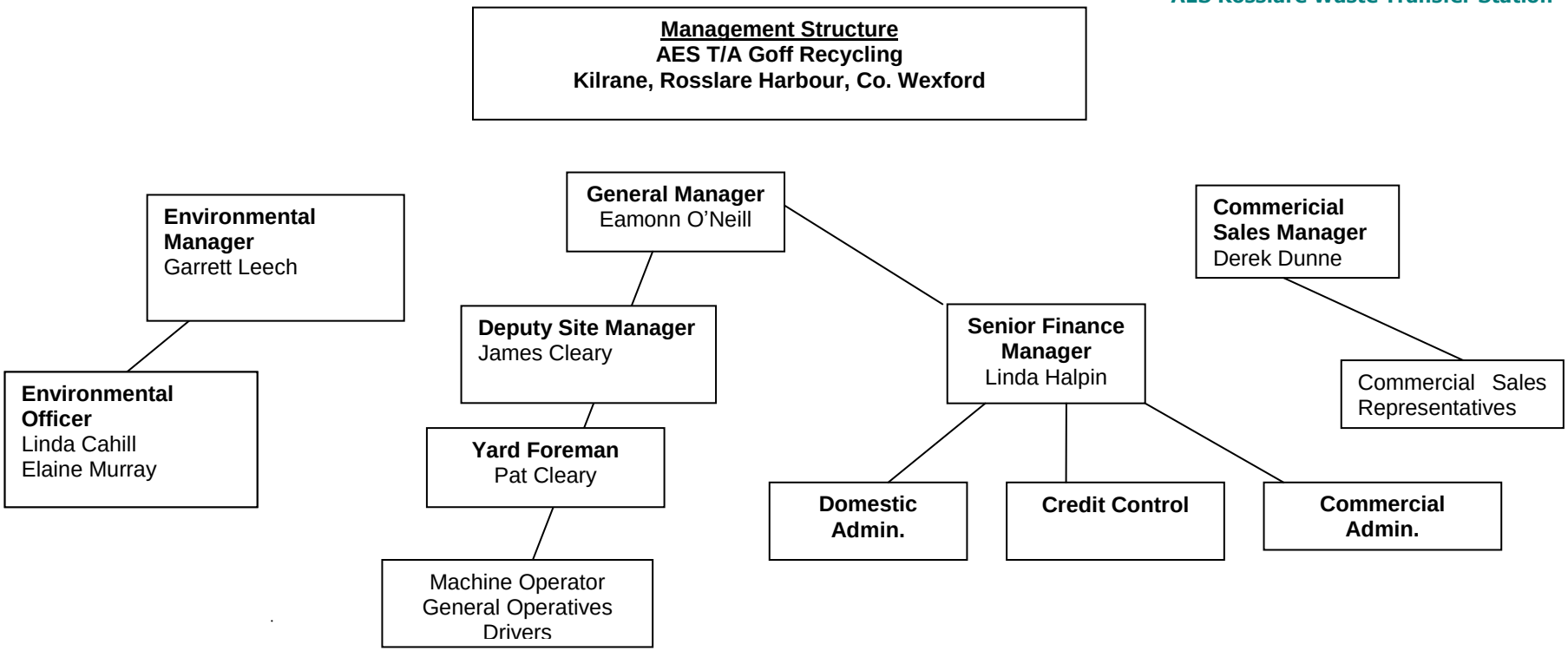

Figure 9.1: Management and Staffing Structure

9.3. New Procedures Developed During 2009

The Environmental Management system for AES Rosslare was revised during 2009 and was awarded 1SO14001 certification on the 26ht of January 2010.

9.4. Review of Nuisance Controls

There were no nuisance/pest issues in during the 2009 reporting period and there are no proposed amendments to nuisance controls for 2010. The existing nuisance control procedure is presented below:

Purpose: *To define the procedure of Vermin Control at AES Rosslare.*

Scope: *All methods of vermin control in place on-site at AES Rosslare.*

References: *WI 2.0 Site Inspection Procedure*
EWIF 2.2 Daily Environmental Nuisance Inspection Form
Rodent Control Contractor Site File

Procedure

1. *Condition 5.6 of Waste Licence 229-01 states that Vermin, Birds and Flies associated with the waste activities on-site do not result in an impairment of, or an interference with, amenities or the environment at the facility or beyond the facility boundary or any other legitimate uses of the environment beyond the facility boundary.*

2. *On a daily basis, the site and its immediate surrounds shall be inspected for nuisances caused by Vermin, Birds and Flies as part of the Daily Nuisance Monitoring Procedure outlined in WI 2.0 Site Inspection Procedure. A record of inspections shall be maintained on EWIF 2.2 Daily Environmental Nuisance Inspection Form.*

3. *AES Rosslare uses the services of a specialist pest control contractor to provide a pest prevention service for rodents.*

The pest control contractor has bated the site and has set up an inspection schedule to visit the site approximately once a month, and carry out inspections, and servicing of poison bait boxes which are installed around the site.

The Pest Control Contractors Site File will include details of the following –

- *Site visits and inspection findings.*
- *MSDS sheets for rodenticides used.*
- *Details of operator training.*
- *A map showing the locations of all external bait stations on site.*

Precautions in order to minimise secondary poisoning of other species will be as follows –

- *The use of first generation warfarin based anti-coagulant poisons which reduce the risk of secondary poisoning to other species.*
- *Rodenticides will be housed in specialised tamperproof and clearly marked bait stations which will be checked regularly and replaced if damaged.*
- *Removal of any dead rodents preventing scavengers from ingesting them.*
- *Proper disposal of empty rodenticide containers and storage of rodenticides in accordance with legislation.*

ANNUAL ENVIRONMENTAL REPORT – 2009

AES ROSSLARE WASTE TRANSFER STATION

ST. HELEN'S, ROSSLARE HARBOUR, COUNTY WEXFORD

WASTE LICENCE REG. NO. W0229-01

ORIGINAL

MARCH 2010

BORD NA MÓNA

AES

ANNUAL ENVIRONMENTAL REPORT – 2009

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BORD NA MÓNA

AES

ANNUAL ENVIRONMENTAL REPORT – 2009

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WASTE LICENCE REG. NO. W0229-01

MARCH 2010

REVISION CONTROL TABLE

User is Responsible for Checking the Revision Status of This Document

Rev. Nr.	Description of Changes	Prepared by:	Checked by:	Approved by:	Date:
0	Issue to Client	DB/MT			30.03.10

Client: Bord na Móna

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

Abstract: This report presents the Annual Environmental Report for AES Rosslare Waste Transfer Station, St Helen's, Rosslare Harbour, Co. Wexford to the Environmental Protection Agency. The report covers the annual reporting period of 2009.

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1. INTRODUCTION

The Environmental Protection Agency (EPA) issued Goff Recycling Limited with a waste licence for its Waste Transfer Station at St. Helen's, Kilrane, Rosslare Harbour, Co. Wexford, on 9th March 2007. The waste licence reference number is W0229-01. This licence was transferred to Advanced Environmental Solutions (Ireland) Ltd. on 26th August 2008.

The facility is currently licensed to accept a maximum of 23,000 tonnes of waste per annum (5,400 tonnes of Household waste, 8,600 tonnes of Commercial waste, 4,000 tonnes of Non-hazardous Construction and Demolition (C&D) waste and 5,000 tonnes of Non-hazardous Industrial waste). The site is located in St Helen's, south-west of Rosslare Harbour.

In May 2007, Bord na Móna PLC acquired Advanced Environmental Solution (AES) Ireland Ltd., one of Irelands leading waste management companies which services 5,000 commercial customers and 60,000 domestic customers. The acquisition was a key part of the Bord na Móna PLC's diversification strategy and one which tied in perfectly with the existing Bord na Móna PLC areas of operation.

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. Goff Recycling Ltd previously operated this waste recovery and transfer station. It was acquired by AES (Ireland) Ltd. during September 2008 and still trades as Goff Recycling.

Fehily Timoney & Company (FTC) 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 31st 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 1st January 2009 up to 31st December 2009 and provides a summary of all waste licence-related activities on site during this period.

1.1. Site Description and Activities

As previously referred to, AES operates a waste licence (W0299-01) for its Waste Transfer Station at St. Helen's, Kilrane, Rosslare Harbour, Co. Wexford. Operations at the facility include the acceptance of domestic, commercial, industrial and construction and demolition waste, which is sorted and segregated for onward recycling/recovery in accordance with the waste licence for the facility. Waste deemed unsuitable for recycling/recovery is segregated and compacted for disposal off-site.

The site location map is included in Appendix I. Monitoring location maps are included in the specific reports in Appendix II.

1.1.3 Waste Handling Procedure

Waste is accepted at or dispatched from the AES Rosslare facility only between the hours of 08.00 to 18.00 Monday to Friday inclusive and 8.00 to 13.00 on Saturdays. The facility is operated only during the hours of 06.00 to 20.00 Monday to Friday inclusive and 8.00 to 14.00 on Saturdays. All waste accepted at the facility for disposal is removed from the facility within 48 hours of its arrival on-site (during bank holidays/weekends waste is removed within 72 hours).

Current waste acceptance procedures involve the use of a computer based programme called Integrated Waste System (IWS). The software is linked to the on-site weighbridge and is used for recording of waste quantities accepted on-site. The vehicle registration number, customer and product is inputted into the system and from this detail, the source of the waste can be obtained.

After weighing, each waste load is brought to the enclosed Recycling Plant Building where it is deposited on the floor for visual inspection to ensure that all wastes comply with the requirements of the Waste licence, W0229-01. The Yard Foreman is responsible for carrying out visual waste inspections and for maintaining a written record of all loads. Only after visual inspection, can the waste be identified for disposal or recovery.

Within the Recycling Plant Building the waste is sorted according to its recycling potential and is either deemed suitable for further onward recycling/recovery or compacted within one of the ejector trailers on-site and transported off-site for final disposal (non-recoverable waste) to an authorised landfill. The categories of waste deemed suitable for segregation and recycling is dependent on available markets for such materials. Materials commonly accepted for recycling Steel/Iron, Cardboard/ Newsprint, Timber, Construction & Demolition (suitable for backfill material), Plastic, Glass and on-occasion empty gas cylinders. Household mixed recyclables are collected and accepted at the facility, where the waste is forwarded off-site for further recovery. All waste deemed unsuitable for recycling/recovery is loaded into and compacted within ejector trailers on-site. All compacted wastes are covered and subsequently transported for authorised disposal. All waste being transported from the facility is weighed and recorded at the weighbridge. An individual weigh docket is printed for each waste load.

2. EMISSIONS FROM THE FACILITY

During the reporting period wastewater collected from site from bunds, interceptors, silt traps, bin/vehicle washing sump, weighbridge sump and underground storage tank

- 7/09/2009: 10,000l (Enva)
- 8/07/2009: 8,000l (Enva)
- 23/03/2009: 2100kg (M & T Plant Hire)

An estimate of storm water emissions from the facility can not be determined as flow is not monitoring. Weekly chemical analysis of storm water samples is undertaken.

3. WASTE MANAGEMENT RECORD

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

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

These waste classifications, subsequent to inspection, can be further categorised as been either suitable for recycling/recovery offsite or disposed to off-site authorised disposal facilities. Hazardous waste is not accepted at the AES Rosslare Waste Transfer Station. 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 or not acceptable 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 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 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

In accordance with Condition 11.9 of the waste licence, details of all wastes arriving at and departing from the facility are recorded. The details, which are maintained in a full record on site, include:

- The tonnages and EWC code for the waste materials imported and/or sent off-site for disposal/recovery
- The names of the agent and carrier of the waste and their waste collection permit details, if required (to include issuing authority and vehicle registration number)
- Details of the ultimate disposal/recovery destination facility for the waste and its appropriateness to accept the consigned waste stream, to include its permit/licence details and issuing authority, if required
- Written confirmation of the acceptance and disposal/recovery of any hazardous waste consignments sent off-site
- Details of all wastes consigned abroad for Recovery and classified as "Green" in accordance with the EU Transfrontier Shipment of Waste Regulations (Council Regulation EEC No. 259/1993, as amended). The rationale for the classification must form part of the record.
- Details of any rejected consignments
- Details of any approved waste mixing
- The results of any waste analyses required under *Schedule C: Control and Monitoring* of this licence
- The tonnages and EWC Code for the waste materials recovered/disposed on-site

In accordance to requirements of the Waste licence,. W0229-01, a summary of the waste recovered/disposed at the facility over the period from 1st January 2009 to 31st December 2009 is presented in Table 3.1 & 3.2.

Table 3.1: Incoming Waste to AES Rosslare Waste Transfer Station

EWC Code	Incoming Waste
15 01 01 BC – Cardboard	104.78
15 01 01 C – Cardboard	1652.08
15 01 01 MX - Cardboard	363.52
15 01 02 PL – Plastic	21.82
15 10 2P LW – Plastic	0
15 01 03 – Wooden packaging	0
15 01 04 – Metal Packaging	0
15 01 06 – Metal Packaging	24.61
15 01 07 - Glass Packaging	0
17 01 02 –C&D	923.61
17 02 01 – Wood	273.44
17 02 02 – Glass	2.82
17 04 07 - Mixed metals	75.33
17 06 05 – C&C containing asbestos	0
17 08 02 –C&D	0
17 09 04 –C&D	939.77
19 05 03 – Off specification compost	111.5
19 08 05 – Sludge	0
19 12 09 – Sand & stones	0
20 01 02 – Glass	0
20 01 11 – Textiles	28.79
20 01 39 - Plastics	0
20 03 01 C – Municipal Waste	7463.4
20 03 01 D – Municipal Waste	1040
20 03 01 K – Municipal Waste	2007.14
Grand Total	15032.61

Table 3.2 Quantities of Waste Recovered / Disposed at Facility during 2009

EWC Code	Outgoing Waste *(tonne)*	Waste Recovery / Disposal Destination Name	Waste Recovery / Disposal Destination Address	Licence / Permit No.
15 01 01 BC – Cardboard	900.92	(MLM) ACN Europe (UK),	Adamson House, Towers Business Park, Wilmslow Road, Didsbury, Manchester M20 2YY	
15 01 01 B - Cardboard C	255.7	International Recycling Ltd.,	Health House, 5 Woodgate Court, St. Benedicts Street, Norwich NR2 4AP, UK	AEA/791992/B
15 01 01 B - Cardboard C	31.58	Irish Packaging Recycling,	Ballymount Road, Walkinstown, Dublin 12	WPR 021/02
15 01 01 MX – Cardboard	161.5	Irish Packaging Recycling,	Ballymount Road, Walkinstown, Dublin 12	WPR 021/02
15 01 02 PL – Plastic	92.06	Leinster Environmental	Clermont Business Park, Haggardstown, Dundalk, Co. Louth	WP 2008/06
17 01 02 –C&D	1401.03	Goff Developments Ltd.	Jacketstown, Drinagh, Co. Wexford	WP/06/30
17 01 02 –C&D	193.58	Goff Developments Ltd.	Jacketstown, Drinagh, Co. Wexford	WP/06/30
17 02 01 – Wood	515.56	Shreedwood Ltd.,	Littleton, Thurles, Co. Tipperary	WP/TN/101
17 02 02 – Glass	17.34	Urban & Rural Recycling	Creeg, Ballycogley.	WP/06/36(A)
17 04 07 - Mixed metals	216.4	MSM Recycling	Cookstown Industrial Est., Tallaght, Dublin 24	W0079-01
19 05 03 – Off specification compost	93.51	Bord na Mona	Kilberry, Athy, Co. Kildare	W0198-01
19 12 09 – Sand & stones	665.12	Drehid WMF	Killinagh Upper, Carbury, Co. Kildare	W0201-03
19 12 12 – Other waste from mechanical treatment	6711.51	Drehid WMF	Killinagh Upper, Carbury, Co. Kildare	W0201-03
20 03 01 C – Municipal Waste	21.78	Wexford CoCo Landfill	Holmestown, Barntown, Co. Wexford	W0191-01
20 03 01 C – Municipal Waste	960.8	AES Portlaoise	Kyletalesha, Portlaoise, Co. Laois	W0194-02
20 03 01 K – Municipal Waste	78.98	Mr. Binman Clearpoint,	Ballylynch, Carrick-on-Suir, Co. Tipperary	WP 035-02
20 03 01 K – Municipal Waste	1742.93	Dungarvan MRF	Shandon, Dungarvan, Co. Waterford	W0189-01
20 03 01 K – Municipal Waste	923.43	AES Tullamore	Cappincur Industrial Est. Daingean Rd, Tullamore Co. Offaly	W0104-02
Grand Total	**14983.73**			

4. RESOURCE AND ENERGY CONSUMPTION

4.1. Resource Consumption Summary

Some resources consumed at AES Rosslare Waste Transfer Station are recorded. During the Reporting period water usage on-site is not metered and has not been recorded, therefore, calculation of water usage is not possible at present.

Road Diesel Consumption was 247,475 Litres.

The total electrical consumption at the site was 88,850 kWh during the reporting period. During the same period wastewater produced at the facility (collected from site from bunds, interceptors, silt traps, bin/vehicle washing sump, weighbridge sump and underground storage tank) was recorded as 18,000 litres (Enva) and 2100 kg (M & T Plant Hire).

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 2008. The findings of the report will be implemented, where feasible. Please refer to the Proposed Targets & Objectives for 2010 in Table 5.2 for more details.

4.3. Water Consumption

The volume of wastewater produced at the facility and transported off-site is presented above in Section 4.1.

Please refer to Objective & Targets 2010 (Table 5.2) for proposals being developed to minimise water demand and the volume of trade effluent discharge, in compliance with Condition 7.3, which include investigating the feasibility of the collection and re-use of rainwater for vehicle washing.

