

ANNUAL ENVIRONMENTAL REPORT 2009

Reporting Period 1st January – December 31st 2009

**Waste Transfer Station,
John F. Connolly Road.
Churchfield Industrial Estate, Cork
Tel:- 021 4310333
Fax:- 021-4323068
E-mail:- info@ashgroverecycling.ie**

Table of Contents

	Page No
1. Introduction	
1.1 Facility Details	2
1.2 Waste Activities	2
2. Quantity & Composition of Waste Composition	
2.1 July 2002 – February 2003	5
2.2 2004	6
2.3 2005	7
2.4 2006	8
2.5 2007	9
2.6 2008	10
2.7 2009	12
3. Waste Composition Represented Graphically by Year	
3.1 Recovery / Disposal Graph	13
4. Summary Report on Emissions	
4.1 Emissions to Public Sewer	16
4.2 Foul Effluent	16
4.3 Surface Water	16
4.4 Locations	16
4.5 Methods	16
5. Summary of Results & Interpretations	
5.1 Foul Water	17
5.2 Surface Water	17
5.3 Interpretation of results	18
6. Summary of Dust Monitoring	
6.1 Graphs of Dust Results	18
6.2 Conclusion	20
6.3 Full Dust Report	21
7. Bi – Annual Noise Monitoring Report	25
8. Environmental Management Plan	
8.1 Introduction	44
8.2 Purpose	45
8.3 Schedule of Objectives & Targets 2010	46
8.4 Benefits	56
8.5 Progress Review of 2009 Objectives	56
8.6 Corrective Action Procedures	58

9.	Bunded Tank Report	59
	<i>9.1 Drainage Integrity Testing</i>	62
10.	Recorded Incidents & Complaints	
	<i>10.1 Complaints</i>	62
	<i>10.2 Incidents</i>	62
11.	Review of Nuisance Controls	
	<i>11.1 Odour</i>	63
	<i>11.2 Litter</i>	63
	<i>11.3 Noise</i>	63
	<i>11.4 Flies</i>	63
	<i>11.5 Mud</i>	63
	<i>11.6 Rodents</i>	63
	<i>11.7 Dust</i>	64
12.	Resource & Energy Consumption	64
	<i>12.1 Diesel Fuel Usage</i>	65
	<i>12.2 Water Consumption 2009</i>	65
	<i>12.3 Foul Water to Sewer</i>	65
13.	Financial Provisions	66
14.	Staffing Structure	66
15.	Programme for public Information	67
16.	Noise Reduction Measures	67
17.	Development & Infrastructural Works	
	<i>17.1 Staff Training</i>	68
	<i>17.2 Site Security</i>	68
18.	Plant Capacity	69
19.	Appendices	70

1. Introduction

Ashgrove Recycling operates a materials recovery facility / waste transfer station at Churchfield Industrial Estate, Cork.

The Company began operations in July 2002. The facility is Located in an Industrial Estate north of Cork City. The site prior to construction was a Greenfield site in industrial zoned land.

The site occupies 1.1 hectares and consists of a materials recovery building with associated offices and impermeable concreted surfaces. The operations at Ashgrove have positively helped the environment in diverting materials away from unnecessary land filling.

1.1 Facility Details

Licence Registration Number: - W0147-01
Name: - Ashgrove Plant Ltd, t/a Ashgrove Recycling
Location: - John. F Connelly Road, Churchfield Industrial Estate, Cork.
Reporting Period: - 1st January – December 31st 2009

1.2 Waste Activities

The waste streams that are processed at the facility are non hazardous. The facility does not accept liquid wastes. The majority of waste accepted at the facility is derived from construction and demolition activities, along with a smaller quantity of commercial and industrial waste streams.

Incoming waste is weighed on a Precia Molen weighbridge, and is then consigned to the material recovery building. The material is visually inspected to determine its compliance with waste acceptance criteria.

Large items of timber and metal are removed mechanically and placed in to designated containers. Material that is not readily separated is fed into the Viper 123 city sizer and the action of the vibrating screen box separates out the soils and the fines. Larger material that does not fall through the screen mesh is deposited onto a conveyor belt and passes underneath a powerful over band magnet, which in turn removes the metal fraction. From here the remaining material moves through a Viper picking station where recoverable material is manually picked and deposited into hoppers which conveys the material into suitable containers. Plastic, glass, wood, non ferrous metal are separated from the material and the remaining material consists of light fractions of paper and plastic, along with a mixture of rubble and stones.

As this mixture falls below from the end of the belt, a high velocity air stream blows the lighter material into a catch net. The heavier material falls below into an awaiting receptacle. The recyclable material is brought to the respective industry for use as a raw material for further processing

2.0 Quantity and Composition of Waste

2.1 July 2002 – February 2003

Wastes Received and consigned by the facility

Period:- 8th July 2002 to 26th Feb 2003

Total Quantity of material handled (Incoming)	2,268,000 Kg	
Recovery	Weight/Kg	EWC Codes
Wood		15 01 03
Dunlee waste management	273,000.00	17 02 01
		19 12 07
CTO Environmental Solutions	151,290.00	20 01 38
Cardboard/Paper		15 01 01
Cork Recycling	48,000.00	19 12 01
		20 01 01
Glass		
Cork Mini Skips	25,140.00	15 01 07
		17 02 02
		19 12 05
		20 01 02
Metals		
Cork Metal	154,140.00	15 01 04
		17 04 07
		19 12 02
		19 12 03
		20 01 40
Plastic		
Cork Recycling	22,000.00	15 01 02
		17 02 03
		19 12 04
		20 01 39
Rubble/Soil		
Loftus Engineering, Kinsale Rd	647,070.00	17 01 01
	400,000.00	17 01 02
		17 01 03
		17 01 07
		17 05 04
Disposal		
Residual Material		
Kinsale Road Landfill	300,560.00	19 12 12
Transferred to other facilities for Recovery/Disposal		
Aherne Waste Management	170,000.00	20 03 01
Tyrone Recycling	76,800.00	15 01 05
		19 12 12
		20 01 0 8
		20 01 02

2.2 Wastes Received and consigned by the facility

Period:- 01/01/04 to 31/12/04

Total Quantity of material handled (Incoming)	10,741,510Kg	
Recovery	Weight/Kg	EWC Codes
Wood		15 01 03
Dunlee waste management	667,240	17 02 01
Medité	12,180	19 12 07
CTO Environmental Solutions	408,160	20 01 38
Cardboard/Paper		15 01 01
Cork Recycling	207,940	19 12 01
KRL	4,580	20 01 01
Glass		
MSM	9,190	15 01 07
		17 02 02
Metals		
Cork Metal	632,340	15 01 04
		17 04 07
		19 12 02
Plastic		
Cork Recycling	18,380	15 01 02
		17 02 03
Rubble/Soil		
Dan Sheehan	1,982,930	17 01 01
John Dunlee	3,169,460	17 01 02
Rossmore	193,470	17 01 03
Youghal	17,560	17 01 07
Green Waste		17 05 04
CTO	31260	20 02 02
Disposal		
Residual Material		
Kinsale Road Landfill	409,000	19 12 12
Transferred to other facilities for Recovery/Disposal		
Greenstar	1,800,970	20 03 01
Tyrone Recycling	76,800.00	15 01 05
Lehane Environmental	641,760	19 12 12
Glanmire	27,890	20 01 08
Mulleadys	296,910	20 01 02
Longford	22440	
Rosmore	75570	
Youghal	5820	
KRL	476,840	