4.4. Raw Materials Consumption & Waste Generation

Please refer to Objective & Targets 2010 (Table 5.2) for proposals being developed to minimise raw material consumption and waste generation. Proposals include:

- Induct staff and contract cleaners on waste segregation and minimisation. Display signs on segregated bins (residual & recyclable) outlining waste to be deposited in each. Install battery bin and ink/toner cartridge bins in main office and organise collection
- Induct yard staff on waste segregation and minimisation. Display signs on segregated bins (residual & recyclable) outlining waste to be deposited in each
- Once organic waste collections commence, install organic waste bins in canteen and yard
- Investigate the feasibility of the usage of "Ad-Blue" in vehicles currently not utilising this additive. As the fleet is updated with newer vehicles, the use of "Ad-Blue" shall be rolled out to a greater number of vehicles
- Maximise throughput of picking line to maximise the recovery of recyclables and to minimise disposal of waste
- Increase Customer Awareness in relation to waste segregation
- Roll-out of domestic and commercial brown bin on a phased basis
- Streamline Routes. Computer programme being acquired for AES Group to manage collection route to ensure maximum efficiency of labour and raw materials

5. ENVIRONMENTAL OBJECTIVES & TARGETS

5.1. Progress against Targets for 2009

Details on progress made against the Targets for 2009 are presented in Table 5.1.

Table 5.1: Progress against Targets for 2009

Ref No	Objective	Target	Status
1	To investigate the feasibility of decreasing diesel consumption	To complete a trial of the use Dipetane, an additive for diesel, to investigate the feasibility of its use in decreasing diesel consumption.	It was found that the use of Dipetane was not cost effective as it only produced a small reduction in diesel consumption.
2	Installation of upgraded Dust Suppression System	Install upgraded Dust Suppression System within Waste Transfer Building	The trommel was covered to reduce dust emissions. A quote was obtained in December 2009 for a Dust and Odour Suppression System. Two more quotes are to be obtained in 2010. Please see Objectives & Targets for 2010.
3	Maximise recovery of recyclables	Maximise throughput of picking line to maximise the recovery of recyclables and to minimise disposal of materials	The trommel was replaced with a larger and more efficient system in December 2009. Please see Objectives & Targets for 2010.
4	Internal Waste Awareness Campaign	Increase awareness among staff of importance of waste segregation	Although there is increased waste awareness among staff, there is a requirement for improved waste management in the offices, canteen and yard. Please see Objectives & Targets for 2010.
5	Diversion of biodegradable waste from landfill	To begin trialling domestic brown bins for the segregation and collection of biodegradable waste	Collections are due to commence in 2010 in accordance with local Bye-Laws. Please see Objectives & Targets for 2010.

5.2. Schedule of Objectives and Targets for 2010

The proposed schedule of Objectives and Targets for 2010 is presented in Table 5.2.

Table 5.2: Proposed schedule of Objectives and Targets for 2010

Ref No	Objective	Target	Timescale	Response	Status
1	Improved Waste Management	Office - Induct staff and contract cleaners on waste segregation and minimisation. Display signs on segregated bins (residual & recyclable) outlining waste to be deposited in each. Install battery bin and ink/toner cartridge bins in main office and organise collection.	Mar-10	EoN/JC	Ongoing
		Site - Induct yard staff on waste segregation and minimisation. Display signs on segregated bins (residual & recyclable) outlining waste to be deposited in each.	Mar-10	EoN/JC	Ongoing
		Once organic waste collections commence, install organic waste bins in canteen and yard.	Dec-10	EoN/JC	Ongoing
2	Review Energy Efficiency Audit Report	Implement findings, where feasible.	Jun-10	EoN/JC	Ongoing
3	Increase usage of "Ad-blue" in Fleet Vehicles to reduce emissions	Investigate the feasibility of the usage of "Ad-Blue" in vehicles currently not utilising this additive. As the fleet is updated with newer vehicles, the use of "Ad-Blue" shall be rolled out to a greater number of vehicles.	Dec-10	EoN	Ongoing
4	Maximise recovery of recyclables	Maximise throughput of picking line to maximise the recovery of recyclables and to minimise disposal of waste	Dec-10	EoN	Ongoing
		Increase Customer Awareness in relation to waste segregation	Dec-10	EoN	Ongoing
5	Diversion of biodegradable waste from landfill	Roll-out of domestic and commercial brown bin on a phased basis.	Dec-10	EoN	Ongoing
6	Environmental Monitoring	As per Waste Licence: Should any limits be exceeded, corrective actions to be implemented.	Dec-10	EoN/JC/ LC	Ongoing
7	Installation of up-graded Dust Supression System	Install upgraded Dust Suppression System within Waste Transfer Building	Sep-10	MW	Ongoing
8	Investigate options for the reduction and/or re-use of water on-site	Investigate the feasibility of the collection and re-use of rainwater for vehicle washing.	Aug-10	EoN	Ongoing
9	Efficiency of Fuel Consumption	Streamline Routes. Computer programme being acquired for AES Group to manage collection route to ensure maximum efficiency of labour and raw materials	Dec-10	Logistics Manager	Ongoing
10	Upkeep of Environmental Management System	Accreditation of EMS to ISO 14001	Jul-10	Enviro Team	Ongoing
		Monthly EMS Meetings	Dec-10	Enviro Team	Ongoing
		Ongoing review of procedures, objectives & targets, and aspects register	Dec-10	Enviro Team	Ongoing
11	Environmental Training & Awareness	As per training matrix and schedule	May-10	JC	Ongoing

6. 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 2009.

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

1. Noise — Annually
2. Dust Deposition — Three times per annum
3. Storm Water Emissions — Weekly & Quarterly

Sections 6.5 present a summary of the Environmental Management Programme for the facility. .

6.1. Noise Monitoring Report Summary

In compliance with the requirements of the waste licence, W0229-01, annual noise monitoring at the AES Rosslare Waste Transfer Station was undertaken. Monitoring was carried out on the 13 May 2009.

L_{Aeq}, L_{A10} L_{A90} values and 1/3 Octave band analyses was determined at all four monitoring locations (N1 – N4). The noise monitoring locations are presented in Table. 6.1.

Table 6.1: Noise monitoring Locations

Map reference No.	Location Type	Location Description
N1	Boundary	South western corner beside the main office
N2	Boundary	North western corner beside bin storage area
N3	Boundary	North eastern corner beside bin storage area
N4	Boundary	South eastern corner behind the main office

The daytime L_{Aeq} recorded a the four boundary locations ranged from 53 dB at N4 – 60 dB at N2. The full set f results are presented in Table 6.2.

Table 6.2: Noise monitoring Results

Map reference No.	Measurement Period *(mins)*	Time	L_{Aeq} *(dB)*	L_{A10} *(dB)*	L_{A90} *(dB)*	L_{AfMAX} *(dB)*
N1	30	14.06	54	58	44	73
N2	30	15.15	60	61	42	89
N3	30	15.48	57	61	37	80
N4	30	14.39	53	57	38	74

Elevated noise levels were noted at two of the boundary locations (N2 and N3) during the monitoring period. The main source of noise recorded at the boundary locations N2 (60 dB) and N3 (57 dB) were, for the most part, due to trucks loading bins beside the noise meter which drove up the average noise level recorded and also the operation of a power washer in the facility.

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

The full noise report is included in Appendix II.

6.2. Ambient monitoring Summary

In compliance with the requirements of the waste licence, W0229-01, dust monitoring at the AES Rosslare Waste Transfer Station was undertaken. Monitoring was carried out on three times during the reporting period.

There are four dust monitoring locations on site, detailed in Table 6.3.

The Waste Licence limit for dust deposition is given as 350mg/m^2/day as per Schedule B.5.

Table 6.3: Dust monitoring Locations

Monitoring Location	Description
A2-1	South Western corner beside Reception
A2-2	Middle of site beside power washer
A2-3	North western corner of facility
A2-4	North eastern corner of the facility

Four Bergerhoff dust gauges were continuously exposed for a 29 day period between the 15 January - 13 February, for a 33 days from 13 May – 15 June and finally 31 days from 17 July – 17 August 2009. The results for monitoring are presented in Table 6.4.

Table 6.4: Dust monitoring Results

Monitoring Location	Dust Deposition Limit	Deposition Rate *(15 January – 13 February)*	Deposition Rate *(13 May – 15 June)*	Deposition Rate *(17 July – 17 August)*
	(mg.m^2/day)			
D1	350	**470**	219	217
D2	350	221	163	98
D3	350	157	31	244
D4	350	**389**	Note 1	**396**

Note 1 – Dust gauge was missing during the monitoring period

The results were elevated above the EPA limits at D1 and D4 during the first round of monitoring. D4 was elevated above the EPA limit during the third round of monitoring. All the other results are under the licence limits.

The full dust monitoring reports are attached in Appendix II.

6.3. Surface water Monitoring Results Summary

In accordance with Waste Licence, W0229-01 Schedule C.2.3, AES Rosslare is required to carry out a Daily Visual Inspection, weekly sampling of pH, conductivity and suspended solids and quarterly sampling of COD, Ammonia and Mineral Oils from the surface water in the immediate environs of its Waste Transfer Facility.

Surface water monitoring locations are presented in Table 6.5.

Table 6.5: Surface Water Monitoring Locations

Monitoring Location	Description
SW-1	Located upstream of the AES facility
SW-2	North eastern corner of AES facility
SW-3	Located 10m immediately downstream of SW-2

Quarterly Monitoring occurred on the 15 January, 13 May, 17 August and finally on the 15 October. The results of Quarterly surface water monitoring are presented in Table 6.6. Emission limits for surface waters are not specified in the Waste Licence.

The full surface water monitoring reports are attached in Appendix II.

Table 6.6: Surface Water Monitoring Results

Parameter	Quarter 1			Quarter 2			Quarter 3			Quarter 4		
	SW-1	SW-2	SW-3	SW-1	SW-2	SW-3	SW-1	SW-2	SW-3	SW-1	SW-2	SW-3
On-site visual inspection	Clear colour, high SS	Clear colour, few SS, oily surface	Clear colour, few SS, oily surface	Clear colour, no SS	Clear colour, no SS, oily surface	Clear colour, no SS, oily surface	Clear colour, no SS	Clear colour, few SS, slight oily surface	Clear colour, high SS due to vegetation	Clear/ cloudy colour, some SS, no oily surface	Clear/ cloudy colour, high SS, oily surface	Cloudy colour, high SS due to vegetation, no oily surface
Odour	No odour	No odour	No odour	No odour	Slight odour	Slight odour	No odour	No odour	No odour	No odour	Very oily odour	Slight oily odour
COD mg/l	74	66	67	20	28	22	<10	<10	<10	29	30	43
** Mineral Oils µg/l Note 1	<10	266	477	<10	<10	<10	<10	<10	<10	<10	<10	<10
Ammonia mg/l as N	0.29	0.23	0.31	0.02	0.94	0.77	<0.02	0.16	<0.02	0.04	0.04	0.07

** - Subcontracted test

6.4. Tank and Pipeline Testing & Inspection Reports

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. 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

Tank and Pipeline Testing & Inspection Reports for the site are due in 2010.

6.5. Environmental Management Programme

The Environmental Management Program (EMP) form part of the Objectives and Targets for the facility, presented in Table 5.1 & 5.2. Among the measures outlined in the Tables, it is proposed for the coming year:

- To obtain ISO 14001 certification for the facility
- Undertake an ongoing review of procedures, objectives & targets, and aspects register
- To hold Monthly EMS Meetings
- Investigate the feasibility of the collection and re-use of rainwater for vehicle washing
- To undertake an internal waste awareness campaign
- Increase Customer Awareness in relation to waste segregation

7. SITE DEVELOPMENT / INFRASTRUCTURAL WORKS

7.1. Current Infrastructure in Place

The facility is currently licensed to accept a maximum of 23,000 tonnes of waste per annum (5,400 tonnes of Household waste, 8,600 tonnes of Commercial waste, 4,000 tonnes of Non-hazardous Construction and Demolition (C&D) waste and 5,000 tonnes of Non-hazardous Industrial waste). The current operating Capacity is 440 tonnes per week.

Table 7.1: Summary list of Plant & Machinery

List of all Machinery & Equipment
Trommel
pickling line
Baler
Track Machine (360)
Loading Shovel
2 forklifts (1 equipment with grab, 1 for moving)

Most waste arriving on-site is already source segregated. Should the trommel breaks down, waste is sorted manually with track machine and by general operatives. Should the track machine or loading shovel were down, a replacement would be hired in.

The network of sites owned by AES and their proximity is a beneficial factor considering standby. Should the baler be down for an extended period, recyclable would be sent to AES Tullamore un-baled and baled there. Should the trommel remain out of action for a few days, waste would be re-directed to AES Portlaoise for segregation.

7.2. Site Development Works during 2009

During the 2009 reporting period the trommel was upgraded.

7.3. Proposed Development Works for 2010

During 2010 it is anticipated that the site will install an upgraded Dust Suppression System within Waste Transfer Building. This is detailed in Table 5.2: Proposed schedule of Objectives and Targets for 2010.

8. INCIDENTS & COMPLAINTS

8.1. Complaints Summary

All environmental complaints are recorded at the facility. 4 No complaints were received by the site during the 2009 reporting period. Summary details are presented in Table 8.1.

Table 8.1: Summary of Complaints

Date	Complaint Summary Details	Action Summary Details
10/05/2009	Odour	Odour check undertaken and a slight odour was observed
22/06/2009	Odour & litter	Odour check undertaken and a slight odour was observed. Check for litter. Completed litter picking on the road. Communicated with complainant regarding the corrective action
17/09/2009	Odour & Noise (reverse beepers)	Odour check undertaken the a slight odour was observed. Treated with odour control and informed the EPA. Ordered a verbal reversing beeper to mitigate noise complaint
15/10/2009	Odour	Odour check undertaken and a strong odour noted. Treated with odour control and informed the EPA.

8.2. Reported Incidents Summary

All environmental incidents are recorded at the facility. 3 No incidents were recorded by the site during the 2009 reporting period. Summary details are presented in Table 8.2.

Table 8.2: Summary of Incidents

Date	Incident Summary Details
20/07/2009	Waste lorry caught fire
24/09/2009	Elevated dust above licence limits
July/August	Elevated dust above licence limits

Full details of complaints and incidents are included in Appendix III.

8.3. 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 are included in full in Appendix IV.

9. FACILITY MANAGEMENT

9.1. Report on Financial Provisions

In 2008, Goff Recycling Limited was acquired by AES (Ireland) Ltd. which is a wholly-owned subsidiary of Bord Na Móna plc. AES Rosslare t/a Goff Recycling Ltd 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 facility, therefore, any costs incurred in addressing same will be limited to the removal and safe disposal of the waste remaining on-site following an emergency event (e.g. fire or spillage event) or the decommissioning and closure of the site. Such environmental liabilities cover should account foe 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 to cover the liability arising from damage to property and injury to parties as a result of sudden an 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.

9.2. Management & Staffing Structure

The management and staffing structure of the facility is described in Figure 9.1.

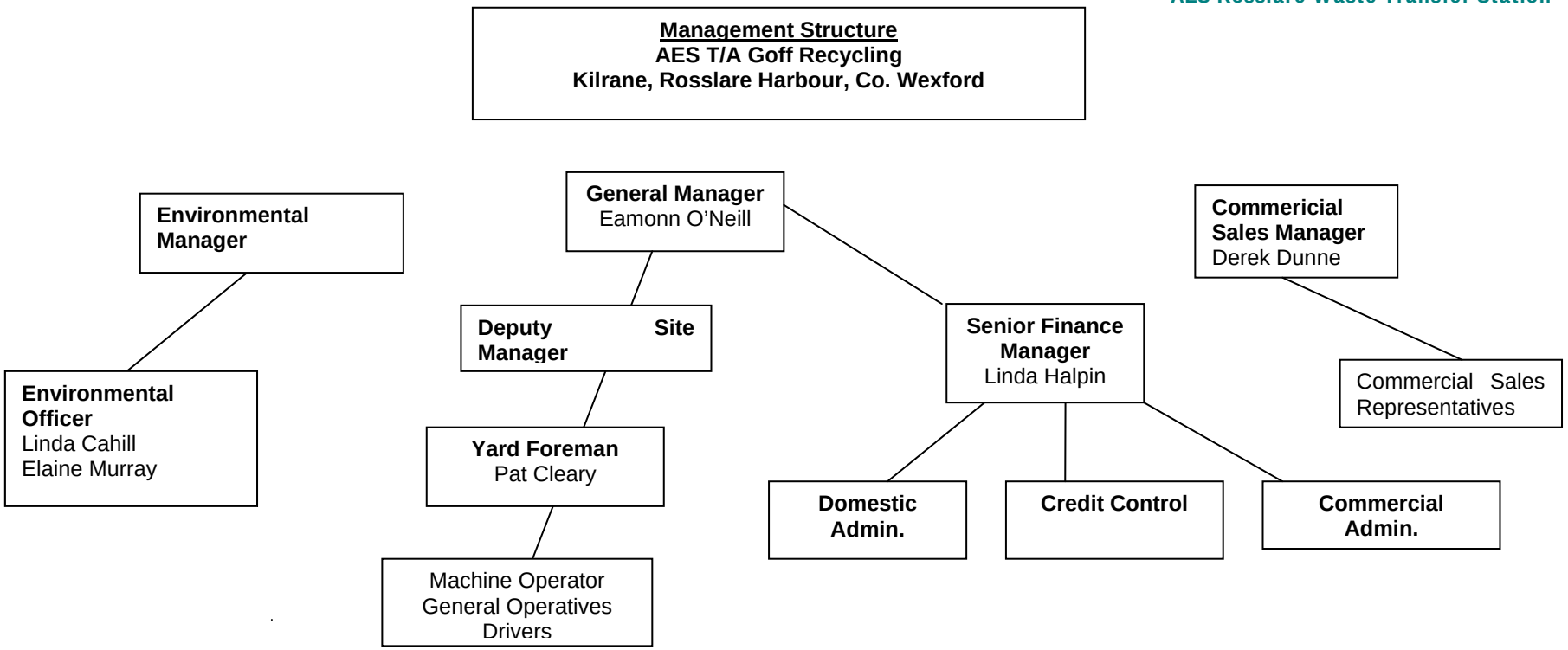


Figure 9.1: Management and Staffing Structure

9.3. New Procedures Developed During 2009

Environmental Management for AES Rosslare was revised during 2009 and was awarded 1SO14001 certification on the 26ht of January 2010.

9.4. Review of Nuisance Controls

There were no nuisance/pest issues in during the 2009reporting period and there are no proposed amendments to nuisance controls for 2010. The existing nuisance control procedure is presented below:

Purpose: *To define the procedure of Vermin Control at AES Rosslare.*

Scope: *All methods of vermin control in place on-site at AES Rosslare.*

References: *WI 2.0 Site Inspection Procedure*
EWIF 2.2 Daily Environmental Nuisance Inspection Form
Rodent Control Contractor Site File

Procedure

1. *Condition 5.6 of Waste Licence 229-01 states that Vermin, Birds and Flies associated with the waste activities on-site do not result in an impairment of, or an interference with, amenities or the environment at the facility or beyond the facility boundary or any other legitimate uses of the environment beyond the facility boundary.*

2. *On a daily basis, the site and its immediate surrounds shall be inspected for nuisances caused by Vermin, Birds and Flies as part of the Daily Nuisance Monitoring Procedure outlined in WI 2.0 Site Inspection Procedure. A record of inspections shall be maintained on EWIF 2.2 Daily Environmental Nuisance Inspection Form.*

3. *AES Rosslare uses the services of a specialist pest control contractor to provide a pest prevention service for rodents.*

The pest control contractor has bated the site and has set up an inspection schedule to visit the site approximately once a month, and carry out inspections, and servicing of poison bait boxes which are installed around the site.

The Pest Control Contractors Site File will include details of the following –

- *Site visits and inspection findings.*
- *MSDS sheets for rodenticides used.*
- *Details of operator training.*
- *A map showing the locations of all external bait stations on site.*

Precautions in order to minimise secondary poisoning of other species will be as follows –

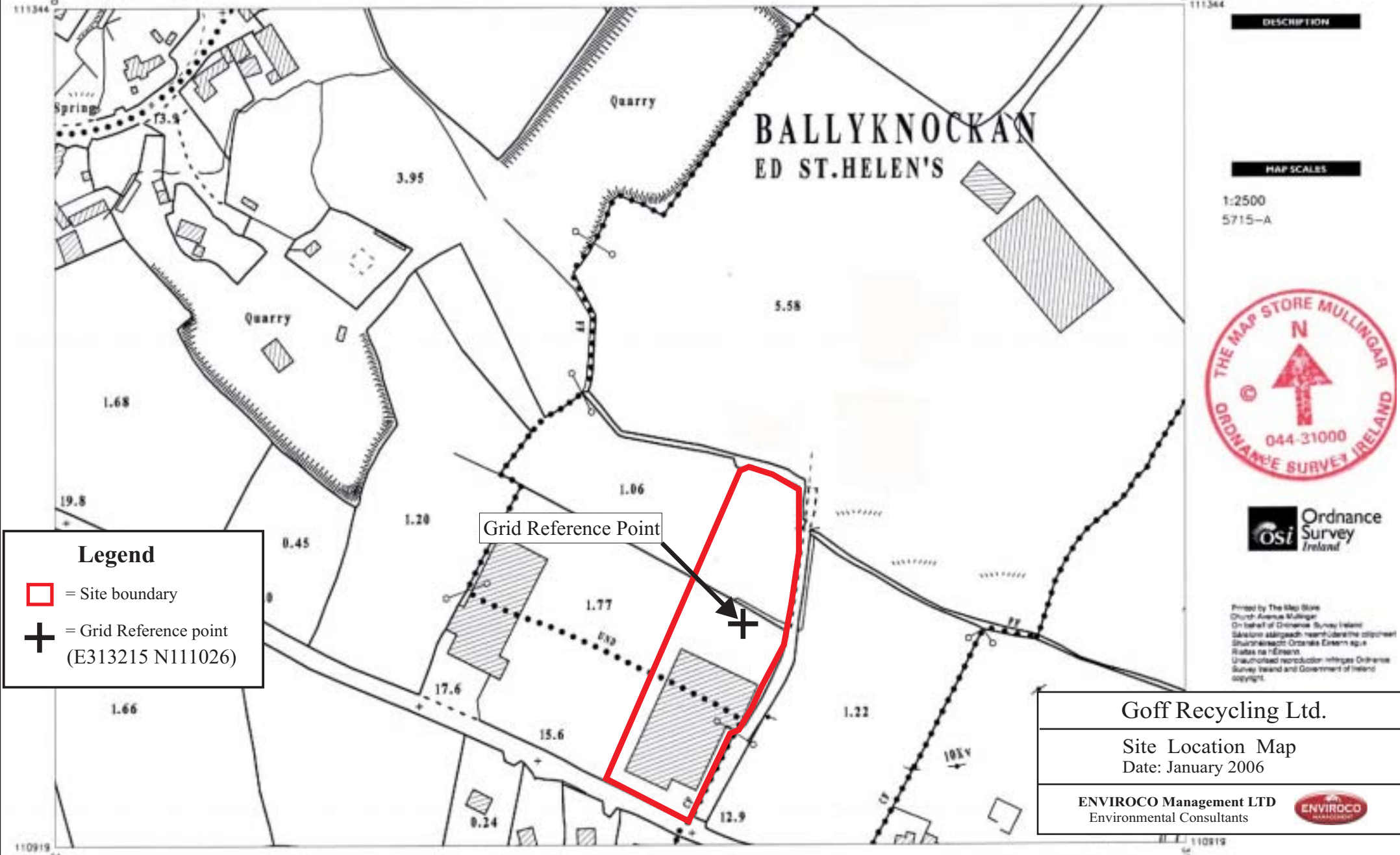
- *The use of first generation warfarin based anti-coagulant poisons which reduce the risk of secondary poisoning to other species.*
- *Rodenticides will be housed in specialised tamperproof and clearly marked bait stations which will be checked regularly and replaced if damaged.*
- *Removal of any dead rodents preventing scavengers from ingesting them.*
- *Proper disposal of empty rodenticide containers and storage of rodenticides in accordance with legislation.*

Appendix I

Drawings

Surveyed 1996
Revised 2004
Levelled 1992

Map B.2.1 Location Map of the Goff Recycling Ltd. site Kilrane, Rosslare Harbour



Appendix II

Monitoring Results

BORD NA MÓNA

BORD NA MÓNA ENVIRONMENTAL LIMITED

MONITORING OF AMBIENT NOISE LEVELS AT THE ADVANCED ENVIRONMENTAL SOLUTIONS (IRELAND) LTD. (GOFF RECYCLING) SITE AT ROSSLARE, CO. WEXFORD IN ACCORDANCE WITH WASTE LICENSE REGISTER NO. W0229-01

For the Attention of:
Ms. Linda Cahill
Environmental Officer
Advanced Environmental Solutions (Ireland) Ltd.
Unit 1 Monread Road
Naas
Co. Kildare

Prepared by:
Ms. Josephine Chadwick
Environmental Scientist

Reviewed by:
Mr. Peter Coogan
Monitoring Team Leader

Ref: **ECS3332-Noise (Annual)**
Date: **May 2009**

EXECUTIVE SUMMARY

In accordance with the requirements of the company's Waste Licence (Register No. W0229-01), Advanced Environmental Solutions (AES) Ltd., are required to conduct annual noise monitoring at four locations at the site at Rosslare, Co. Wexford on an annual basis. The site was subsequently visited by a Bord na Móna Environmental Scientist on the13th of May to conduct the annual monitoring survey for 2009.

$L(A)_{Leq}$, $L(A)_{10}$, $_{L}(A)_{90}$ values and 1/3 Octave band analysis was determined at all four monitoring locations (N1-N4). The daytime L_{eq} recorded at the four boundary locations ranged from 53.3 dB(A) at N4 to 60.3 dB(A) at N2.

Elevated noise levels were noted at two of the four boundary locations (N2 and N3) during the 2009 noise monitoring survey. The main source of noise recorded at the boundary locations N2 (60.3dB(A)) and N3 (56.7 dB(A)) were, for the most part, due to trucks loading bins beside the noise meter which drove up the average noise level recorded and a power washer operating in the AES facility.

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

Respectively Submitted,

Josephine Chadwick

Ms. Josephine Chadwick
Environmental Scientist

Peter Coogan

Mr. Peter Coogan
Monitoring Team Leader

TABLE OF CONTENTS

1.0 INTRODUCTION

AES Ltd. operates and manages a waste recycling facility at Rosslare, Co. Wexford

In compliance with the requirements stipulated in schedules B and C of Waste Licence No. W0229-01, AES Ltd. is required to

a) Carry out a noise survey of the site operations annually

b) Determine ambient noise levels at locations as set out in C.5 of the waste licence. Table B.4 specifies the monitoring frequency and parameters to be determined consisting of:

LA_{LEQ} (30minutes)
LA_{10} (30 minutes)
LA_{90} (30 minutes)
Frequency Analysis (1/3 Octave band analysis)

c) Ensure that activities on-site shall not give rise to noise levels off site, at any noise sensitive location, which exceed the following sound pressure limits (L_{Aeq}, 30 minute):

Daytime 55 dB A

Bord na Móna Technical Services was contracted to conduct this noise assessment and subsequently visited the site to conduct the 2009 noise monitoring event. The AES Ltd. facility only operates during the daytime hours (0800 –1800 hours). This report presents details of both the methodologies employed and results obtained.

2.0 METHODOLOGIES

2.1 Measurement Parameters

2.1.1 L_{eq} Values

$L_{eq}(t)$ values represent the continuous equivalent sound level over a specified time (t). This value expresses the average levels over time and is a linear integral.

2.1.2 Max P Values

The Max P values represent the maximum sound pressure level produced by a source during the monitoring period.

2.1.3 L_{90} and L_{10} Values

The L_{90} and L_{10} values represent the sound levels exceeded for a percentage of the instrument measuring time. L_{10} indicates that for 10% of the monitoring period, the sound levels were greater than the quoted value. L_{10} is a good statistical parameter for expressing event noise such as passing traffic. The L_{90} represents post event sound levels and is a good indicator of background noise levels.

2.2 Tonal and Impulsive Characteristics

For the purpose of this report, tonal noise is characterised in accordance with ISO 1996-2, which indicates that a noise source being tonal at a particular frequency is either clearly audible or exceeds the level of the adjacent bands by 5dB or more.

An impulsive noise is of short duration (typically less than one second), it is brief and abrupt, its' startling effect causes greater annoyance than would be expected from a simple measurement of sound pressure level. For example an instantaneous bang/thud that maybe associated with pile driving, hammering etc.

2.3 Standards and Guidance

The acoustic assessment and subsequent report are in accordance with International Standard Organisation (ISO) 1996 Acoustics – Description and Measurement of Environmental Noise Part 1, 2, and 3 in addition to the Environmental Protection Agency Integrated Pollution Control Licensing Guidance Note for Noise In Relation To Scheduled Activities.

2.4 Site information

2.4.1 All measurements were taken at 1.5 m height above local ground level and 1-2 m away from reflective surfaces.

2.4.2 The weather was dry and sunny with a slight breeze at the time of the assessment.

2.4.3 Table 2.2 describes the locations of the monitoring positions for the annual noise monitoring assessment.

2.4.4 All noise measurements were sampled for the license stipulated minimum time period of 30 minutes.

2.4.5 Sampling Locations

Table 2.1 presents details of the noise monitoring locations. Map locations provided in Appendix 2.

TABLE 2.1 : LOCATION OF NOISE MONITORING MEASUREMENTS

Map Reference No.	*Location Type*	*Geographical location from the site centre*
N1	Boundary	South Western corner beside the main office
N2	Boundary	North Western corner beside bin storage area
N3	Boundary	North Eastern corner beside bin storage area
N4	Boundary	South Eastern corner behind the main office

3.0 INSTRUMENTATION EQUIPMENT USED

The following equipment was employed during the acoustic assessment on the 28th of August 2008.

Bruel & Kjaer Real-Time Noise Analyzer Type 2260 Observer with Sound Analysis Software BZ 7210

Model No: 2260	Serial No: 2418359
Date of Certificate and Calibration:	19th February 2008
Microphone Type: B&K 4936	Serial No: 2417709
Date of Certificate and Calibration:	19th February 2009
Tripod	

On site Calibration

The instrument was calibrated immediately before and after the measurement periods with no drift in calibration level noted.

4.0 RESULTS

Table 4.1 presents the results of the noise monitoring survey carried out at the AES Ltd. waste management facility during normal daytime activities. Map locations provided in Appendix 2.

TABLE 4.1: NOISE MEASUREMENT RESULTS

Location No.	Measurement Period	Sampling Time	L_{eq} dB(A)	L_{10} dB(A)	L_{90} dB(A)	L_{AFMax} dB(A)
N1	30	14:06	54	58.2	44.0	73.1
N2	30	15:15	60.3	60.8	41.8	88.5
N3	30	15:48	56.7	60.5	36.9	80.4
N4	30	14:39	53.3	56.5	37.7	74.0

5.0 DISCUSSION

Noise monitoring was undertaken at 4 boundary locations, at the AES Ltd. facility in Rosslare, Co. Wexford. The monitoring of noise emissions was carried out as part of the requirements of the EPA Waste License W0229-01.

Noise emissions arising from normal daytime site operations should not result in exceedance of the noise limit of 55 dB(A) at any of the nearest noise sensitive locations.

Table 4.1 presents daytime noise measurements undertaken at the four monitoring locations for the 2009 monitoring event, 4 boundary locations.

Daytime Noise Measurements

Boundary Locations:

During the noise survey the site boundary L_{eq} levels (N1-N4) determined ranged from 53.3 dB(A) at N4 – 60.3dB(A) at N2.

N1 is located at the South Western corner of the site beside the main office. The L_{eq} level recorded at N1 was 54 dB(A). As can be seen from Table 4.1, the L_{90} value would suggest that for 90% of the 30 minute monitoring period, the average L_{eq} level was 44dB(A). The main source of noise at this location was a grass strimmer operating to the South of the site in a neighbouring domestic house which was intermittent and contributed to the LAF_{max} of 73.1dB(A). Other external sources of noise include bird singing, traffic passing on the road nest to the facility and also some noise from distance traffic from the N25 road passing through Rosslare town. General operations on site were quite with the odd truck passing in and out of the facility. Tonal noise was not detected at this location.

N2 is located at the North Western corner beside the bin storage area. N2 represents the highest L_{eq} level recorded at the boundary locations with a L_{eq} of 60.3 dB(A). The L_{90} value would suggest that for 90% of the 30 minute monitoring period, the average L_{eq} level was 41.8dB(A). Onsite observations indicate that the main source of noise audible at this location was a petrol engine power washer operating for a few minutes in the AES yard. The other source of noise was the loading and offloading of bins by trucks operating beside the noise meter which would have increased the average noise level and contributed to a high LAF_{max} of 88.5dB(A). Other noise

sources from the AES facility included intermittent beeping from a reversing truck and some faint noise from machinery operating in the recycling shed. External noise sources included birds singing and distant traffic on the roads around the site. No tonal noise was detected at this location

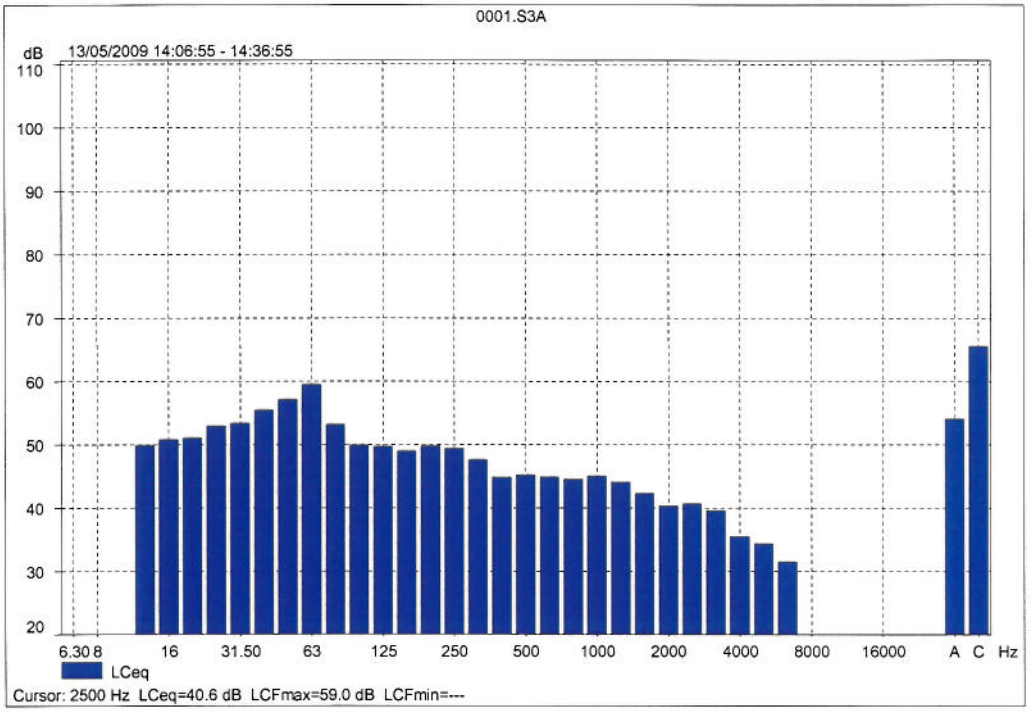
N3 is located at the North Eastern corner of the AES facility beside the bin storage area. The L_{eq} level recorded at N3 was 56.7 dB(A). The main sources of noise from the facility itself originated from fork lifts operating in the yard, a truck parking beside the bin storage area and slight noise from machinery in the AES shed. A truck collecting bins beside the noise meter would have contributed to a high LAF_{max} of 80.4dB(A), which would have increased the average noise level of 41.8dB(A) (L_{90}) recorded over the 30 minute period. External noise sources included birds singing and distant traffic on the roads around the site. Tonal noise was not detected at this location.