2.3 Wastes Received and consigned by the facility

Period:- 01/01/05 to 31/12/05

Total Quantity of material handled (Incoming)	10,741,510Kg	
Recovery	Weight/Kg	EWC Codes
Wood		15 01 03
		17 02 01
Mediterranean	3,811,080	19 12 07
CTO Environmental Solutions	32,000	20 01 38
Cardboard/Paper		15 01 01
Glyntown	347,250	19 12 01
		20 01 01
Glass		
SFL	631,160	15 01 07
		17 02 02
Metals		
Cork Metal	1,140,160	15 01 04
		17 04 07
		19 12 02
Plastic		
Glyntown	86,740	15 01 02
		17 02 03
Rubble/Soil		
Dan Sheehan	14,453,530	17 01 01
John Butler		17 01 02
		17 01 03
		17 01 07
Green Waste		17 05 04
CTO	59,520	20 02 02
Disposal		
Residual Material		
Kinsale Road Landfill	409,000	19 12 12
Transferred to other facilities for Recovery/Disposal		
Mulleadys	5,341,730	20 03 01
Rossmore		15 01 05
Thorntons		19 12 12
Portlaoise		20 01 08
Ballymackey		20 01 02

2.4 Wastes Received and consigned by the facility

Period:- 01/01/06 to 31/12/06

Total Quantity of material handled (Incoming)	Weight/Kg	EWC Codes
Recovery		
Wood		15 01 03
Graingers	39,310	17 02 01
Wayerheuser, formellyMedite	2,830,790	19 12 07
CTO Environmental Solutions-Green Waste	65520	20 01 38
Timber - CTO Environmental Solutions	578700	
Mixed Dry Recyclables	1,270,040	
Thorntons		
Cardboard/Paper		15 01 01
Glyntown	443,640	19 12 01
		20 01 01
Glass		
SFL	263,520	15 01 07
Tullagower Recycling	920,580	17 02 02
Gypsum		
Cleanbuild	64,620	
Gypsum Industries	60,440	
Metals		
Cork Metal	1,155,040	15 01 04
Cable – National Recycling	246,240	17 04 07
		19 12 02
Bituminous Mixtures		17 04 01
John A Wood	75,177	
Plastic		
Glyntown	191800	15 01 02
Clearpoint	108,200	17 02 03
Rubble/Soil		
Con Cronin, Mourneabbey	4,132,890	17 01 01
John Butler	7,560,130	17 01 02
John A Wood	676,593	17 01 03
		17 01 07
Green Waste		17 05 04
CTO		20 02 02
Disposal – Residual Material		
Residual Material		
Ballaghveny	6,120,970	19 12 12
Mulleadys	84,740	
Rossmore	16,110	

2.5 Wastes Received and consigned by the facility

Period:- 01/01/07 to 31/12/07

Total Quantity of material handled (Incoming)	Weight/Metric Tonnes	EWC Codes
Recovery		
Wood		15 01 03
Graingers		17 02 01
Wayerheuser, formellyMedite	4351.88	19 12 07
		20 01 38
Mixed Dry Recyclables		
Thorntons	4272	20 03 01
Cardboard/Paper		15 01 01
Glyntown		19 12 01
Cork Recycling, Lehenaghmore	474	20 01 01
Glass		
Tullagower Recycling	1448.86	15 01 07
		17 02 02
Gypsum		
Cleanbuild		
Gypsum Industries		
Metals		
Cork Metal	1672.22	15 01 04
Cable – National Recycling	30.32	17 04 07
		19 12 02
Bituminous Mixtures		17 04 01
John A Wood		
Plastic		
Glyntown	64	15 01 02
Clearpoint		17 02 03
Bernard O.Brien, Waterfall	24.02	
Rubble/Soil		
Con Cronin, Mourneabbey	3171	17 01 01
John Butler	7,403	17 01 02
Paudie Sheehan, Donoughmore	1428	17 01 03
Whites Cross	1037	17 01 07
Gypsum/Plasterboard		17 08 02
Cleanbuild	535	
Gypsum Recycling	96	
Dry Recyclables		
Thorntons		20 01 99
Clearpoint	200.38	
Disposal – Residual Material		
Residual Material		
Ballaghveny	1404.43	19 12 12
Youghal	6923.53	

2.6 Wastes Received and consigned by the facility

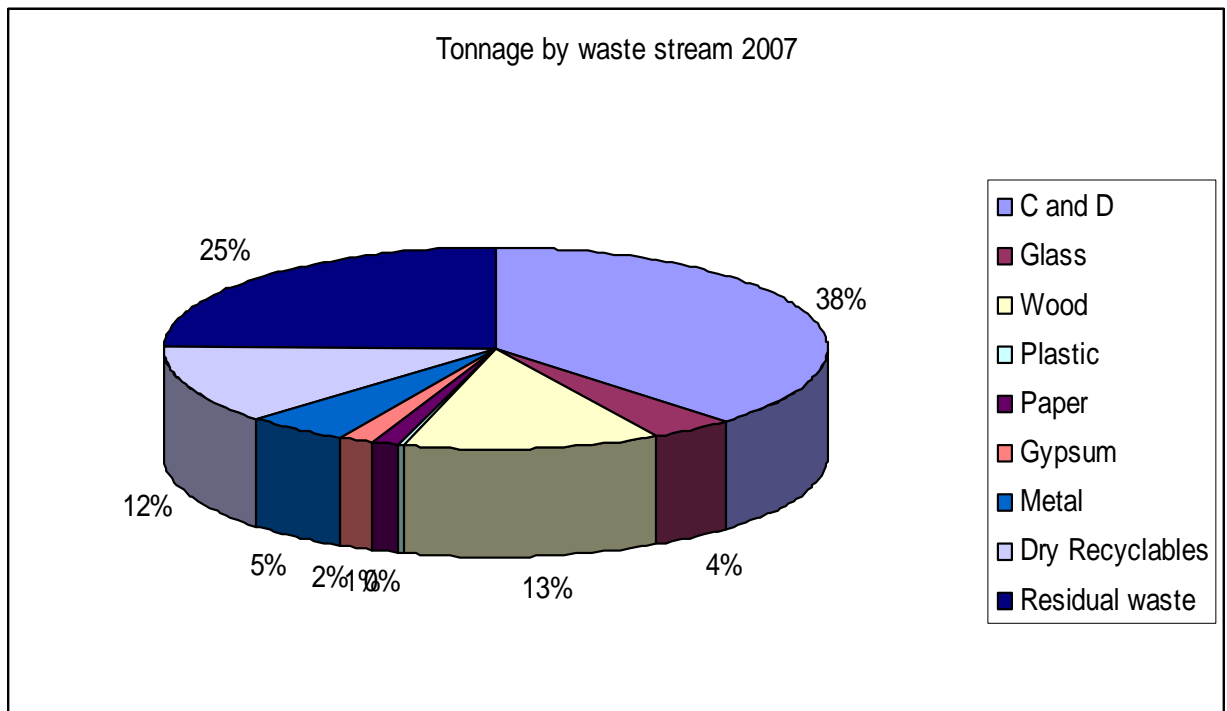
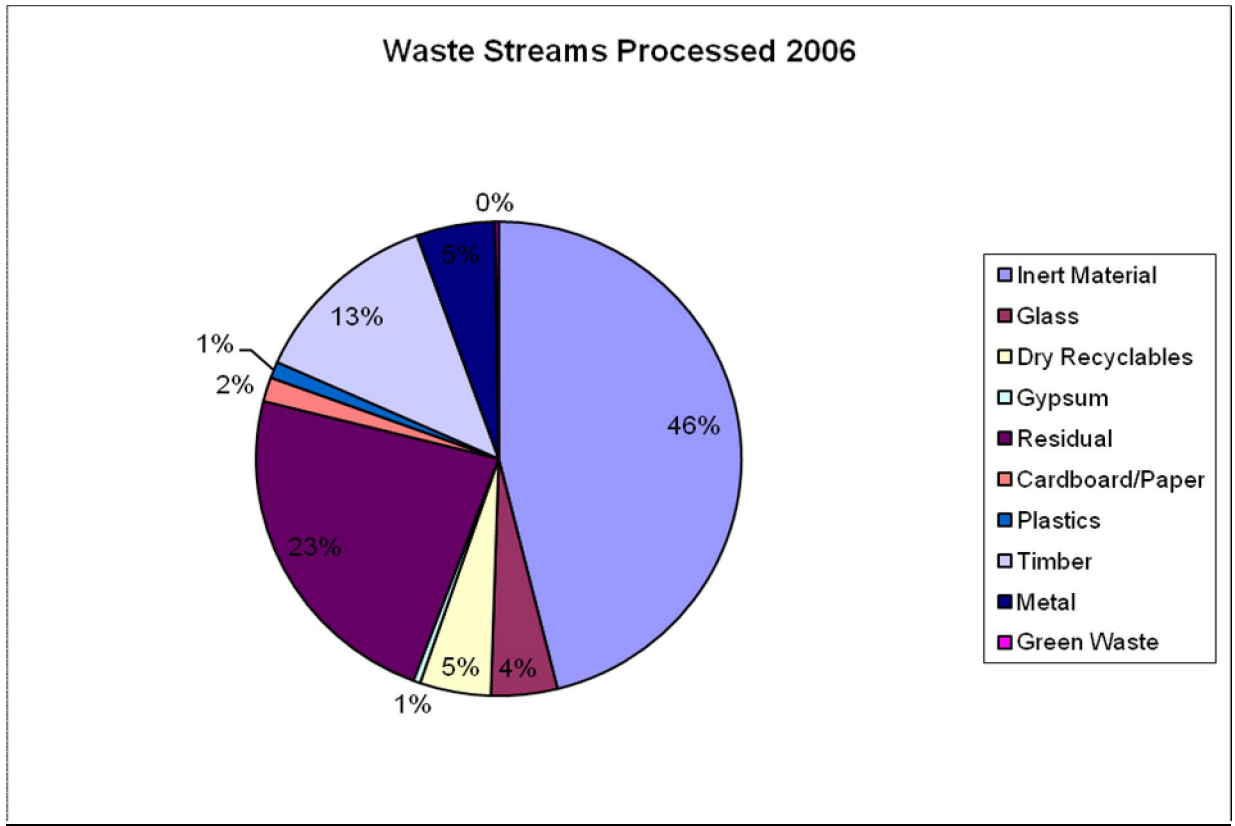
Period:- 01/01/08 to 31/12/08

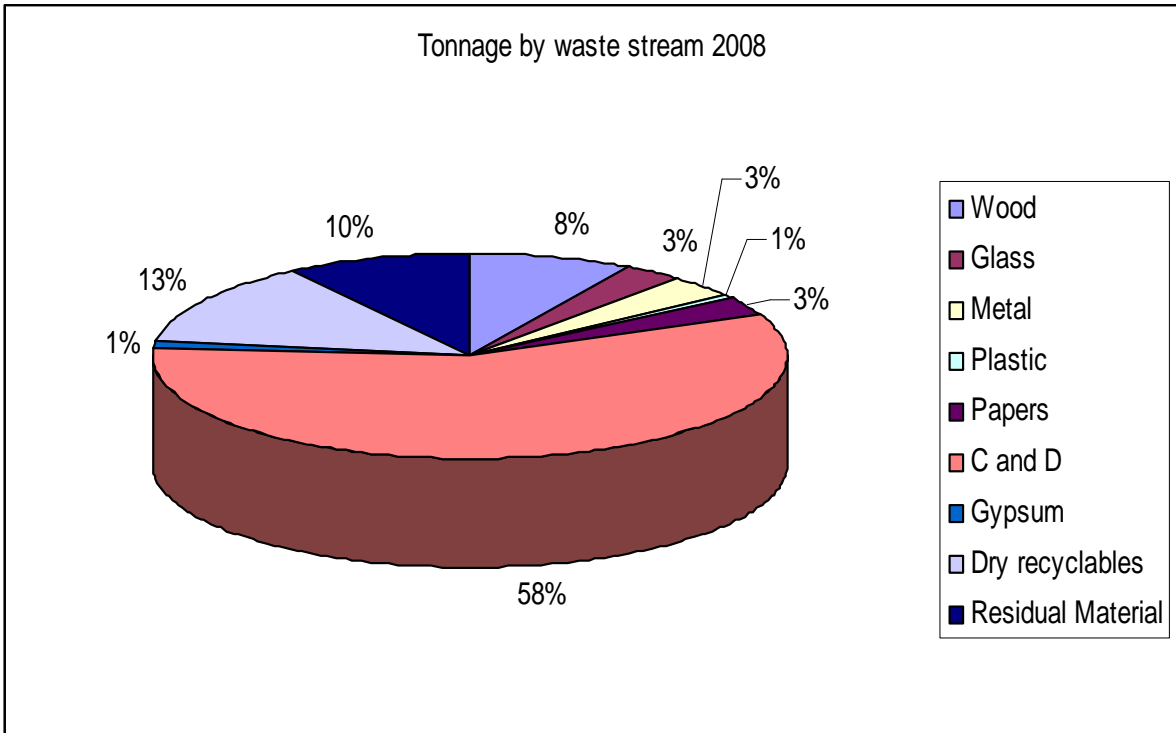
Total Quantity of material handled (Incoming)		
Recovery	Weight/Metric Tonnes	EWC Codes
Wood		15 01 03
Eirbloc	561	17 02 01
Wayerheuser, formellyMedite	2215	15 01 03
	1574	17 02 01
Waste recovery services Fermoy	119	20 01 38
WEEE		
Veolia Environmental	.09	16 02 14 / 20 01 36
Veolia Environmental	2,18	16 02 13* / 20 01 35*
Veolia Environmental	.05	20 01 21*
Veolia Environmental	4.31	16 02 14 / 20 01 36
BC Waste Management	4.28	16 02 14 / 20 01 36
Mixed Dry Recyclables		
Thorntons	6991	20 03 01
AVR Safeway, Youghal, Co. Cork	553	20 03 01
Cardboard/Paper	1435	15 01 01
Glyntown		19 12 01
Cork Recycling, Lehenaghmore	55	20 01 01
Glass		
Clare Recycling	1632	15 01 07
End of life tyres		
Crossmore Tyres	11	16 01 03
Mixture of Conc and Bricks		
Mallow Contracts	7707	17 01 07
Paint related materials		
Veolia Environmental	.54	15 01 10
Metals		
Cork Metal	1659	17 04 07
Cable – National Recycling	12	17 04 11
National Recycling	30.33	17 04 02
Thornton's	81	15 01 04
Thornton's	37	15 01 04
Bituminous Mixtures		17 04 01
John A Wood	8.5	
Plastic		
Thorntons	318	15 01 02

Cork Recycling	22	17 02 03
Bernard O Brien Waterfall	100	17 02 03
Rubble/Soil		
Mallow Contracts	17,500	17 05 04
John Butler	7,403	17 01 02
Paudie Sheehan, Donoughmore	1428	17 01 03
Whites Cross	1037	17 01 07
Gypsum/Plasterboard		17 08 02
Cleanbuild	166	
Recycleworks, St Margarets, Co. Kildare	458	17 08 02
Dry Recyclables		17 08 02
Thorntons		20 01 99
Clearpoint	200.38	
Disposal – Residual Material		
Residual Material		
Gortadroma Landfill	841	20 03 01
Youghal	5098	
Kinsale road	827	