N4 is located on the South Eastern corner of the site behind the main offices. This was the lowest L_{eq} recorded at any of the boundary locations at 53.3 dB(A). No noise was audible from the AES facility at this monitoring location. External noise sources included birds singing, traffic passing on the adjacent yard and children playing on the road. No tonal noise was detected at this location

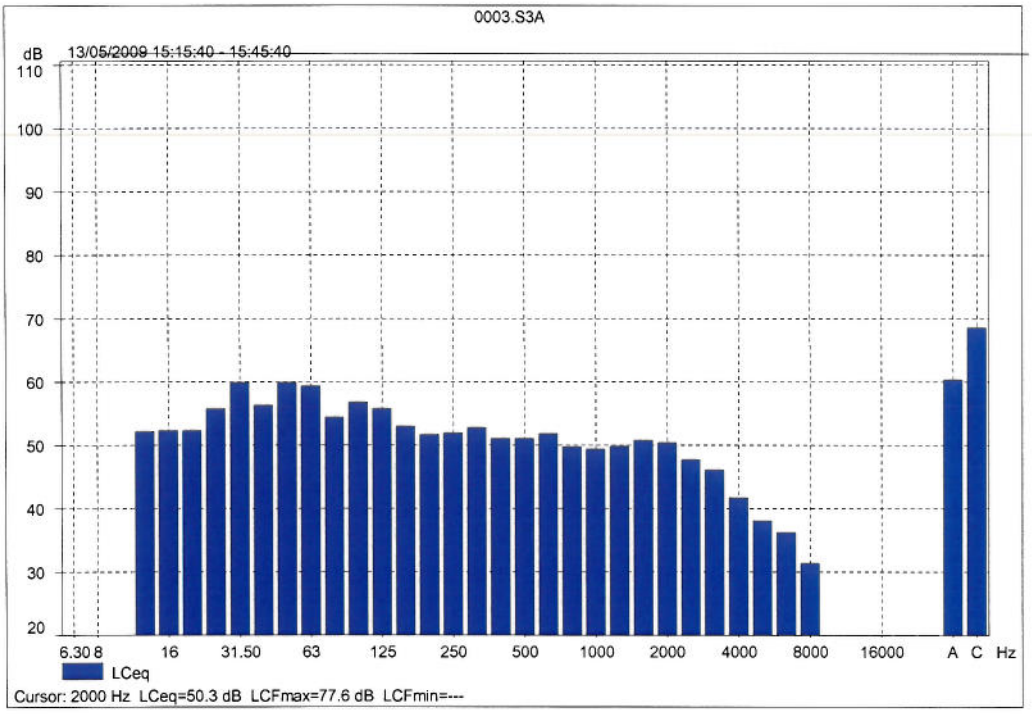
Appendix 1

$^1/_3$ Octave Tonal Graphs

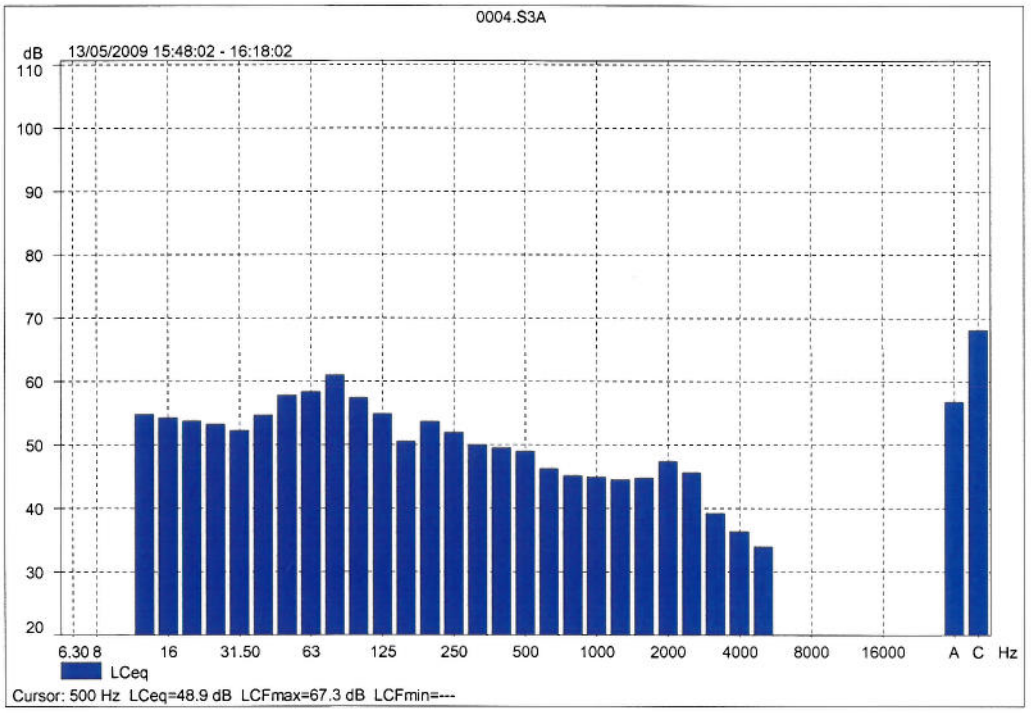
N1 $^{1}/_{3}$ Octave Tonal Graphs



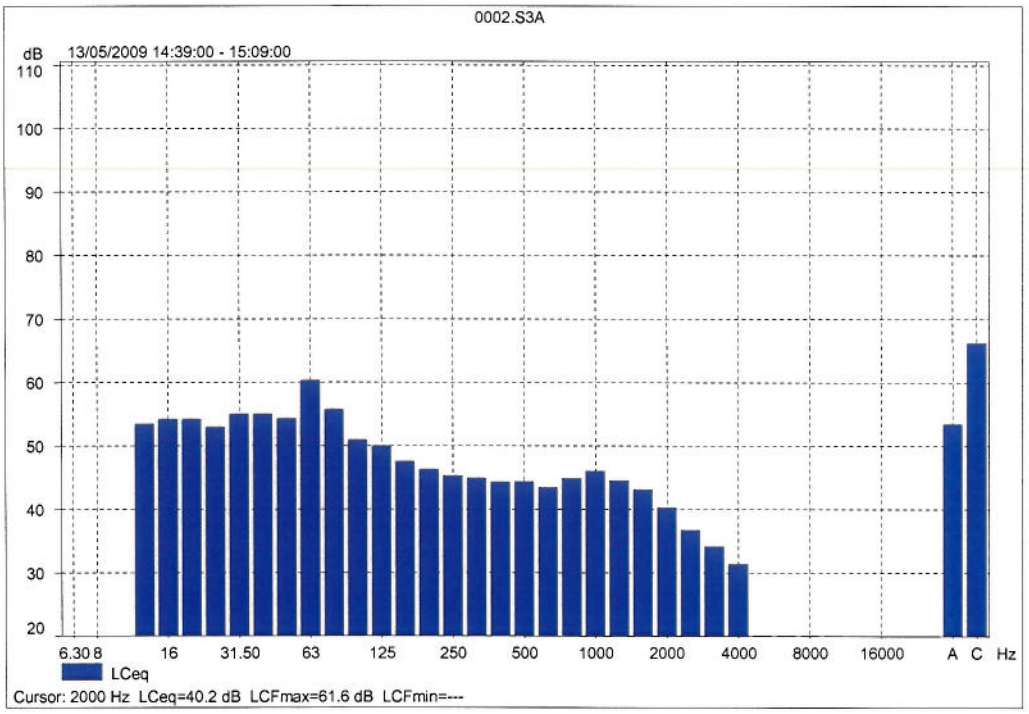
N2 $^{1}/_{3}$ Octave Tonal Graphs



N3 $^{1}/_{3}$ Octave Tonal Graphs



N4 $^{1}/_{3}$ Octave Tonal Graphs



Appendix 2

Map Indicating Noise Monitoring Locations

Noise Monitoring locations at the Goff Recycling Ltd. Rosslare Site

DUST DEPOSITION MONITORING AT THE ADVANCED ENVIRONMENTAL SOLUTIONS (IRELAND) LTD. (GOFF RECYCLING) SITE AT ROSSLARE, CO. WEXFORD IN ACCORDANCE WITH WASTE LICENCE REGISTER NO. W0229-01

For the Attention of:
Ms. Linda Cahill
Environmental Officer
Advanced Environmental Solutions (Ireland) Ltd.
Unit 1 Monread Commercial Park
Monread Road
Naas
Co. Kildare

Prepared by:
Mr. Peter Coogan
Monitoring Team Leader

Reviewed by:
Ms. Josephine Chadwick
Environmental Scientist

Report No: ECS3228-Dust
Monitoring Date: January/February 2009
Reporting Date: March 2009

Executive Summary

In accordance with Waste Licence Register No. W0229-01, Advanced Environmental Solutions Ltd. (AES) is required to conduct dust deposition monitoring at selected locations within their Rosslare Waste Transfer Facility three times a year.

Four Bergerhoff dust gauges were continuously exposed for a 29 day period between the 15th January 2009 and the 13th of February 2009. The dust deposition samples were then returned to the laboratory for subsequent analysis.

Bord na Móna Technical Services was commissioned to perform the sampling and analysis.

The Waste Licence limit for dust deposition is given as 350mg/m^2/day as per Schedule B.5 of the Waste Licence.

Respectively Submitted,

Mr. Peter Coogan	Ms. Josephine Chadwick
Monitoring Team Leader	Environmental Scientist

CONTENTS

1.0 INTRODUCTION

In compliance with the requirements of their Waste Licence, Register No. W0229-01 (Schedule B.5), AES is required to monitor dust deposition from their facility in Rosslare, Co. Wexford three times per year. Dust deposition is determined using the German Standard method VDI 2119 (Bergerhoff).

Bord na Móna Technical Services was commissioned to perform the sampling and analysis. The site was visited by a Bord na Móna Environmental Scientist on the 15th of January 2009 to install the dust jars. The dust jars were subsequently collected on the 13th of February 2009 (29 days later) and returned to the laboratory for analysis.

This report details the sampling methodologies and procedures followed.

2.0 METHODOLOGY

2.1 Dust Monitoring Locations

Dust deposition samples were taken at four locations within the site boundary. Table 2.1 below describes the sampling locations which are accurately marked on the environmental monitoring map locations attached in Appendix 1.

TABLE 2.1: LOCATION OF DUST MONITORING POSITIONS	
Sample Name	**LOCATION**
A2-1	South Western corner beside Reception
A2-2	Middle of site beside power washer
A2-3	North western corner of facility
A2-4	North eastern corner of the facility

2.2 Sampling

2.2.1 Dust Deposition

The Bergerhoff Dust Deposition Gauges used for this sampling survey consist of a plastic collecting vessel and a stand with a protective cage. Each vessel was placed in the metal basket which was positioned at a height of between 1.5 and 2 meters above ground level according to the German Standard Method VDI 2119 (Measurement of Dustfall, Determination of Dustfall using Bergerhoff Instrument (Standard Method) German Engineering Institute).

Prior to sampling, the collecting vessels were carefully cleaned with laboratory detergent, rinsed with deionised water and allowed to dry. Following exposure, the sample bottles were securely capped and returned to the laboratory for analysis.

2.3 Analysis

All samples returned to the laboratory were stored at 2-8°C. Subsequent analysis of all samples was carried out gravimetrically for dust and strictly followed the standard VDI 2119. The results were expressed in $mg/m^2/day$.

3.0 ACCREDITED QUALITY SYSTEM

3.1 INAB Accreditation

Bord na Móna Technical Services analytical laboratories is accredited to ISO 17025 by the National Accreditation Board (INAB). ISO 17025 accreditation ensures that the laboratory operates a quality system with technically competent staff. The laboratory has accreditation since 1997 and it is the policy of the laboratory to achieve and maintain a high standard of quality consistent with client's requirements in all aspects of the work carried out within the laboratory.

3.2 Interlaboratory Proficiency Schemes

To ensure the accuracy of the analytical testing the laboratory participates in several external proficiency schemes. The ongoing competence of the laboratory and its staff is assessed by participation in various inter-laboratory proficiency testing schemes, such as LGC Aquacheck scheme and the EPA Intercalibration programme organised for environmental laboratories throughout Ireland. Bord na Móna Environmental Consultancy & Laboratory Services Analytical Laboratory is listed on the EPA's register of Quality Controlled Laboratories

3.3 Controlled Chain of Custody

As part of the Quality System in place in Bord na Móna Technical Services., measures are taken to ensure controlled chain of custody. An outline of the chain of custody is given below.

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BORD NA MÓNA ENVIRONMENTAL LIMITED

CONTROLLED CHAIN OF CUSTODY

SITE		TRANSPORT		LABORATORY
Sampling and packaging of all samples were carried out by Bord na Móna Technical Team: Mr. Peter Coogan	Transport Document Form →	Transport to laboratory by Bord na Móna Technical Team.	Sample Reception Form →	Receiving of samples at Bord na Móna Technical Services Analytical Laboratories complex (Secure laboratory complex access to authorised personnel only) ↓ Storage of all samples for 1 month period after report issue. ↓ Supervised Disposal

4.0 RESULTS

Table 4.1 below presents the results of the dust deposition monitoring at the AES facility in Rosslare, Co. Wexford.

TABLE 4.1: RESULTS OF DUST DEPOSITION		
Sample Name	**Deposition Rate ($mg/m^2/day$)**	***Dust Deposition Limit ($mg/m^2/day$)***
A2-1	**470**	***350***
A2-2	221	***350***
A2-3	157	***350***
A2-4	**389**	***350***

5.0 COMMENT

The results of the dust deposition survey which was carried out from 15th of January to the 13th of February 2009 at the AES facility in Rosslare are presented in Table 4.1.

The Waste Licence limit for dust deposition is given as $350mg/m^2/day$ as per Schedule B.5 of the Waste Licence.

The dust deposition level obtained at A2-1 ($470mg/m^2/day$), may be attributed to its location within the facility. A2-1 is situated on the south western corner beside the main access road to neighboring industrial facilities. Traffic on this access road would have contributed to high dust levels.
On-site sources of dust may have originated from the loading bay located 10m away from the dust monitoring location.

A2-4 ($389mg/m^2/day$), is located at the back of the AES facility and would be a quite location in relation to activities in-site. The access road to the neighboring industrial facilities runs alongside this dust gauge. Traffic on this road would have contributed to high dust levels in this area. AES Trucks collecting and dropping off empty waste bins in this area would also have contributed to dust high levels.

The dust deposition results at sample locations A2-2 and A2-3 were in compliance with the requirements of the Waste Licence.

APPENDIX 1

Map of Monitoring Locations

BORD NA MÓNA

BORD NA MÓNA ENVIRONMENTAL LIMITED

DUST DEPOSITION MONITORING AT THE ADVANCED ENVIRONMENTAL SOLUTIONS (IRELAND) LTD. (GOFF RECYCLING) SITE AT ROSSLARE, CO. WEXFORD IN ACCORDANCE WITH WASTE LICENCE REGISTER NO. W0229-01

For the Attention of:
Ms. Linda Cahill
Environmental Officer
Advanced Environmental Solutions (Ireland) Ltd.
Unit 1 Monread Commercial Park
Monread Road
Naas
Co. Kildare

Prepared by:
Mr. Peter Coogan
Monitoring Team Leader

Reviewed by:
Mr. Ronan Connolly
Environmental Scientist

Report No: ECS3332-Dust
Monitoring Date: May/June 2009
Reporting Date: July 2009

Executive Summary

In accordance with Waste Licence Register No. W0229-01, Advanced Environmental Solutions Ltd. (AES) is required to conduct dust deposition monitoring at selected locations within their Rosslare Waste Transfer Facility three times a year.

Four Bergerhoff dust gauges were continuously exposed for a 33 day period between the 13th May 2009 and the 15th of June 2009. The dust deposition samples were then returned to the laboratory for subsequent analysis.

Bord na Móna Technical Services was commissioned to perform the sampling and analysis.

The Waste Licence limit for dust deposition is given as 350mg/m^2/day as per Schedule B.5 of the Waste Licence.

Respectively Submitted,

Mr. Peter Coogan
Monitoring Team Leader

Mr. Ronan Connolly
Environmental Scientist

CONTENTS

1.0 INTRODUCTION

In compliance with the requirements of their Waste Licence, Register No. W0229-01 (Schedule B.5), AES is required to monitor dust deposition from their facility in Rosslare, Co. Wexford three times per year. Dust deposition is determined using the German Standard method VDI 2119 (Bergerhoff).

Bord na Móna Technical Services was commissioned to perform the sampling and analysis. The site was visited by a Bord na Móna Environmental Scientist on the 13th of May 2009 to install the dust jars. The dust jars were subsequently collected on the 15th of June 2009 (33 days later) and returned to the laboratory for analysis.

This report details the sampling methodologies and procedures followed.

2.0 METHODOLOGY

2.1 Dust Monitoring Locations

Dust deposition samples were taken at four locations within the site boundary. Table 2.1 below describes the sampling locations which are accurately marked on the environmental monitoring map locations attached in Appendix 1.

TABLE 2.1: LOCATION OF DUST MONITORING POSITIONS	
Sample Name	**LOCATION**
A2-1	South Western corner beside Reception
A2-2	Middle of site beside power washer
A2-3	North western corner of facility
A2-4	North eastern corner of the facility

2.2 Sampling

2.2.1 Dust Deposition

The Bergerhoff Dust Deposition Gauges used for this sampling survey consist of a plastic collecting vessel and a stand with a protective cage. Each vessel was placed in the metal basket which was positioned at a height of between 1.5 and 2 meters above ground level according to the German Standard Method VDI 2119 (Measurement of Dustfall, Determination of Dustfall using Bergerhoff Instrument (Standard Method) German Engineering Institute).