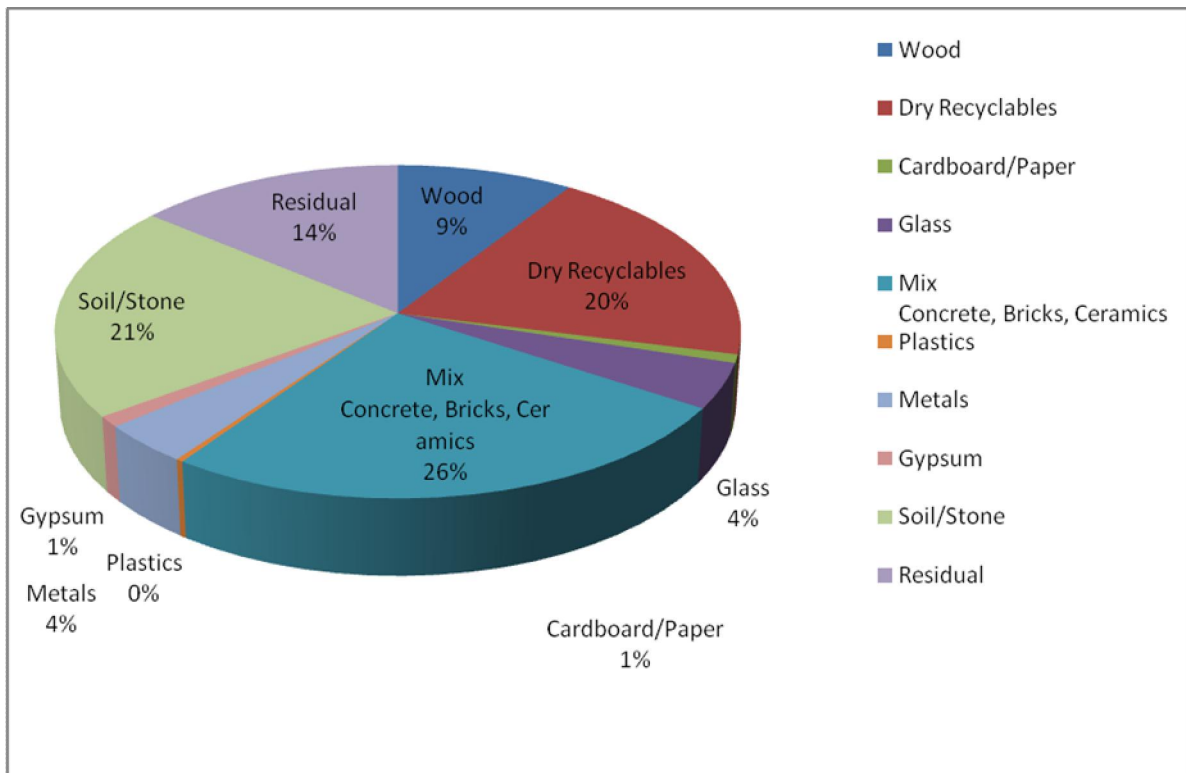
Total Quantity of material handled 2009 Inclusive		
<i>Recovery</i>	Weight/Metric Tonnes	EWC Codes
Wood		
Eirebloc	609	17 02 01
Wayerheuser, formellyMedite	2635	20 01 38
Mixed Dry Recyclables		
Thorntons	6891	20 03 01
Cardboard/Paper		
Cork Recycling, Lehenaghmore	282	15 01 01 20 01 01 19 12 01
Glass		
Clare Recycling	1325	15 01 07
Glassdon	224	
Mixture of Concrete, Bricks & Tiles		
Mallow Contracts	8969	17 01 07
Plastics		
W.F Recycling	29	17 02 03
Bernard O'Brien	58	
Glyntown Enterprises	14.76	20 01 39
Cork Recycling	7	
Metals		
Aluminium - Cork Metal	5.98	17 04 02
Cable – Cork Metal	5.86	17 04 11
National Recycling	8.78	17 04 02
Mixed Metal – Cork Metal	1354	17 04 07
Gypsum		
Sandyhills Environmental	368	17 08 02
Soil & Stone		
Mallow Contracts	7337	17 05 04
Disposal		
Residual Waste		
Youghal Landfill	221	20 03 01
Gortadroma Landfill	4706	

3.0 2006 – 2009 Waste Streams Represented Graphically:-

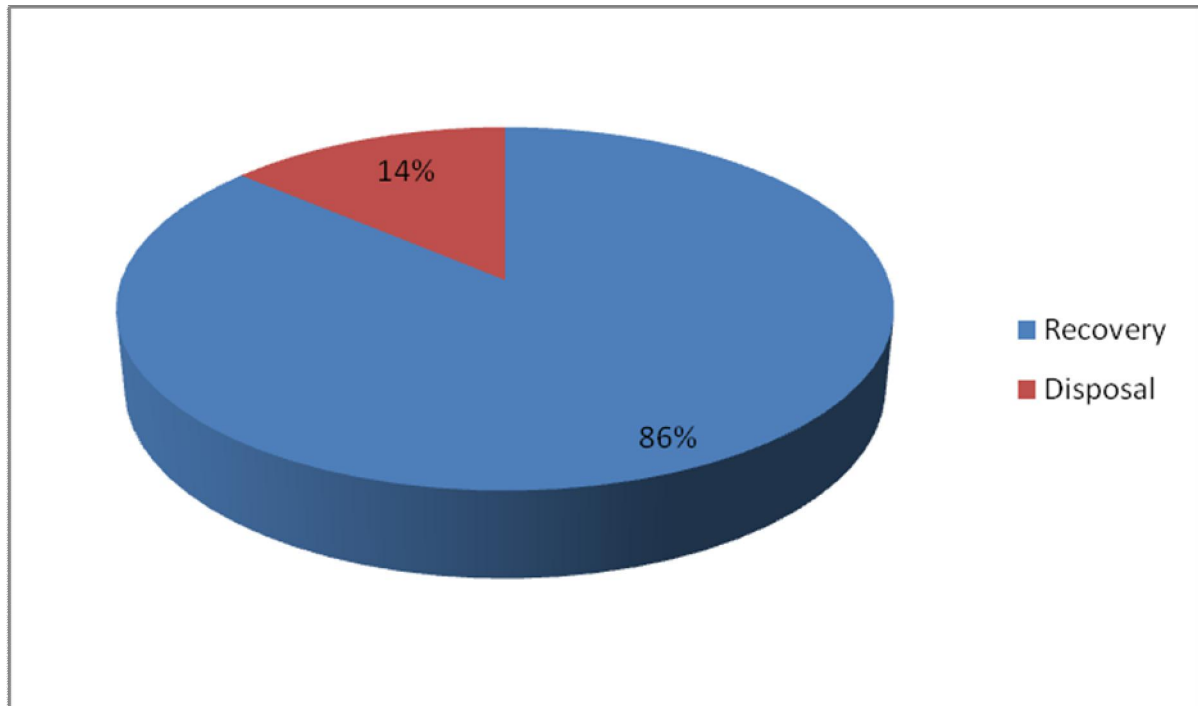




2009 Waste Streams Characterisation



3.1 2009 – Recovery/Disposal



The pie chart above represents graphically the variation between the quantity of waste that was disposed of and the quantity of material that was recovered. Of approximately 36,000 tonnes of material the facility processed in 2009, only 4,927 tonnes was sent to Landfill. This equates to approximately 14%.

4.0 Summary Report on Emissions

4.1 Emissions to Public Sewers

There are no discharges directly to waters from the facility. Emissions are made to foul and surface water sewers only. Both effluent and surface water discharge are sampled at the facility.

Both effluent types pass through a class 2 interceptor (full retention) prior to being emitted to the public sewer north of the facility. Foul water is cleaned of petrochemical contamination by passing through a 4000 litre full retention separator.

4.2 Foul effluent

This consists of process effluent from waste handling activities within the MRF and of discharge (washings and surface water) from the bin washing area of the site. This effluent is monitored on a monthly basis as per conditions of licence W0147/01.

4.3 Surface water effluent

This originates from rainwater and washings coming from the areas of hard standing at the site and from rainwater roof discharge. This effluent type is emitted to surface water sewer running west-east direction along the northern boundary of the site. Runoff from the yard also enters this sewer, however it is passed through an interceptor prior to discharging to public sewer.

4.4 Locations

Surface and foul water monitoring is carried out at two locations (S01 and S02) to the north of the site.

4.5 Methods

Foul water sampling is carried out by taking a grab sample below the V notch weir when there is adequate flow. Surface water sampling was carried out by full submergence of the container into the surface water body. Samples were stored appropriately and transferred within 24 hours for analysis, conducted by Alcontrol Laboratories.

The results have been compared to the ELV,s contained in Schedule C and D of waste licence 147/1. All surface and foul water results were in compliance with the emission limit values contained in the licence.

5.0 Summary of Results & Interpretations – Environmental Monitoring

Monitoring Point	Grid Reference
F 01	165933 E 73611N

5.1 Summary of Foul Water Effluent Analysis

Parameter	BOD	COD	Amm. Nitrogen	Suspended Solids	Sulphate	p.H	Temp	MBAS	F.O.Gs
Sampling Date	mg/l	mg/l	mg/l	mg/l	Mg/l		°o	Mg/l	mg/l
29.01.09	12	45	0.2	176	108	8.1	11	2.2	1
26.02.09	37	116	1.0	21	118	7.4	13	3.3	1
26.03.09	18	200	0.7	33	92	8.5	12	0.15	24
30.04.09	4.88	54.3	1.05	17	114	8	11	0.3	1.74
28.05.09	7.11	103	0.940	12	185	7.7	14.2	0.340	6.10
* June									
17.07.09	7.00	70.8	0.889	30	49	7.9	15.2	0.1	1.30
31.08.09	30	337	0.5	83	89	7.7	21	0.36	10
30.09.09	10.0	62	1.3	15	104	8	17.2	0.32	<10
29.10.09	3.58	90.6	0.332	2.50	116	8.1	11	0.412	4.77
24.11.09	4.65	46.4	0.200	16	43.6	7.8	8	0.249	4.29
10.12.09	8.88	84.3	1.37	119	57.2	7.4	10	0.380	1.38

* Unable to obtain a representative sample due to the emptying of Interceptor

5.2 Summary of Surface Water Effluent Analysis

Sampling Date	BOD Mg/l	Suspended Solids Mg/l	Am. Nitrogen NH 4 Mg/l	pH	Mineral Oils Mg/l
29.10.09	104	66	0.1	7	2.36
30.09.09	2	38	0.3	7.2	0.016

5.3 Interpretation of Results:-

Foul water results have been within the Emission Limit Values as specified within the licence for 2008. This is confirmed also by Agency monitoring, however, on a few occasions the ELV for sulphates have exceeded the trigger value for a grab sample. Segregation of waste streams that may give rise to elevated sulphates has been isolated so as to prevent ingress of sulphates within the Drainage system.

BOD and COD levels are all well within allowable limits. This is also true for the other parameters that require testing.

Testing carried out by Cork City Council to determine if effluent is within limits as specified within discharge licence W.P. (S) 608/09 have demonstrated that they are all within the specified limits.

The interceptors are cleared of contents on a regular basis and drainage inspections all help positively in achieving compliance.

No sample obtained in June as the interceptors were cleared of contents for treatment.

Surface water results for October were in excess of the trigger levels as specified for the following parameters within the facility licence. An exceedence in BOD and suspended solids was noted.

The sample taking was a grab sample which could not be construed as a highly representative sample of the quality of the surface water discharge.

The yard could not be swept for four days as the mechanical sweeper was defective and this may have contributed to the elevated parameters.

6.0 Summary of Dust Monitoring

The dust gauges were set up at the locations D1, D2, D3 and D4 as specified in Table D1.1 of the Waste Licence. The gauges were erected such that the containers were 1.8 m above ground level. The containers were exposed for a 30 day period.

D1: This sample location is sited at the southeast corner of the site.

D2: This sample location is sited at the northwest corner of the site.

D3: This sample location is sited at the southwest corner of the site.

D4: This sample location is sited at the northeast corner of the site.

Monitoring Point	Easting	Northing
D1	166017	73499
D2	165915	73549
D3	165941	73484
D4	165990	73619

The results of the dust monitoring are outlined in the tables below, along with graphical representation of results.

16th November – 15th December 2009

Station	Total Dust mg/m ² /day	Organic Dust	Inorganic Dust
D1	49	43	10
D2	52	48	10
D3	51	37	15
D4	41	25	16

August 2009 – 30 Day Composite

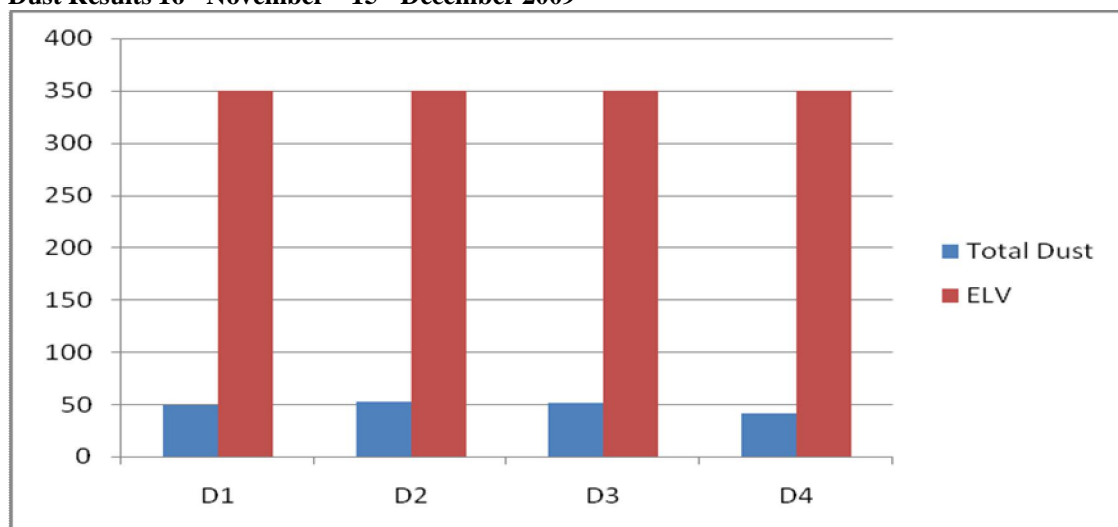
Station	Total Dust mg/m ² /day	Organic Dust	Inorganic Dust
D1	99	45.6	53.6
D2	34.3	20.4	13.9
D3	245.9	48.8	197.2
D4	218	74.5	143.6

July 2009 – 30 Day Composite

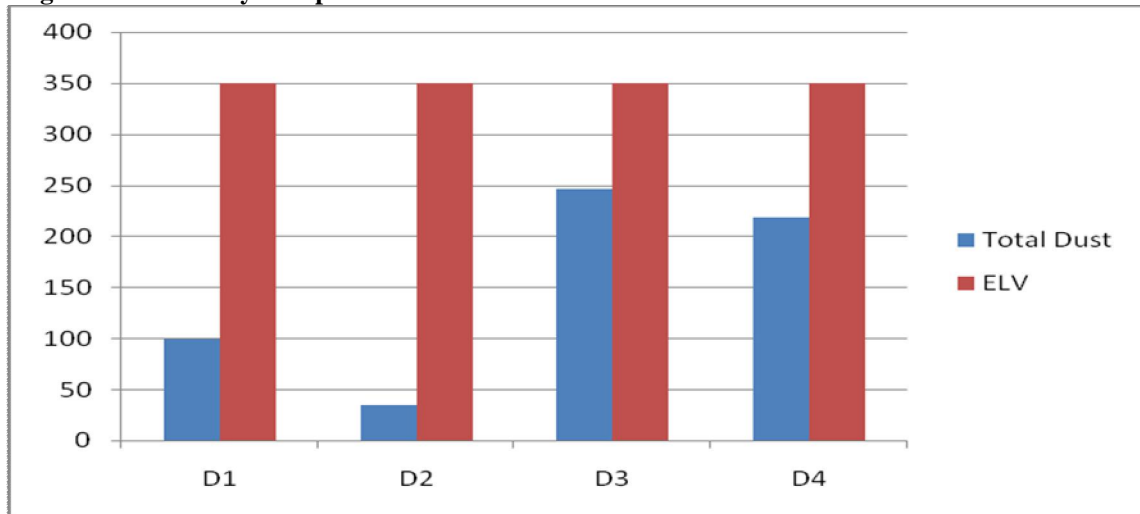
Station	Total Dust mg/m ² /day	Organic Dust	Inorganic Dust
D1	101	37	64
D2	40	39	10
D3	170	34	135
D4	155	69	86