Prior to sampling, the collecting vessels were carefully cleaned with laboratory detergent, rinsed with deionised water and allowed to dry. Following exposure, the sample bottles were securely capped and returned to the laboratory for analysis.

2.3 Analysis

All samples returned to the laboratory were stored at 2-8°C. Subsequent analysis of all samples was carried out gravimetrically for dust and strictly followed the standard VDI 2119. The results were expressed in $mg/m^2/day$.

3.0 ACCREDITED QUALITY SYSTEM

3.1 INAB Accreditation

Bord na Móna Technical Services analytical laboratories is accredited to ISO 17025 by the National Accreditation Board (INAB). ISO 17025 accreditation ensures that the laboratory operates a quality system with technically competent staff. The laboratory has accreditation since 1997 and it is the policy of the laboratory to achieve and maintain a high standard of quality consistent with client's requirements in all aspects of the work carried out within the laboratory.

3.2 Interlaboratory Proficiency Schemes

To ensure the accuracy of the analytical testing the laboratory participates in several external proficiency schemes. The ongoing competence of the laboratory and its staff is assessed by participation in various inter-laboratory proficiency testing schemes, such as LGC Aquacheck scheme and the EPA Intercalibration programme organised for environmental laboratories throughout Ireland. Bord na Móna Technical & Laboratory Services Analytical Laboratory is listed on the EPA's register of Quality Controlled Laboratories

3.3 Controlled Chain of Custody

As part of the Quality System in place in Bord na Móna Technical Services., measures are taken to ensure controlled chain of custody. An outline of the chain of custody is given below.

BORD NA MÓNA

CONTROLLED CHAIN OF CUSTODY

SITE		TRANSPORT		LABORATORY
Sampling and packaging of all samples were carried out by Bord na Móna Technical Team: Mr. Peter Coogan	Transport Document Form →	Transport to laboratory by Bord na Móna Technical Team.	Sample Reception Form →	Receiving of samples at Bord na Móna Technical Services Analytical Laboratories complex (Secure laboratory complex access to authorised personnel only) ↓ Storage of all samples for 1 month period after report issue. ↓ Supervised Disposal

4.0 RESULTS

Table 4.1 below presents the results of the dust deposition monitoring at the AES facility in Rosslare, Co. Wexford.

TABLE 4.1: RESULTS OF DUST DEPOSITION		
Sample Name	**Deposition Rate ($mg/m^2/day$)**	***Dust Deposition Limit ($mg/m^2/day$)***
A2-1	219	***350***
A2-2	163	***350***
A2-3	31	***350***
A2-4	**Note 1**	***350***

Note 1: Dust gauge went missing during this monitoring period.

5.0 COMMENT

The results of the dust deposition survey which was carried out from 13th of May to the 15th of June 2009 at the AES facility in Rosslare are presented in Table 4.1.

The Waste Licence limit for dust deposition is given as $350mg/m^2/day$ as per Schedule B.5 of the Waste Licence.

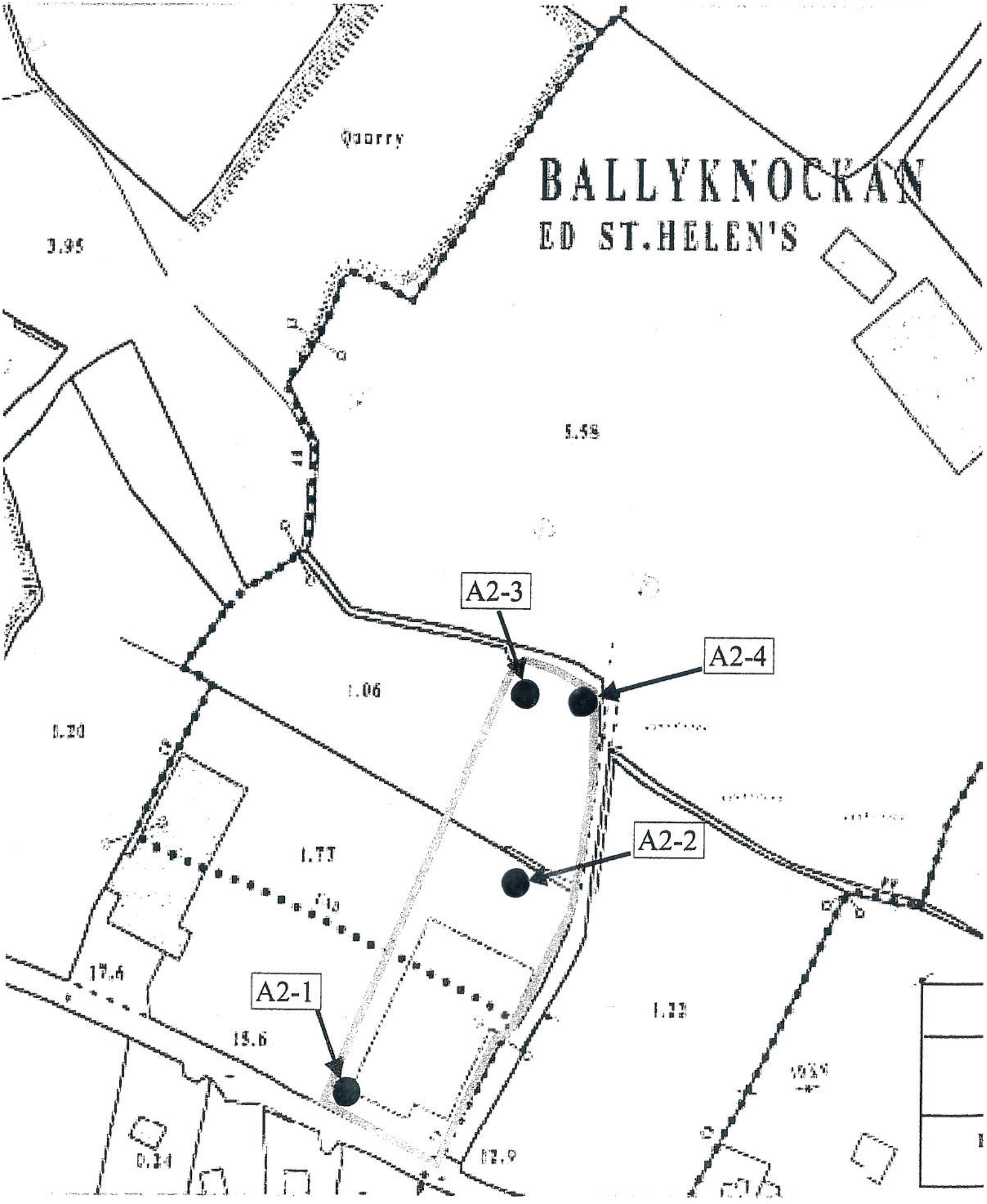
The dust deposition results at all sample locations were in compliance with the requirements of the Waste Licence.

The dust gauge and monitoring location A2-4 went missing during this monitoring period.

APPENDIX 1

Map of Monitoring Locations

Dust Monitoring locations at the Goff Recycling Ltd. Kilrane, Site



BORD NA MÓNA

BORD NA MÓNA ENVIRONMENTAL LIMITED

DUST DEPOSITION MONITORING AT THE ADVANCED ENVIRONMENTAL SOLUTIONS (IRELAND) LTD. (GOFF RECYCLING) SITE AT ROSSLARE, CO. WEXFORD IN ACCORDANCE WITH WASTE LICENCE REGISTER NO. W0229-01

For the Attention of:
Ms. Linda Cahill
Environmental Officer
Advanced Environmental Solutions (Ireland) Ltd.
Unit 1 Monread Commercial Park
Monread Road
Naas
Co. Kildare

Prepared by:
Mr. Peter Coogan
Monitoring Team Leader

Reviewed by:
Mr. Ronan Connolly
Environmental Scientist

Report No: ECS3388-Dust
Monitoring Date: July/Aug 2009
Reporting Date: September 2009

Executive Summary

In accordance with Waste Licence Register No. W0229-01, Advanced Environmental Solutions Ltd. (AES) is required to conduct dust deposition monitoring at selected locations within their Rosslare Waste Transfer Facility three times a year.

Four Bergerhoff dust gauges were continuously exposed for a 31 day period between the 17th July 2009 and the 17th of August 2009. The dust deposition samples were then returned to the laboratory for subsequent analysis.

Bord na Móna Technical Services was commissioned to perform the sampling and analysis.

The Waste Licence limit for dust deposition is given as 350mg/m^2/day as per Schedule B.5 of the Waste Licence.

Respectively Submitted,

Mr. Peter Coogan
Monitoring Team Leader

Mr. Ronan Connolly
Environmental Scientist

CONTENTS

1.0 INTRODUCTION

In compliance with the requirements of their Waste Licence, Register No. W0229-01 (Schedule B.5), AES is required to monitor dust deposition from their facility in Rosslare, Co. Wexford three times per year. Dust deposition is determined using the German Standard method VDI 2119 (Bergerhoff).

Bord na Móna Technical Services was commissioned to perform the sampling and analysis. The site was visited by a Bord na Móna Environmental Scientist on the 17th of July 2009 to install the dust jars. The dust jars were subsequently collected on the 17th of August 2009 (31 days later) and returned to the laboratory for analysis.

This report details the sampling methodologies and procedures followed.

2.0 METHODOLOGY

2.1 Dust Monitoring Locations

Dust deposition samples were taken at four locations within the site boundary. Table 2.1 below describes the sampling locations which are accurately marked on the environmental monitoring map locations attached in Appendix 1.

TABLE 2.1: LOCATION OF DUST MONITORING POSITIONS	
Sample Name	**LOCATION**
A2-1	South Western corner beside Reception
A2-2	Middle of site beside power washer
A2-3	North western corner of facility
A2-4	North eastern corner of the facility

2.2 Sampling

2.2.1 Dust Deposition

The Bergerhoff Dust Deposition Gauges used for this sampling survey consist of a plastic collecting vessel and a stand with a protective cage. Each vessel was placed in the metal basket which was positioned at a height of between 1.5 and 2 meters above ground level according to the German Standard Method VDI 2119 (Measurement of Dustfall, Determination of Dustfall using Bergerhoff Instrument (Standard Method) German Engineering Institute).

Prior to sampling, the collecting vessels were carefully cleaned with laboratory detergent, rinsed with deionised water and allowed to dry. Following exposure, the sample bottles were securely capped and returned to the laboratory for analysis.

2.3 Analysis

All samples returned to the laboratory were stored at 2-8°C. Subsequent analysis of all samples was carried out gravimetrically for dust and strictly followed the standard VDI 2119. The results were expressed in $mg/m^2/day$.

3.0 ACCREDITED QUALITY SYSTEM

3.1 INAB Accreditation

Bord na Móna Technical Services analytical laboratories is accredited to ISO 17025 by the National Accreditation Board (INAB). ISO 17025 accreditation ensures that the laboratory operates a quality system with technically competent staff. The laboratory has accreditation since 1997 and it is the policy of the laboratory to achieve and maintain a high standard of quality consistent with client's requirements in all aspects of the work carried out within the laboratory.

3.2 Interlaboratory Proficiency Schemes

To ensure the accuracy of the analytical testing the laboratory participates in several external proficiency schemes. The ongoing competence of the laboratory and its staff is assessed by participation in various inter-laboratory proficiency testing schemes, such as LGC Aquacheck scheme and the EPA Intercalibration programme organised for environmental laboratories throughout Ireland. Bord na Móna Technical & Laboratory Services Analytical Laboratory is listed on the EPA's register of Quality Controlled Laboratories

3.3 Controlled Chain of Custody

As part of the Quality System in place in Bord na Móna Technical Services., measures are taken to ensure controlled chain of custody. An outline of the chain of custody is given below.

BORD NA MÓNA

CONTROLLED CHAIN OF CUSTODY

SITE		TRANSPORT		LABORATORY
Sampling and packaging of all samples were carried out by Bord na Móna Technical Team: Mr. Peter Coogan	Transport Document Form →	Transport to laboratory by Bord na Móna Technical Team.	Sample Reception Form →	Receiving of samples at Bord na Móna Technical Services Analytical Laboratories complex (Secure laboratory complex access to authorised personnel only) ↓ Storage of all samples for 1 month period after report issue. ↓ Supervised Disposal

4.0 RESULTS

Table 4.1 below presents the results of the dust deposition monitoring at the AES facility in Rosslare, Co. Wexford.

TABLE 4.1: RESULTS OF DUST DEPOSITION

Sample Name	Deposition Rate ($mg/m^2/day$)	*Dust Deposition Limit ($mg/m^2/day$)*
A2-1	217	***350***
A2-2	98	***350***
A2-3	244	***350***
A2-4	**396**	***350***

5.0 COMMENT

The results of the dust deposition survey which was carried out from 17th of July to the 17th of August 2009 at the AES facility in Rosslare are presented in Table 4.1.

The Waste Licence limit for dust deposition is given as $350mg/m^2/day$ as per Schedule B.5 of the Waste Licence.

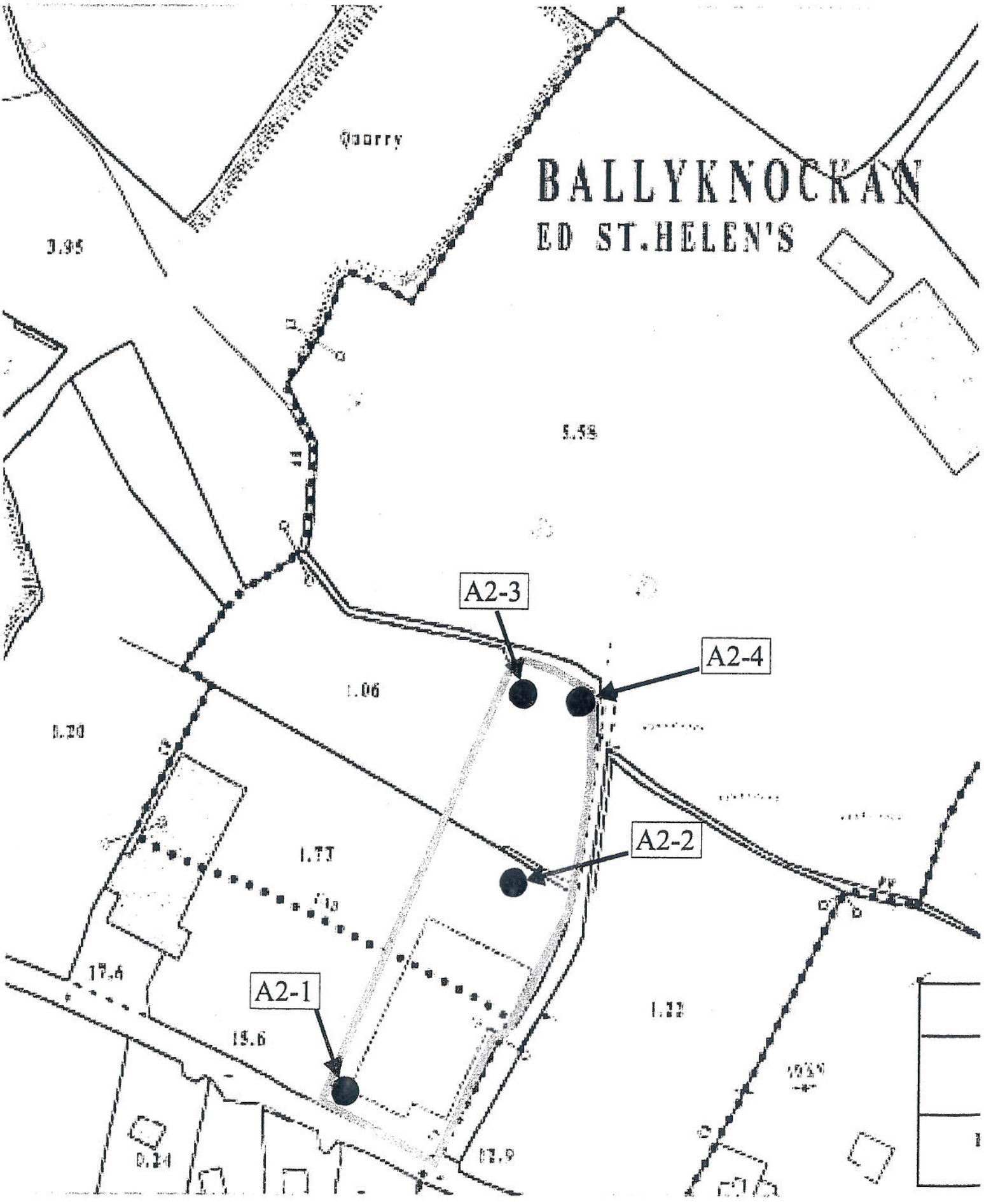
The dust deposition results at the A2-1, A2-2. A2-3 locations were in compliance with the requirements of the Waste Licence.

The dust deposition levels detected at the A2-4 monitoring location ($396mg/m^2/day$) exceeded the limit of $350mg/m^2/day$. A2-4 is located at the back of the site to the north east. Large skips are stored hear and the movement of AES trucks around the area would have contributed to dust levels. Off site traffic on the access road to the neighboring industrial facility, which runs along the east boundary of the AES site would have contributed to dust during dry periods of the summer months.