6.1 Graphical Representation of Dust Results

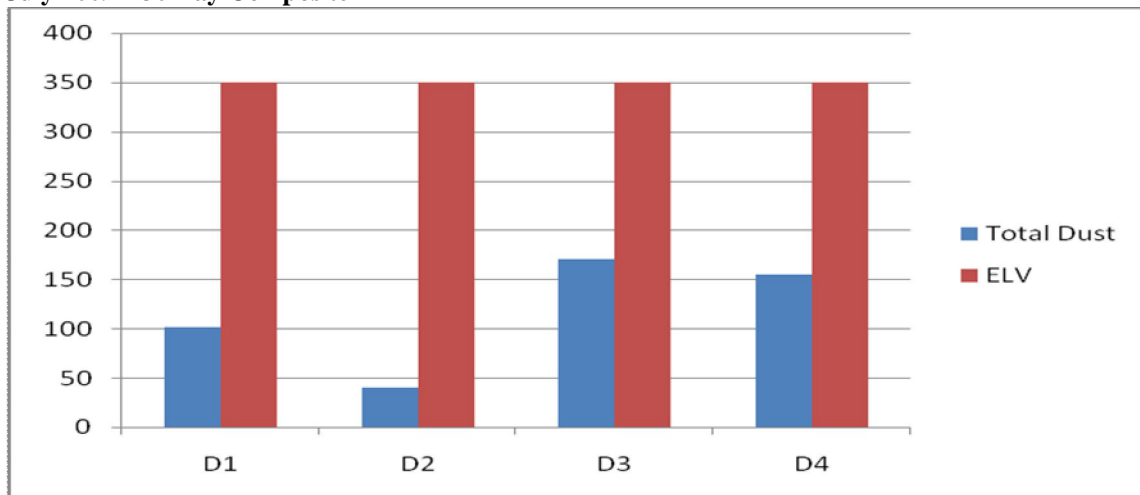
Dust Results 16th November – 15th December 2009



August 2009 – 30 Day Composite



July 2009 – 30 Day Composite



6.2 Conclusion:-

The on-site dust levels when monitored as required in Schedule D2 of waste Licence W0417/01 are within the trigger levels of 350 mg/m²/day. This was achieved by regular spraying of the yard during dry gusty conditions and this in conjunction with yard sweeping using mechanical sweeper.

6.3 Dust Report

REPORT ON DUST MONITORING FOR ASHGROVE RECYCLING, CORK

**PREPARED FOR COMPLIANCE WITH EPA WASTE LICENCE
REGISTER NO. 147-1**

JULY - AUGUST 2009

CONTENTS

1.0	INTRODUCTION	22
2.0	DUST DEPOSITION SURVEY	22
2.1.1	Sources of dust deposition	22
2.1.2	Meteorological Conditions	22
3.0	METHODOLOGY	22
3.1	Sampling Method	22
3.1.1	Sampling Locations	23
4.0	RESULTS:	23
5.0	CONCLUSIONS:	23

INTRODUCTION

Glenside Environmental was commissioned by Ashgrove Recycling to conduct licence compliance monitoring at their premises at John F Connelly Road, Cork. This report details the results of bi-annual dust deposition monitoring at the facility. This survey was conducted to comply with the requirements of the Waste Licence for the facility. The licence (register no. 147-1) was issued by the Environmental Protection Agency to the company in March 2002.

DUST DEPOSITION SURVEY

This report discusses two events of dust monitoring carried out at the Ashgrove facility. In compliance with the waste licence, the dust levels were monitored during the following dates:

- 1st July – 30th July 2009 (29 days)
- 30th July – 27th August 2009 (28 days)

Sources of dust deposition

Within the facility and due to the nature of the on site activity dust can result from sources such as truck movements within the site, cleaning of the yard, and wind blown dust from outside the facility.

Meteorological Conditions

Meteorological Conditions significantly affect the level of dust emissions and the deposition downwind of the source. The most significant meteorological elements affecting dust deposition are rainfall and wind-speed. Rain helps suppress the generation of dust due to the cohesive nature of water between dust particles. Wind lifts up particles into the air and transports them downwind. The worst-case dust deposition conditions typically occur during dry conditions with strong winds.

METHODOLOGY

Sampling Method

Total dust deposition was measured at the site using the Bergerhoff gauges specified in the German Engineering Institute VDI 2119 document entitled “Measurement of Dustfall using the Bergerhoff Instrument (Standard Method).” The gauge consists of a collecting vessel and a stand with a bird-protecting gauge.

The first round analysis was carried out by Southern Scientific Services laboratory in Killarney, Co. Kerry and the second round measurements were carried out by Exova Laboratories in Glanmire, Cork. The liquid is evaporated in a drying chamber and the dustfall residue weighed using a calibrated balance. The daily dust deposition rate is then calculated using information on the dustfall mass, the sampling period and the area of the collecting surface.

Sampling Locations

The dust gauges were set up at the locations D1, D2, D3, and D4 as listed in Table D.1.1 of the waste licence. The gauges were erected such that the containers were 1.8m above the ground surface. The containers were exposed for a period of 29 days from 1st July – 30th July 2009, and for 28 days from 30th July – 27th August 2009.

D1: This sample location is sited at the south-east corner of the site.

D2: This sample location is positioned at the north-west corner of the site.

D3: This sample location is located at the south-west corner of the site.

D4: This sample location is situated at the north-east corner of the site.

RESULTS:

The results of the two dust monitoring events are outlined in the tables below.

Table 4.1: Dust Monitoring Event No. 1

Station No	1 st July – 30 th July 2009		
	mg/m ² /day		
	Total Dust	Organic Dust	Inorganic Dust
D1	101	37	64
D2	40	39	<10
D3	170	34	135
D4	155	69	86

Table 4.2: Dust Monitoring Event No. 2

Station No	30 th July – 27 th August 2009		
	mg/m ² /day		
	Total Dust	Organic Dust	Inorganic Dust
D1	99	46	53
D2	34	20	14
D3	25	5	20
D4	22	7	14

CONCLUSIONS:

The results in the table above are within the EPA limit set out in Schedule C.2 of Waste Licence 147-1 for the facility.

**REPORT ON BI-ANNUAL NOISE MONITORING SURVEY
FOR
ASHGROVE RECYCLING, CORK**

**PREPARED FOR COMPLIANCE WITH EPA WASTE LICENCE
REGISTER NO. W0147-01**

SURVEY DATE: 30th March 2009

CONTENTS

- 1.0 INTRODUCTION

- 2.0 SURVEY DETAILS
 - 2.1 Measurements
 - 2.1.1 Equipment
 - 2.1.2 Weather Conditions

 - 2.2 Permitted Noise Levels
 - 2.3 Noise Terminology
 - 2.4 Noise Monitoring Locations

- 3.0 RESULTS
 - 3.1 Ambient Measurements
 - 3.2 On-Site Sources

- 4.0 OBSERVATIONS

- 5.0 CONCLUSIONS

APPENDIX A – 1/3 Octave Band Analysis

INTRODUCTION

Patrick Power B.Sc MIOA was commissioned by Ashgrove Recycling to conduct a bi-annual noise survey at their premises at John F Connelly Road, Cork. This survey was conducted to comply with the requirements of the Waste Licence for the facility. The licence (register no. W0147-1) was issued by the Environmental Protection Agency to the company in March 2002.

SURVEY DETAILS

The following are the details of the survey as carried out at Ashgrove Recycling on the 30th March 2009. The survey was carried out in accordance with the EPA Noise Survey Guidance Document 2006.

Measurements

Patrick Power B.Sc MIOA carried out measurements at the locations in Schedule D of the licence. All measurements were carried out in accordance with ISO 1996 and EPA Noise Survey Guidance document as specified in the waste licence for the facility.

Equipment

The survey was carried out with a Bruel & Kjaer 2260 Investigator Sound Level Meter. The unit was calibrated before and after use. The instrument was calibrated with a Bruel & Kjaer Type 4231 Sound Level Calibrator, in accordance with ISO 1996-1: 1982 prior to commencing the survey using the recommended calibration procedure and a known pure tone noise source.

Weather Conditions

On 30th March 2009, weather conditions were recorded with a temperature of 9^oC, and wind speed of <1m/s.

Permitted Noise Limits

Table 2.2 below shows the permitted noise levels acceptable outside the site boundaries as given in Schedule D of the waste licence for the facility.

Table 2.1: Noise Monitoring Frequency & Technique

Parameter	Monitoring Frequency	Analysis Method/Technique
L_{Aeq} [30 minutes]	Bi-annual	International Standards Organisation. ISO 1996. Acoustics – Description and Measurement of Environmental Noise. Parts 1, 2 and 3.
L_{A10} [30 minutes]	Bi-annual	
L_{A90} [30 minutes]	Bi-annual	
Frequency Analysis (1/3 Octave Band Analysis)	Bi-annual	

The noise emission limits are given in Schedule C of the licence and are tabulated below.

Table 2.2: Noise Emission Limits

Day dB(A) L_{Aeq} [30 minutes]	Night dB(A) L_{Aeq} [15 minutes]
55	45

Furthermore the EPA requires that there be no audible tones or impulsive components at any noise-sensitive location.

Noise Terminology

The noise monitoring results for the noise sensitive locations (M1-M4) are provided in Table 2.3.

In order to understand the terms used, some definitions are outlined as follows:

- L_{AF10} Refers to those levels in the Top 10 percentile of the sampling interval; it is the level, which is exceeded for 10% of the measurement period. It is used to determine the intermittent high noise level features of locally generated noise.
- L_{AF90}/L_{AF95} Refers to those levels in the lower 90/95 percentile of the sampling interval; it is the level which is exceeded for 90%/95% of the measurement period. It is used to estimate a background level.
- L_{Aeq} The average level recorded over the sampling period. The closer the L_{Aeq} value is to either the L_{AF10} or L_{AF90} value indicates the relative impact of the intermittent sources and their contribution. The relative spread between the values determines the impact of noise on the background.

Noise Monitoring Locations

The following is a description of the noise sensitive locations monitored during the bi-annual noise survey.

Location	Description
M1 (E 166056 N 73491)	On roadside close to FÁS training center, east of the Ashgrove recycling facility
M2 (E 165915 N 73549)	At the “old roundabout” to the west of the facility perimeter
M3 (E 166283 N 73727)	Upper Fair Hill Road adjacent to Fair Green
M4 (E 165868 N 73758)	Outside houses on Nash’s Boreen

RESULTS

Ambient Measurements

The results of the noise monitoring at locations M1-M4 is presented in octave band data below. The 1/3 octave band data is presented in Appendix A.

Table 3.1 Ambient Measurements (Locations M1 - M4)

Monitoring Location	Time and Date	L_{Aeq, 30min} dB(A)	L_{A90, 30min} dB(A)	L_{A10, 30min} dB(A)
M1	30/03/09 15:46-16:16	63.5	56.4	63.5
M2	30/03/09 15:19-15:39	58.8	50.2	61.8
M3	30/03/09 14:39-15:09	65.6	52.6	70.0
M4	30/03/09 14:04-14:34	56.2	35.2	61.6

Observations

Location M1

Traffic movements along the road and activity from local industrial premises were the main noise sources at this location. The activities in the Ashgrove facility were not considered significant at this location. Noise from the other facilities in the estate contributed to the ambient noise levels.

The L_{Aeq} was recorded at 63.5dB(A). The background noise was recorded at 56.4dB(A).

Location M2

Activities from the transfer station building and the local industrial park were the main noise source at this monitoring location. The activities in the Waters Glass facility also contributed to the ambient noise levels.

The average noise level was recorded at 58.8dB(A) and the L_{90} was 50.2dB(A). The background noise level indicates that the specific noise from the Ashgrove premises is within the 55dB(A) limit as specified in the Waste Licence.

Location M3

At location M3 the traffic on the Upper Fairhill Road was the dominant source of noise. The high L_{AF10} levels are an indication of traffic noise. There was no contribution from the Ashgrove facility at this location. The L_{Aeq} was recorded at 65.6dB(A).

Location M4

There was no noise audible from the Ashgrove facility at this location. The average noise levels were influenced by local passing traffic and the background levels were influenced by the distant traffic from the Mallow Road. The L_{Aeq} was recorded at 56.2dB(A) and the L_{90} was 35.2dB(A).

CONCLUSIONS

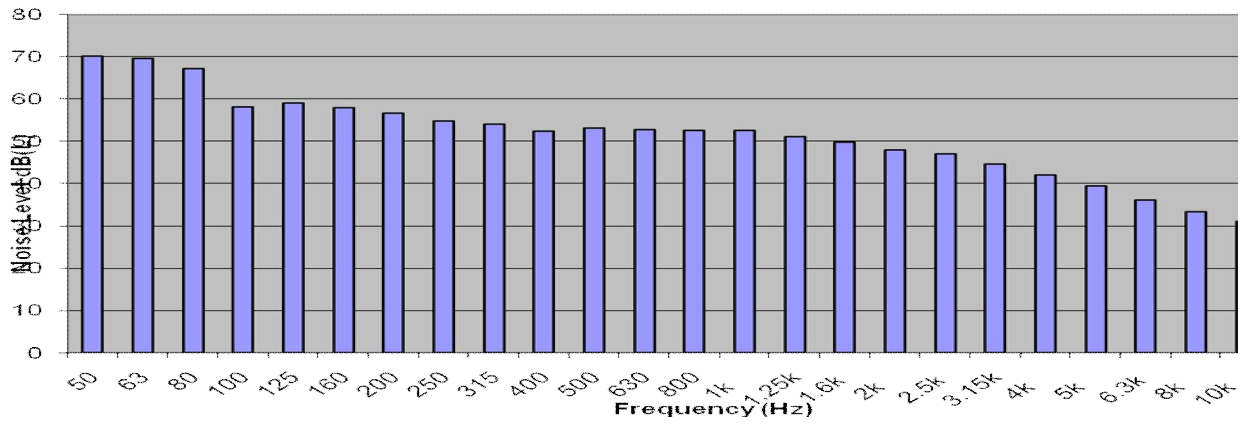
There was no audible noise from the facility at 3 of the 4 monitoring locations. At location M2 close to the facility the average noise level was recorded at 57.3dB(A). Traffic movements and operational noise influenced the average noise levels. The area is zoned industrial and other local industry also contributed to the ambient levels.

In conclusion the noise levels emanating from the Ashgrove facility are considered not to be impacting on local sensitive areas.