APPENDIX 1

Map of Monitoring Locations

Dust Monitoring locations at the Goff Recycling Ltd. Kilrane, Site



ENVIRONMENTAL ASSESSMENT OF THE QUALITY OF SURFACE WATERS AT THE ADVANCED ENVIRONMENTAL SOLUTIONS (IRELAND) LTD. (GOFF RECYCLING) SITE AT ROSSLARE, CO. WEXFORD IN ACCORDANCE WITH WASTE LICENCE REGISTER NO. W0229-01

For the Attention of:
Ms. Linda Cahill
Environmental Officer
Advanced Environmental Solutions (Ireland) Ltd.
Unit 1 Monread Commercial Park
Monread Road
Naas
Co. Kildare

Prepared by:
Mr. Peter Coogan
Monitoring Team Leader

Reviewed by:
Ms. Josephine Chadwick
Environmental Scientist

Report No: ECS3228-SW
Monitoring Date: January 2009
Reporting Date: February 2009

Executive Summary

In accordance with Waste Licence Register No. W0229-01, Advanced Environmental Solutions Ltd. (AES) is required to carry out an assessment of the surface water quality in the immediate environs of its Rosslare Waste Transfer Facility on a quarterly basis.

Bord na Móna Technical Services was commissioned to perform the sampling and analysis.

The site was subsequently visited by a Bord na Móna Environmental Scientist on the 15th January 2009 for the first quarterly sampling event. Surface Water samples were collected and returned to the laboratory for subsequent analysis.

Emission limits for surface waters are not specified in the Waste Licence (Register No. W0229-01) as there is no direct discharge pipe to the stream from the recycling facility.

Respectively Submitted,

Mr. Peter Coogan	Ms. Josephine Chadwick
Monitoring Team Leader	Environmental Scientist

CONTENTS

1.0 INTRODUCTION

In accordance with Waste Licence Register No. W0229-01, AES is required to carry out an assessment of the surface water quality in the immediate environs of its Rosslare Waste Transfer Facility on a quarterly basis. Bord na Móna Technical Services was commissioned to perform the sampling and analysis.

An Environmental Scientist from Bord na Móna Technical Services visited the site on the 15th of January 2009 to carry out the first quarterly sampling event of 2009. AES staff directed the Bord na Móna Environmental Scientist to the sampling points. Three sample points were selected; upstream of the recycling facility (SW-1), downstream beside the main access road to neighboring industrial units located on the north eastern corner of the AES facility (SW-2) and down stream adjacent to a farm yard to the north east of the AES facility (SW-3).

This report details the sampling methodologies and procedures followed.

2.0 METHODOLOGY

2.1 Sampling Locations

The Surface Water sampling locations are described in Table 2.1 below and marked on the map contained in Appendix 1.

TABLE 2.1: LOCATION OF SURFACE WATER SAMPLING STATIONS	
Sample Point	**Location**
SW-1	Located upstream of the AES facility
SW-2	North eastern corner of AES facility
SW-3	Located 10m immediately downstream of SW-2

Grab samples of surface water were extracted in accordance with standard procedures. All samples were returned to the laboratory and stored at 2-8°C prior to analysis.

2.2 Analysis

Analysis of all samples was carried out in strict accordance with recognised standard methods as detailed in Tables 2.2 overleaf

TABLE 2.2: CHEMICAL ANALYSIS OF SAMPLES		
Parameter	**Limit of Detection/Range**	**Method**
Visual Inspection	-	On-Site Visual Determination
Odour	-	On-Site Sensory Determination
Chemical Oxygen Demand COD (mg/l)	10 – 1500	G/03 Based on APHA 2005, 21st Edition, Method 5220D
Ammonia (mg/l)	<0.02	G/67 Based on APHA 2005, 21st Edition, 4500-NH3 and bluebook Ammonia in waters 1981.
Mineral Oils (µg/l)**	<10	GC - FID
Diesel Range Organics (DRO) (µg/l)**	<10	GC - FID

** Sub-Contracted Test

Note: **APHA** - American Public Health Association, Standard Methods for the Examination of Waters and Waste Waters, 21st Edition, 2005.

G/ - INAB Accredited Method, Bord na Móna Environmental & Analytical Services Standard Operating Procedures Manual

3.0 ACCREDITED QUALITY SYSTEM

3.1 INAB Accreditation

Bord na Móna Technical Services analytical laboratories is accredited to ISO 17025 by the National Accreditation Board (INAB). ISO 17025 accreditation ensures that the laboratory operates a quality system with technically competent staff. The laboratory has accreditation since 1997 and it is the policy of the laboratory to achieve and maintain a high standard of quality consistent with client's requirements in all aspects of the work carried out within the laboratory.

3.2 Interlaboratory Proficiency Schemes

To ensure the accuracy of the analytical testing the laboratory participates in several external proficiency schemes. The ongoing competence of the laboratory and its staff is assessed by participation in various inter-laboratory proficiency testing schemes, such as LGC Aquacheck scheme and the EPA Intercalibration programme organised for environmental laboratories throughout Ireland. Bord na Móna Environmental Consultancy & Laboratory Services Analytical Laboratory is listed on the EPA's register of Quality Controlled Laboratories

3.3 Controlled Chain of Custody

As part of the Quality System in place in Bord na Móna Environmental Ltd., measures are taken to ensure controlled chain of custody. An outline of the chain of custody is given below.

BORD NA MÓNA

BORD NA MÓNA ENVIRONMENTAL LIMITED

CONTROLLED CHAIN OF CUSTODY

SITE		TRANSPORT		LABORATORY
Sampling and packaging of all samples were carried out by Bord na Móna Technical Team: Mr. Peter Coogan	Transport Document Form →	Transport to laboratory by Bord na Móna Technical Team.	Sample Reception Form →	Receiving of samples at Bord na Móna Technical Services Analytical Laboratories complex (Secure laboratory complex access to authorised personnel only) ↓ Storage of all samples for 1 month period after report issue. ↓ Supervised Disposal

4.0 RESULTS

The results of the investigation carried out by Bord na Móna Technical Services are presented in Table 4.1 below.

TABLE 4.1: RESULTS OF CHEMICAL ANALYSIS OF SURFACE WATER SAMPLES

Parameter	SW-1	SW-2	SW-3
On-Site Visual Inspection	Clear colour, High SS	Clear colour, few S.S, Oily Surface	Clear colour, few S.S, Oily Surface
Odour	No Odour	No Odour	No Odour
COD mg/l	74	66	67
**Mineral Oils µg/l Note 1	<10	266	177
**DRO µg/l	<10	409	272
Ammonia mg/l as N	0.29	0.23	0.31

** = Subcontracted Test

5.0 COMMENT

The results of the analysis of the grab sample of surface obtained from the Advanced Environmental Solutions Ltd. on the 15th January 2009 are presented in Table 4.1.

Under Conditions C.2.3 of the Waste Licence Register No. W0229-01 issued to Advanced Environmental Solutions Ltd. grab samples of surface waters are to be conducted on a quarterly basis.

There are no emissions discharged from the recycling facility, therefore emission limits for surface waters are not specified in Waste Licence Register No. W0229-01.

APPENDIX 1

Map of Monitoring Locations

BORD NA MÓNA

BORD NA MÓNA ENVIRONMENTAL LIMITED

ENVIRONMENTAL ASSESSMENT OF THE QUALITY OF SURFACE WATERS AT THE ADVANCED ENVIRONMENTAL SOLUTIONS (IRELAND) LTD. (GOFF RECYCLING) SITE AT ROSSLARE, CO. WEXFORD IN ACCORDANCE WITH WASTE LICENCE REGISTER NO. W0229-01

For the Attention of:
Ms. Linda Cahill
Environmental Officer
Advanced Environmental Solutions (Ireland) Ltd.
Unit 1 Monread Commercial Park
Monread Road
Naas
Co. Kildare

Prepared by:
Mr. Peter Coogan
Monitoring Team Leader

Reviewed by:
Mr. Ronan Connolly
Environmental Scientist

Report No: ECS3332-SW
Monitoring Date: May 2009
Reporting Date: June 2009

Executive Summary

In accordance with Waste Licence Register No. W0229-01, Advanced Environmental Solutions Ltd. (AES) is required to carry out an assessment of the surface water quality in the immediate environs of its Rosslare Waste Transfer Facility on a quarterly basis.

Bord na Móna Technical Services was commissioned to perform the sampling and analysis.

The site was subsequently visited by a Bord na Móna Environmental Scientist on the 13th May 2009 for the second quarterly sampling event. Surface Water samples were collected and returned to the laboratory for subsequent analysis.

Emission limits for surface waters are not specified in the Waste Licence (Register No. W0229-01) as there is no direct discharge pipe to the stream from the recycling facility.

Respectively Submitted,

Mr. Peter Coogan
Monitoring Team Leader

Mr. Ronan Connolly
Environmental Scientist

CONTENTS

1.0 INTRODUCTION

In accordance with Waste Licence Register No. W0229-01, AES is required to carry out an assessment of the surface water quality in the immediate environs of its Rosslare Waste Transfer Facility on a quarterly basis. Bord na Móna Technical Services was commissioned to perform the sampling and analysis.

An Environmental Scientist from Bord na Móna Technical Services visited the site on the 13th of May 2009 to carry out the second quarterly sampling event of 2009. AES staff directed the Bord na Móna Environmental Scientist to the sampling points. Three sample points were selected; upstream of the recycling facility (SW-1), downstream beside the main access road to neighboring industrial units located on the north eastern corner of the AES facility (SW-2) and further down stream adjacent to a farm yard to the north east of the AES facility (SW-3).

This report details the sampling methodologies and procedures followed.

2.0 METHODOLOGY

2.1 Sampling Locations

The Surface Water sampling locations are described in Table 2.1 below and marked on the map contained in Appendix 1.

TABLE 2.1: LOCATION OF SURFACE WATER SAMPLING STATIONS

Sample Point	Location
SW-1	Located upstream of the AES facility
SW-2	North eastern corner of AES facility
SW-3	Located 10m immediately downstream of SW-2

Grab samples of surface water were extracted in accordance with standard procedures. All samples were returned to the laboratory and stored at 2-8°C prior to analysis.

2.2 Analysis

Analysis of all samples was carried out in strict accordance with recognised standard methods as detailed in Tables 2.2 overleaf

TABLE 2.2: CHEMICAL ANALYSIS OF SAMPLES		
Parameter	**Limit of Detection/Range**	**Method**
Visual Inspection	-	On-Site Visual Determination
Odour	-	On-Site Sensory Determination
Chemical Oxygen Demand COD (mg/l)	10 – 1500	G/03 Based on APHA 2005, 21st Edition, Method 5220D
Ammonia (mg/l)	<0.02	G/67 Based on APHA 2005, 21st Edition, 4500-NH3 and bluebook Ammonia in waters 1981.
Mineral Oils (µg/l)**	<10	GC - FID

** Sub-Contracted Test

Note: **APHA** - American Public Health Association, Standard Methods for the Examination of Waters and Waste Waters, 21st Edition, 2005.

G/ - INAB Accredited Method, Bord na Móna Environmental & Analytical Services Standard Operating Procedures Manual

3.0 ACCREDITED QUALITY SYSTEM

3.1 INAB Accreditation

Bord na Móna Technical Services analytical laboratories is accredited to ISO 17025 by the National Accreditation Board (INAB). ISO 17025 accreditation ensures that the laboratory operates a quality system with technically competent staff. The laboratory has accreditation since 1997 and it is the policy of the laboratory to achieve and maintain a high standard of quality consistent with client's requirements in all aspects of the work carried out within the laboratory.

3.2 Interlaboratory Proficiency Schemes

To ensure the accuracy of the analytical testing the laboratory participates in several external proficiency schemes. The ongoing competence of the laboratory and its staff is assessed by participation in various inter-laboratory proficiency testing schemes, such as LGC Aquacheck scheme and the EPA Intercalibration programme organised for environmental laboratories throughout Ireland. Bord na Móna Technical & Laboratory Services Analytical Laboratory is listed on the EPA's register of Quality Controlled Laboratories

3.3 Controlled Chain of Custody

As part of the Quality System in place in Bord na Móna Technical Services, measures are taken to ensure controlled chain of custody. An outline of the chain of custody is given below.

BORD NA MÓNA

CONTROLLED CHAIN OF CUSTODY

SITE		TRANSPORT		LABORATORY
Sampling and packaging of all samples were carried out by Bord na Móna Technical Team: Mr. Peter Coogan	Transport Document Form →	Transport to laboratory by Bord na Móna Technical Team.	Sample Reception Form →	Receiving of samples at Bord na Móna Technical Services Analytical Laboratories complex (Secure laboratory complex access to authorised personnel only) ↓ Storage of all samples for 1 month period after report issue. ↓ Supervised Disposal

4.0 RESULTS

The results of the investigation carried out by Bord na Móna Technical Services are presented in Table 4.1 below.

TABLE 4.1: RESULTS OF CHEMICAL ANALYSIS OF SURFACE WATER SAMPLES

Parameter	SW-1	SW-2	SW-3
On-Site Visual Inspection	Clear colour, No SS	Clear colour, No S.S, Slight Oily Surface	Clear colour, No S.S,
Odour	No Odour	Slight Odour	Slight Odour
COD mg/l	20	28	22
**Mineral Oils µg/l	<10	<10	<10
Ammonia mg/l as N	0.02	0.94	0.77

** = Subcontracted Test

5.0 COMMENT

The results of the analysis of the grab sample of surface obtained from the Advanced Environmental Solutions Ltd. on the 13th May 2009 are presented in Table 4.1.

Under Conditions C.2.3 of the Waste Licence Register No. W0229-01 issued to Advanced Environmental Solutions Ltd. grab samples of surface waters are to be conducted on a quarterly basis.

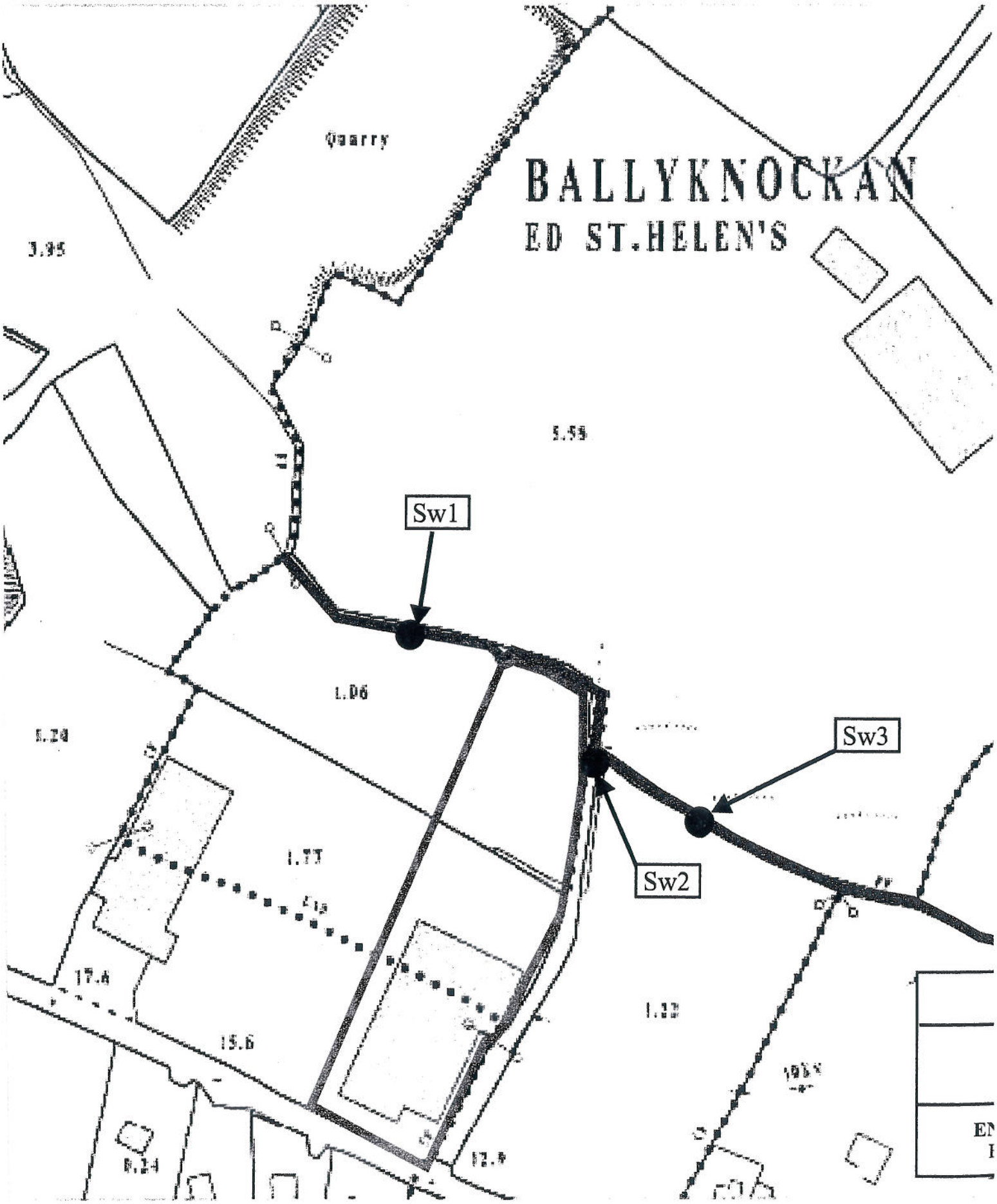
The results of ammonia have increased since last monitored in January 2009 (ECS 3228) at monitoring points SW-2 (0.23 → 0.94mg/l) and SW-3 (0.31→ 0.77mg/l) while levels upstream have decreased (0.29→ 0.02mg/l).

There are no emissions discharged from the recycling facility, therefore emission limits for surface waters are not specified in Waste Licence Register No. W0229-01.

APPENDIX 1

Map of Monitoring Locations

Water Monitoring locations at the Goff Recycling Ltd. Rosslare Site



BORD NA MÓNA

BORD NA MÓNA ENVIRONMENTAL LIMITED

ENVIRONMENTAL ASSESSMENT OF THE QUALITY OF SURFACE WATERS AT THE ADVANCED ENVIRONMENTAL SOLUTIONS (IRELAND) LTD. (GOFF RECYCLING) SITE AT ROSSLARE, CO. WEXFORD IN ACCORDANCE WITH WASTE LICENCE REGISTER NO. W0229-01

For the Attention of:

Ms. Linda Cahill
Environmental Officer
Advanced Environmental Solutions (Ireland) Ltd.
Unit 1 Monread Commercial Park
Monread Road
Naas
Co. Kildare

Prepared by:

Mr. Peter Coogan
Monitoring Team Leader

Reviewed by:

Mr. Eamonn Lee
Environmental Scientist

Report No: ECS3388-SW
Monitoring Date: August 2009
Reporting Date: October 2009

Executive Summary

In accordance with Waste Licence Register No. W0229-01, Advanced Environmental Solutions Ltd. (AES) is required to carry out an assessment of the surface water quality in the immediate environs of its Rosslare Waste Transfer Facility on a quarterly basis.

Bord na Móna Technical Services was commissioned to perform the sampling and analysis.

The site was subsequently visited by a Bord na Móna Environmental Scientist on the 17th August 2009 for the third quarterly sampling event. Surface Water samples were collected and returned to the laboratory for subsequent analysis.

Emission limits for surface waters are not specified in the Waste Licence (Register No. W0229-01) as there is no direct discharge pipe to the stream from the recycling facility.

Respectively Submitted,

Mr. Peter Coogan
Monitoring Team Leader

Mr. Eamonn Lee
Environmental Scientist

CONTENTS

1.0 INTRODUCTION

In accordance with Waste Licence Register No. W0229-01, AES is required to carry out an assessment of the surface water quality in the immediate environs of its Rosslare Waste Transfer Facility on a quarterly basis. Bord na Móna Technical Services was commissioned to perform the sampling and analysis.

An Environmental Scientist from Bord na Móna Technical Services visited the site on the 17th of August 2009 to carry out the third quarterly sampling event of 2009. AES staff directed the Bord na Móna Environmental Scientist to the sampling points. Three sample points were selected; upstream of the recycling facility (SW-1), downstream beside the main access road to neighboring industrial units located on the north eastern corner of the AES facility (SW-2) and further down stream adjacent to a farm yard to the north east of the AES facility (SW-3).

This report details the sampling methodologies and procedures followed.

2.0 METHODOLOGY

2.1 Sampling Locations

The Surface Water sampling locations are described in Table 2.1 below and marked on the map contained in Appendix 1.

TABLE 2.1: LOCATION OF SURFACE WATER SAMPLING STATIONS

Sample Point	Location
SW-1	Located upstream of the AES facility
SW-2	North eastern corner of AES facility
SW-3	Located 10m immediately downstream of SW-2

Grab samples of surface water were extracted in accordance with standard procedures. All samples were returned to the laboratory and stored at 2-8°C prior to analysis.

2.2 Analysis

Analysis of all samples was carried out in strict accordance with recognised standard methods as detailed in Tables 2.2 overleaf

TABLE 2.2: CHEMICAL ANALYSIS OF SAMPLES		
Parameter	**Limit of Detection/Range**	**Method**
Visual Inspection	-	On-Site Visual Determination
Odour	-	On-Site Sensory Determination
Chemical Oxygen Demand COD (mg/l)	10 – 1500	G/03 Based on APHA 2005, 21st Edition, Method 5220D
Ammonia (mg/l)	<0.02	G/67 Based on APHA 2005, 21st Edition, 4500-NH3 and bluebook Ammonia in waters 1981.
Mineral Oils (µg/l)**	<10	GC - FID

** Sub-Contracted Test

Note: **APHA** - American Public Health Association, Standard Methods for the Examination of Waters and Waste Waters, 21st Edition, 2005.

G/ - INAB Accredited Method, Bord na Móna Environmental & Analytical Services Standard Operating Procedures Manual

3.0 ACCREDITED QUALITY SYSTEM

3.1 INAB Accreditation

Bord na Móna Technical Services analytical laboratories is accredited to ISO 17025 by the National Accreditation Board (INAB). ISO 17025 accreditation ensures that the laboratory operates a quality system with technically competent staff. The laboratory has accreditation since 1997 and it is the policy of the laboratory to achieve and maintain a high standard of quality consistent with client's requirements in all aspects of the work carried out within the laboratory.

3.2 Interlaboratory Proficiency Schemes

To ensure the accuracy of the analytical testing the laboratory participates in several external proficiency schemes. The ongoing competence of the laboratory and its staff is assessed by participation in various inter-laboratory proficiency testing schemes, such as LGC Aquacheck scheme and the EPA Intercalibration programme organised for environmental laboratories throughout Ireland. Bord na Móna Technical & Laboratory Services Analytical Laboratory is listed on the EPA's register of Quality Controlled Laboratories

3.3 Controlled Chain of Custody

As part of the Quality System in place in Bord na Móna Technical Services, measures are taken to ensure controlled chain of custody. An outline of the chain of custody is given below.

BORD NA MÓNA

CONTROLLED CHAIN OF CUSTODY

SITE		TRANSPORT		LABORATORY
Sampling and packaging of all samples were carried out by Bord na Móna Technical Team: Mr. Peter Coogan	Transport Document Form →	Transport to laboratory by Bord na Móna Technical Team.	Sample Reception Form →	Receiving of samples at Bord na Móna Technical Services Analytical Laboratories complex (Secure laboratory complex access to authorised personnel only) ↓ Storage of all samples for 1 month period after report issue. ↓ Supervised Disposal

4.0 RESULTS

The results of the investigation carried out by Bord na Móna Technical Services are presented in Table 4.1 below.

TABLE 4.1: RESULTS OF CHEMICAL ANALYSIS OF SURFACE WATER SAMPLES

Parameter	SW-1	SW-2	SW-3
On-Site Visual Inspection	Clear colour, No SS	Clear colour, Few S.S, Slight Oily Surface	Clear colour, High S.S due to vegetation
Odour	No Odour	No Odour	No Odour
COD mg/l	<10	<10	<10
**Mineral Oils µg/l	<10	<10	<10
Ammonia mg/l as N	<0.02	0.16	<0.02

** = Subcontracted Test

5.0 COMMENT

The results of the analysis of the grab sample of surface waters obtained from the Advanced Environmental Solutions Ltd. on the 17th August 2009 are presented in Table 4.1.

Under Conditions C.2.3 of the Waste Licence Register No. W0229-01 issued to Advanced Environmental Solutions Ltd. grab samples of surface waters are to be conducted on a quarterly basis.

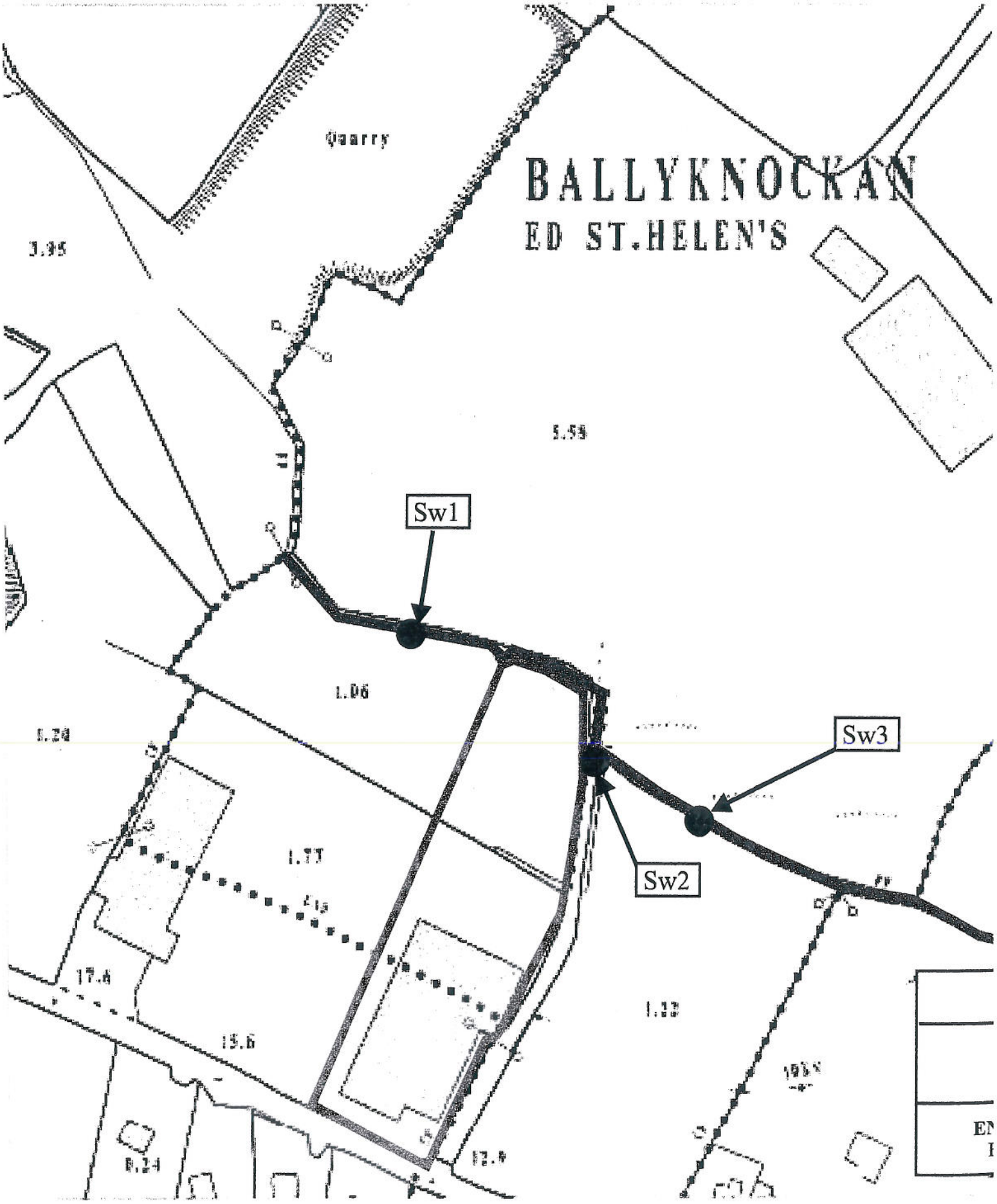
The results of ammonia have decreased since last monitored in May 2009 (ECS 3332) at monitoring points SW-2 (0.94 → 0.16mg/l) and SW-3 (0.77→ <0.02mg/l) while levels upstream at SW-1 were undetected <0.02mg/l.

There are no emissions discharged from the recycling facility, therefore emission limits for surface waters are not specified in Waste Licence Register No. W0229-01.

APPENDIX 1

Map of Monitoring Locations

Water Monitoring locations at the Goff Recycling Ltd. Rosslare Site



BORD NA MÓNA

BORD NA MÓNA ENVIRONMENTAL LIMITED

ENVIRONMENTAL ASSESSMENT OF THE QUALITY OF SURFACE WATERS AT THE ADVANCED ENVIRONMENTAL SOLUTIONS (IRELAND) LTD. (GOFF RECYCLING) SITE AT ROSSLARE, CO. WEXFORD IN ACCORDANCE WITH WASTE LICENCE REGISTER NO. W0229-01

For the Attention of:
Ms. Linda Cahill
Environmental Officer
Advanced Environmental Solutions (Ireland) Ltd.
Unit 1 Monread Commercial Park
Monread Road
Naas
Co. Kildare

Prepared by:
Ms. Linda Lenihan
Environmental Scientist

Reviewed by:
Mr. Peter Coogan
Monitoring Team Leader

Report No: ECS3460-SW
Monitoring Date: October 2009
Reporting Date: October 2009

Executive Summary

In accordance with Waste Licence Register No. W0229-01, Advanced Environmental Solutions Ltd. (AES) is required to carry out an assessment of the surface water quality in the immediate environs of its Rosslare Waste Transfer Facility on a quarterly basis.

Bord na Móna Technical Services was commissioned to perform the sampling and analysis.

The site was subsequently visited by a Bord na Móna Environmental Scientist on the 15th October 2009 for the fourth quarterly sampling event. Surface Water samples were collected and returned to the laboratory for subsequent analysis.

Emission limits for surface waters are not specified in the Waste Licence (Register No. W0229-01) as there is no direct discharge pipe to the stream from the recycling facility.

Respectively Submitted,

Ms. Linda Lenihan
Environmental Scientist

Mr. Peter Coogan
Monitoring Team Leader

CONTENTS

1.0 INTRODUCTION

In accordance with Waste Licence Register No. W0229-01, AES is required to carry out an assessment of the surface water quality in the immediate environs of its Rosslare Waste Transfer Facility on a quarterly basis. Bord na Móna Technical Services was commissioned to perform the sampling and analysis.

An Environmental Scientist from Bord na Móna Technical Services visited the site on the 15th of October 2009 to carry out the fourth quarterly sampling event of 2009. AES staff directed the Bord na Móna Environmental Scientist to the sampling points. Three sample points were selected; upstream of the recycling facility (SW-1), downstream beside the main access road to neighboring industrial units located on the north eastern corner of the AES facility (SW-2) and further down stream adjacent to a farm yard to the north east of the AES facility (SW-3).

This report details the sampling methodologies and procedures followed.

2.0 METHODOLOGY

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Mineral Oils (µg/l)**	<10	GC - FID

** Sub-Contracted Test

Note: **APHA** - American Public Health Association, Standard Methods for the Examination of Waters and Waste Waters, 21st Edition, 2005.

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Bord na Móna Technical Services analytical laboratories is accredited to ISO 17025 by the National Accreditation Board (INAB). ISO 17025 accreditation ensures that the laboratory operates a quality system with technically competent staff. The laboratory has accreditation since 1997 and it is the policy of the laboratory to achieve and maintain a high standard of quality consistent with client's requirements in all aspects of the work carried out within the laboratory.

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To ensure the accuracy of the analytical testing the laboratory participates in several external proficiency schemes. The ongoing competence of the laboratory and its staff is assessed by participation in various inter-laboratory proficiency testing schemes, such as LGC Aquacheck scheme and the EPA Intercalibration programme organised for environmental laboratories throughout Ireland. Bord na Móna Technical & Laboratory Services Analytical Laboratory is listed on the EPA's register of Quality Controlled Laboratories

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SITE		TRANSPORT		LABORATORY
Sampling and packaging of all samples were carried out by Bord na Móna Technical Team: Ms. Linda Lenihan	Transport Document Form →	Transport to laboratory by Bord na Móna Technical Team.	Sample Reception Form →	Receiving of samples at Bord na Móna Technical Services Analytical Laboratories complex (Secure laboratory complex access to authorised personnel only) ↓ Storage of all samples for 1 month period after report issue. ↓ Supervised Disposal

4.0 RESULTS

The results of the investigation carried out by Bord na Móna Technical Services are presented in Table 4.1 below.

TABLE 4.1: RESULTS OF CHEMICAL ANALYSIS OF SURFACE WATER SAMPLES

Parameter	SW-1	SW-2	SW-3
On-Site Visual Inspection	Clear/cloudy colour, Some SS No oily surface	Clear/cloudy colour, High S.S, Oily Surface	Cloudy colour, High S.S due to vegetation No oily surface
Odour	No Odour	Very Oily Odour	Slight oily Odour
COD mg/l	29	30	43
**Mineral Oils µg/l	<10	3880	606
Ammonia mg/l as N	0.04	0.04	0.07

** = Subcontracted Test

5.0 COMMENT

The results of the analysis of the grab sample of surface waters obtained from the Advanced Environmental Solutions Ltd. on the 15th October 2009 are presented in Table 4.1.

Under Conditions C.2.3 of the Waste Licence Register No. W0229-01 issued to Advanced Environmental Solutions Ltd. grab samples of surface waters are to be conducted on a quarterly basis.

The results of ammonia have decreased since last monitored in August 2009 (ECS 3388) at the monitoring point SW-2 (0.16mg/l→ 0.04mg/l), while levels at SW-1 (<0.02 mg/l→ 0.04mg/l) and SW-3 (<0.02 mg/l→ 0.07mg/l) rose slightly.

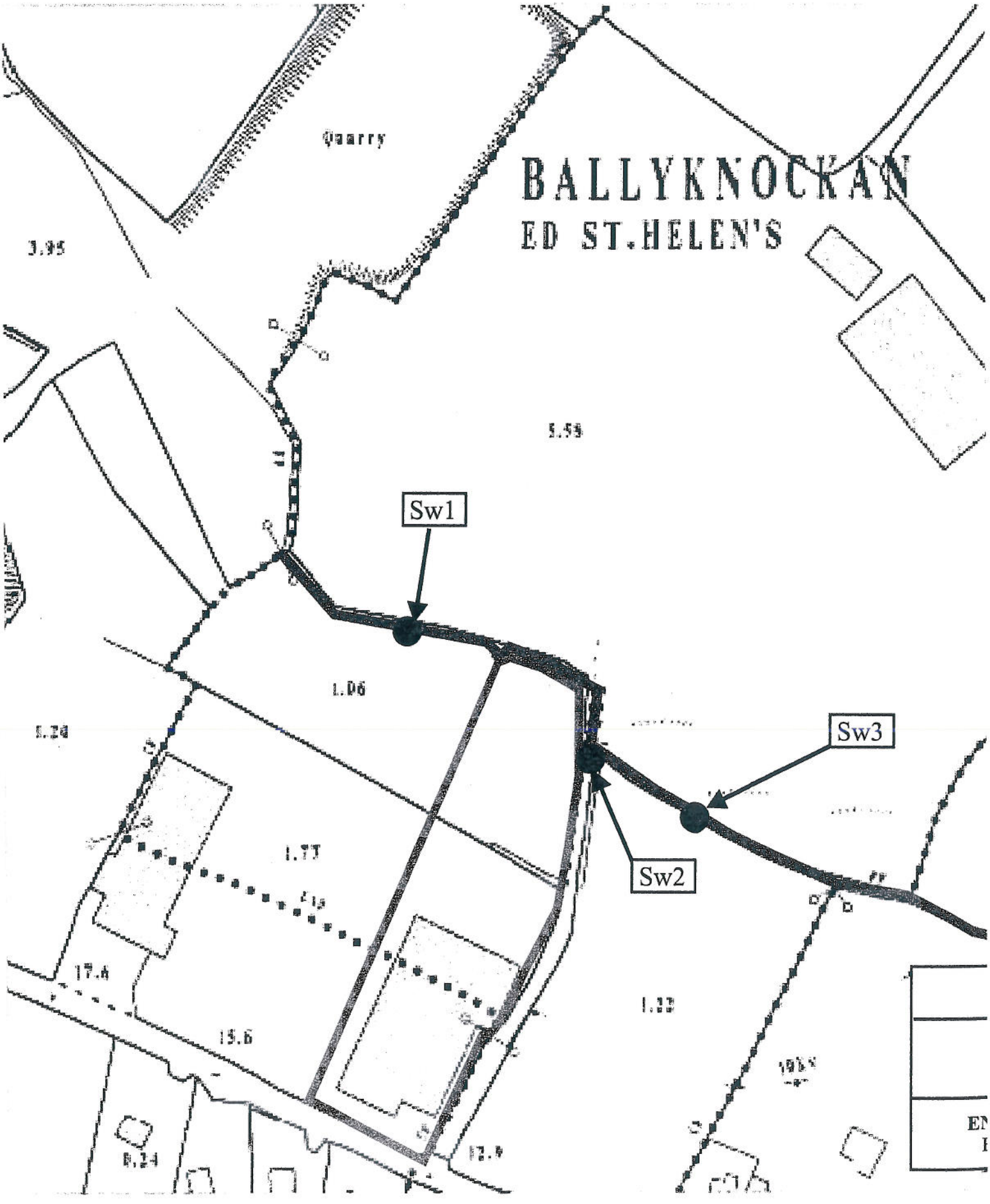
The results of mineral oils remained unchanged for SW-1. However, significant increases were observed, since the previous monitoring event, in both SW-2 (<10µg/l→ 3880µg/l) and SW-3 (<10µg/l→ 606µg/l).

There are no emissions discharged from the recycling facility, therefore emission limits for surface waters are not specified in Waste Licence Register No. W0229-01.

APPENDIX 1

Map of Monitoring Locations

Water Monitoring locations at the Goff Recycling Ltd. Rosslare Site



Appendix III

Reported Incidents

Environmental Complaints Assessment Form	Facility: Goff Recycling Waste Licence 229-1
Prepared by: Linda Cahill	Effective Date: 24/11/08

Complaint No.		Date & Time Received	/ / : am/pm
Name: Donal Cody	Communication Type: Verbal	Description of Complaint:	
Address: Ballycullane Bog Kildare		O'Dowd	
Phone No.			
Fax No.		Incident First Noted	Date: 10/5/09 Time: 12:00 am/~~pm~~
Complaint passed to:	Eo Neill	Date:	/ /
Complaint Valid?	YES / NO Yes (Slight ODour)		
Initial Investigation and Action:			
Checked For ODours Tipping Waste with (ODour Solue).			
Signed: Eoin O'Neill.		Date: / /	
Corrective Action Summary:	Corrective Action No.		
Signed:	Date: / /		
Complaint Resolution Summary:			
Signed:	Date: / /		
Complainant Notified?	YES / NO	Date:	/

Environmental Complaints Assessment Form	Facility: Goff Recycling Waste Licence 229-1
Prepared by: Linda Cahill	Effective Date: 24/11/08

Complaint No.		Date & Time Received	/ / : am/pm
Name: Donal	Communication Type:	Description of Complaint:	
Address: Ballycahane Bic Kilfeakle			
Phone No.			
Fax No.		Incident First Noted	Date: 22/6/09 Time: : am/pm
Complaint passed to:	E. O Neill	Date:	/ /
Complaint Valid?	YES / NO Yes		
	Short odours		
Initial Investigation and Action:			
Checked for odours Treating waste with odour solve.			
Signed: Pam O Neill .		Date: 22/-06-09	
Corrective Action Summary:	Corrective Action No.		
Signed:	Date: / /		
Complaint Resolution Summary:			
Signed:	Date: / /		
Complainant Notified?	YES / NO	Date:	/

Environmental Complaints Assessment Form	Facility: Goff Recycling Waste Licence 229-1
Prepared by: Linda Cahill	Effective Date: 24/11/08

Complaint No.		Date & Time Received	2/07/2009 : am/pm
Name: DENIS CRONIN	Communication Type: VERBAL	Description of Complaint:	
Address: TILE COTTAGE KILBRANE ROSSLARE HARBOUR		LITTER	
Phone No.			
Fax No.		Incident First Noted	Date: 2/07/2009 Time: : am/pm
Complaint passed to:	EAMONN O'NEILL.	Date:	2/07/2009
Complaint Valid?	YES / NO YES		
Initial Investigation and Action:			

CHECKED ROAD FOR LITTER COMPLETED LITTER PICK ON ROAD. LITTER CAME FROM O'LEARY TRANSPORT TRUCK

Signed: Eamon O'Neill.	Date: 2/7/2009.
Corrective Action Summary:	Corrective Action No.

COMPLETED LITTER PICK ON ROAD
SPOKE TO MANAGER (DAVE) IN O'LEARY TRANSPORT. ADVISED HIM THAT WE WANT LOADS TARPAULIN WITH FAULTY LOCKS IN FUTURE.

Signed: Eamon O'Neill	Date: 3/7/2009
Complaint Resolution Summary:	

SPOKE TO DENIS CRONIN EXPLAINED WHAT HAPPENED. ASSURED HIM THAT TARPAULINS WILL BE LOCKED PROPERLY IN FUTURE

Signed: Eamon O'Neill.		Date: 3/7/2009	
Complainant Notified?	YES / NO	Date:	3/7/2009

Procedures Manual		Document: EPF 9.1
Eamonn O'Neill.	AES Rosslare t/a Goff Recycling	Revision: 0 Page: 1 of 1 Issued: 29/06/09

Title: Environmental Complaints Form

Complaint No.	3	Date & Time Rec'd	17-09-2009	/ / : am/pm 12-00	
Name:	D. Carey.			Communication	
Address:	Kilrane Rosslare Htgr			Phone ___ Letter ___ Fax ___ Verbal ___ Other E.P.A.	
Phone No.:		Fax:			

Description of Complaint

Odour at D. Carey House and Door on Warehouse 3 open all the time
Noise from Reverse-a Beeper on Loader.

Incident First Noted	Date: 12/09/2009	Time: am/pm
Complaint Passed to:	E.P.A.	Date: / /

Complaint Valid?	Yes ✓	No ___
Immediate Action Required?	Yes ✓	No ___
Further Corrective Action Required?	Yes ___	No ✓

Initial Investigation and Action

Slight odours at Facility
Door on Warehouse 3 has to be open sometimes for access but not open all the time

Signed: Eamonn O'Neill Date: 17-09-2009

Corrective Action Summary CA #: CA 6 18-12-09

Treated area with odour control
Conducting odour investigation with solutions. Submit findings to E.P.A.

Signed: Eamonn O'Neill. Date: 17-09-2009

Complaint Resolution Summary

We have ordered a verbal reversing beeper for loader this will eliminate noise.

Signed: Date: 17-09-2009

Complainant Notified? Yes via E.P.A. No ___ Date: / /

Complaint Closed by:? ~~Office~~ Eo'Neill Date: 24/9/2009

Procedures Manual	AES Rosslare t/a Goff Recycling	Document: EPF 9.1
Eamon O'Neill		Revision: 0 Page: 1 of 1 Issued: 29/06/09

Title: Environmental Complaints Form

Complaint No.	4	Date & Time Rec'd 15-10-09	11 : ~~am~~/pm 14-30	Communication	
Name: Donal	Canny			Phone	
Address:	Kildare			Letter	
	Rosslare Harb			Fax	
				Verbal	✓
Phone No.:		Fax:		Other	

Description of Complaint

Strong odour at front of facility opposite D Canny's House.

Incident First Noted	Date: 15/10/2009 Time: ~~am~~/pm
Complaint Passed to:	EPA Date: 16/10/2009

Complaint Valid?	Yes ✓	No
Immediate Action Required?	Yes ✓	No
Further Corrective Action Required?	Yes	No ✓

Initial Investigation and Action

Strong odour at front of facility odour mainly coming from refrigerated containers storing fish at other side of business park.

Signed: Eamon O'Neill Date: 15-10-2009

Corrective Action Summary CA #: CA7 10-12-09.

Treated area with odour control solution informed EPA of odour coming from fish containers

Signed: Eamon O'Neill Date: 16-10-2009

Complaint Resolution Summary

Signed: Eamon O'Neill Date: 16-10-2009

Complainant Notified? Yes ✓ No ___ Date: / /

Complaint Closed by:? Eamon O'Neill Date: 22/10/2009

Procedures Manual		Document: EPF 6.1
Eamon O'Neill	AES Rosslare t/a Goff Recycling	Revision: 0 Page: 1 of 1 Issued: 29/06/09

Title: Environmental Incident Investigation Report Form

Report No. EI 1		Date and Time Recorded	20/7/2009 am/~~pm~~	Date and Time of Incident	20/7/2009 10.30 am/~~pm~~
Nature of Incident	REV WASTE LORRY CAUGHT FIRE IN THE ENGINE COMPARTMENT AT COOLGREANY, CO. WEXFORD.				
Cause of Incident	UNKNOWN - UNDER INVESTIGATION				
Environmental Significance of Incident	FIRE WATER WENT DOWN MAINS SEWER SYSTEM. TRUCK WAS REMOVED TO GARAGE.				
Personnel Involved/Affected	DRIVER - EUGENE BRADY HELPER - DAVE CAVE				
Statutory Bodies Informed and Details	E.P.A				
Consequences of Incident	NO ENVIROMENTAL CONSEQUENCES FROM INCIDENT, WATER DISCHARGED INTO SEWER SYSTEM & NO ONE WAS INSURED				
Corrective Action Required?	~~Yes~~ / No	Corrective Action Report No.	N/A.		
Signed:		Date	21.6.09		

Procedures Manual	AES Rosslare t/a Goff Recycling	Document: EPF 6.2
		Revision: 0
		Page: 1 of 1
		Issued: 29/06/09

Title: EPF 6.2 Incident Notification Form

Company Name:	AES Rosslare	Contact Person:	JAMES CLEARY
Location of Incident:	COOLGREANY, CO WEXFORD		
Date and Time of Incident:	20-7-09 / 10:30 am	Duration of Incident	1 HOUR
Details of Occurrence:	WASTE LORRY CAUGHT FIRE IN THE ENGINE COMPARTMENT, BOTH MEN EVACUATED THE LORRY AND CALLED THE FIRE BRIGADE AND MANAGEMENT TO NOTIFY US OF THE INCIDENT. THE 2 PEOPLE INVOLVED WERE EUGENE BRADY – DRIVER AND DAVE CAVE – GENERAL OPERATIVE		
Materials Emitted:	WATER FROM FIRE HOSES		
Environmental Significance of the Incident:	FIREWATER WENT DOWN MAINS SEWER SYSTEM. TRUCK WAS MOVED TO GARAGE AS SOON AS POSSIBLE		
Weather Conditions at time of Incident:	DRY AND CALM		
Steps taken to minimize any emissions:	FIREWATER WENT INTO MAINS SEWER SYSTEM, TRUCK WAS REMOVED FROM LOCATION AS SOON AS POSSIBLE		
Emergency Services Contacted?	FIRE BRIGADE		
Details of Other Bodies Contacted:	E.P.A		
Corrective Action Taken?	N	Corrective Action Ref. No.:	N/A.
Env. Incident Invest. Rep. Form Completed?	Y	Ref. No.	
Signed:	James Cleary		

Procedures Manual		Document: EPF 6.1
Eamonn O'Neill	AES Rosslare t/a Goff Recycling	Revision: 0 Page: 1 of 1 Issued: 29/06/09

Title: Environmental Incident Investigation Report Form

Report No.		Date and Time Recorded		Date and Time of Incident	
E12			24/09/2009 am/pm	11 July/August 2009.	am/pm

Nature of Incident	Exceedance of Dust Deposition Limit at one of Four Monitoring Points.
Cause of Incident	Elevated Dust Levels cannot be solely attributed to A.E.S activities off site traffic on the access road to the neighbouring industrial facility which runs along the East boundary of the A.E.S site would have contributed to dust during dry periods of the summer months.
Environmental Significance of Incident	Minimal. Dust Level Locations at 1 Boundy Location 3 other Boundy locations well below limit.
Personnel Involved/Affected	None
Statutory Bodies Informed and Details	E.P.A.
Consequences of Incident	None.

Corrective Action Required?	Yes / ~~No~~	Corrective Action Report No.	CA/E12.
Signed:	Eamonn O'Neill	Date	24-09-2009

Procedures Manual	AES Rosslare t/a Goff Recycling	Document: EPF 6.2
Eamonn O'Neill		Revision: 0 Page: 1 of 1 Issued: 29/06/09

Title: EPF 6.2 Incident Notification Form

Company Name:	AES Rosslare	Contact Person:	Eamonn O Neill.
Location of Incident:	Kilbane. Rosslare Harbour		
Date and Time of Incident:	July / August.	Duration of Incident	
Details of Occurrence:	Exceedance of Dust Deposition Limit at one of four Monitoring Points.		
Materials Emitted:	Dust		
Environmental Significance of the Incident:	Minimal.		
Weather Conditions at time of Incident:	Dry.		
Steps taken to minimize any emissions:	Investigation of Site Activities at this location is currently being undertaken.		
Emergency Services Contacted?	No		
Details of Other Bodies Contacted:	E.P.A.		
Corrective Action Taken?	Yes.	Corrective Action Ref. No.:	CA / E12.
Env. Incident Invest. Rep. Form Completed?	Yes	Ref. No.	E12.
Signed:	Eamonn O'Neill		

Procedures Manual	AES Rosslare t/a Goff Recycling	Document: EPF 8.1
Laura O'Neill		Revision: 0 Page: 1 of 1 Issued: 29/06/09

Title: Corrective & Preventive Action Report Form

CPAR Reference No:	CA/E/2	Date:	24/9/09	Raised by:	Dust Monitoring Report
Nature of Non-Conformance?	(Actual) / Potential	Action Type?		(Corrective) / Preventive	
Description of Non-Conformance:	Exceedance of dust limit at one of the four boundary monitoring locations				
Bodies Informed, Date and Details:	EPA 24/9/09 EPEG.1 and EPEG.2 completed (Incident Report + Notification forms) + submitted to EPA with report.				
Containment Action:	Investigation of site activities at this location being carried out.				
Root Cause:	Off-site traffic on access road to business park contributing.				
Action Plan:	Submit Alternative Locations to E.P.A. Awaiting Response.				
Responsibility:	Linda Colvill				
Target Date for Completion:		Actual date of Completion:			
Verify Corrective / Preventive Action:					
Closed by (Signature and Title):				Date: / /	

Appendix IV

Accident Prevention & Emergency Response Procedure

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

Incident Contact List:

Emergency Contact List for AES Rosslare t/a Goff Recycling			
Service / Agency	**Address**	**Telephone Numbers**	**Fax / e-mail**
EPA Headquarters	Johnstown Castle Estate Wexford	053 9160600 1890 335599	053 9160699 info@epa.ie
Wexford Co. Council	County Hall Spawell Road Wexford	053-9176500	053-9143406 postmaster@wexfordcoco.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

Title **General Emergency Preparedness & Response**

Procedure:

1. An Emergency Plan is prepared and maintained by AES Rosslare. 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 absence Deputy Site Manager) shall record the details of the incident. Environmental Incident Investigation Form EPF 6.1 or Environmental Incident Notification Form EPF 6.2 shall be completed as per Environmental Incident Investigation and Reporting Procedure (EMS Environmental Procedure EP 6.0). Following the environmental incident, appropriate procedures shall be implemented accordingly i.e. Environmental Non-Conformance Procedures EP 7.0, Environmental Incident/Release Investigation and Reporting Procedures EP 6.0 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.

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 Rosslare.

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.

- 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 Site Manager 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. If the spillage flows into or is likely to flow into the surface water drainage network, the manual shut-off valve shall be shut off to contain the spillage and prevent release to surface water.

7. 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).

Title Spill Clean up procedure

8. Clean up Operation.

   - 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.

9. 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.

10. 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 8.0

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

Title Spill Clean up procedure

12. Spill kits are located as follows:

Number	Location	Description
1.	Warehouse 1	Labelled Wheelie Bin
2.	Warehouse 2	Labelled Wheelie Bin
3.	Warehouse 3	Labelled Wheelie Bin

13. 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.

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

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 Rosslare.

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

Title Malicious Damage Procedure

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

Scope: This procedure applies to AES Rosslare.

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.

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 AES Rosslare.

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 in reception and within the site 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 5.0-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.
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.

Title Unforeseen Emergencies and Fugitive emissions

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.

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Document Approved by: Site Manager	**AES Rosslare t/a Goff Recycling** Emergency Contact List	Revision: 0 Issue Date: 29/06/09 Page: Page 1 of 1

Title Emergency Contact List

Company	Name / Title	**Phone Number/s**
FIRE BRIGADE / AMBULANCE / POLICE		**999 / 112**
WEXFORD HOSPITAL		**053 915 3000**
EMERGENCY RESPONSE TEAM:		
Emergency Controller	Eamonn O'Neill	**087 856 5265**
Deputy Emergency Controller	James Cleary	**087 901 1855**
News/Media Controller	Garrett Leech	**086 6738102**
Fire Warden	Pat Cleary	**087 6643915**
Safety Representative	James Cleary	**087 901 1855**
Health & Safety Manager	Michael Whelan	**087 9868290**
Environmental Manager	Garrett Leech	**086 6738102**
Environmental Officer	Linda Cahill Elaine Murray	**087 7697465** **045 439464**