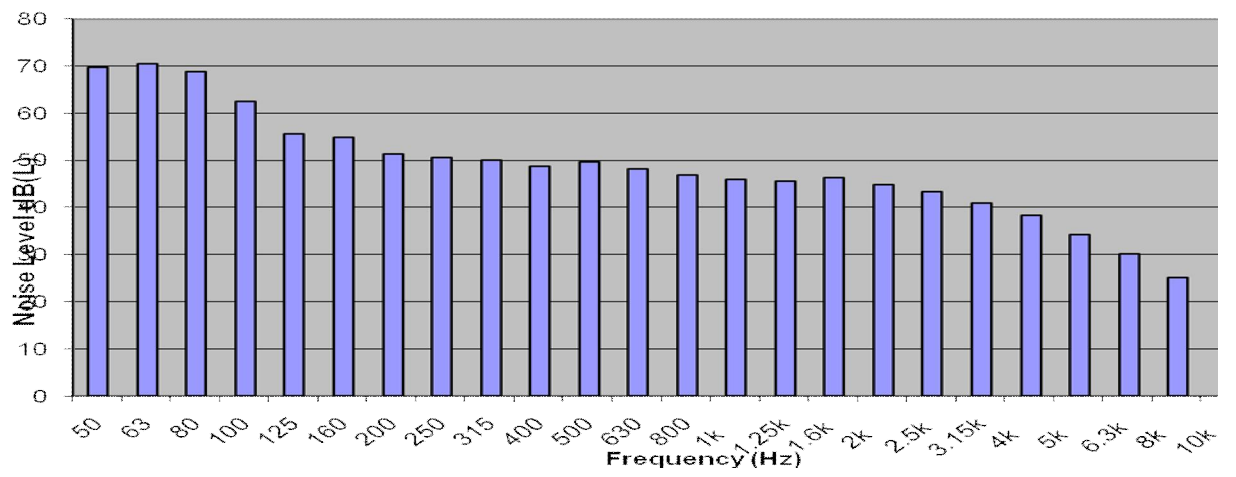
APPENDIX A

NOISE MONITORING SPECTRUM

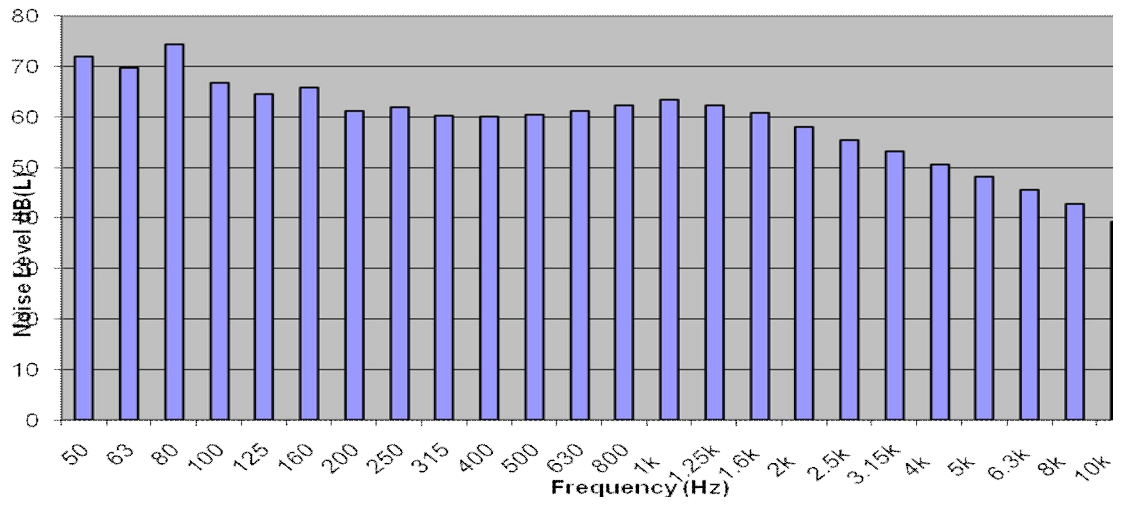
Noise Spectrum at M1



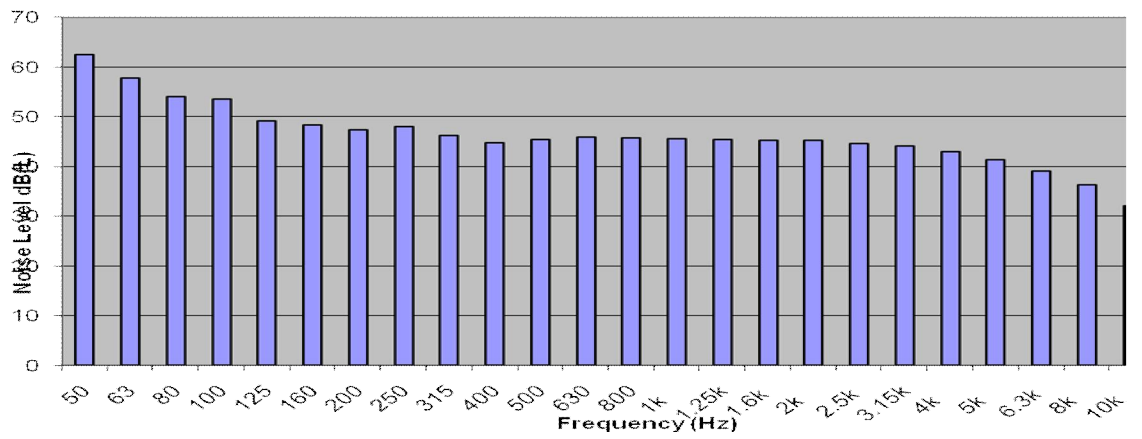
Noise Spectrum at M2



Noise Spectrum at M3



M4 Noise Spectrum



7.0 Bi – Annual Noise Monitoring

**REPORT ON BI-ANNUAL NOISE MONITORING SURVEY
FOR
ASHGROVE RECYCLING, CORK**

**PREPARED FOR COMPLIANCE WITH EPA WASTE LICENCE
REGISTER NO. W0147-01**

SURVEY DATE: 30th October 2009

CONTENTS

1.0	INTRODUCTION.....	36
2.0	SURVEY DETAILS	36
2.1	Measurements	36
2.1.1	Equipment.....	36
2.1.2	Weather Conditions.....	36
2.2	Permitted Noise Limits	36
2.3	Noise Terminology.....	37
2.4	Noise Monitoring Locations	37
3.0	RESULTS.....	38
3.1	Ambient Measurements	38
4.0	OBSERVATIONS.....	38
5.0	CONCLUSIONS	39

INTRODUCTION

Glenside Environmental was commissioned by Ashgrove Recycling to conduct a bi-annual noise survey at their premises at John F Connelly Road, Cork. This survey was conducted to comply with the requirements of the Waste Licence for the facility. The licence (register no. W0147-1) was issued by the Environmental Protection Agency to the company in March 2002.

SURVEY DETAILS

The following are the details of the survey as carried out at Ashgrove Recycling on the 30th March 2009. The survey was carried out in accordance with the EPA Noise Survey Guidance Document 2006.

Measurements

Patrick Power B.Sc MIOA carried out measurements at the locations in Schedule D of the licence. All measurements were carried out in accordance with ISO 1996 and EPA Noise Survey Guidance document as specified in the waste licence for the facility.

Equipment

The survey was carried out with a Bruel & Kjaer 2260 Investigator Sound Level Meter. The unit was calibrated before and after use. The instrument was calibrated with a Bruel & Kjaer Type 4231 Sound Level Calibrator, in accordance with ISO 1996-1: 1982 prior to commencing the survey using the recommended calibration procedure and a known pure tone noise source.

Weather Conditions

On 30th October 2009, weather conditions were recorded with a temperature of 14^oC, and wind speed of <1m/s.

Permitted Noise Limits

Table 2.2 below shows the permitted noise levels acceptable outside the site boundaries as given in Schedule D of the waste licence for the facility.

Table 2.1: Noise Monitoring Frequency & Technique

Parameter	Monitoring Frequency	Analysis Method/Technique
L _{Aeq} [30 minutes]	Bi-annual	International Standards Organisation. ISO 1996. Acoustics – Description and Measurement of Environmental Noise. Parts 1, 2 and 3.
L _{A10} [30 minutes]	Bi-annual	
L _{A90} [30 minutes]	Bi-annual	
Frequency Analysis (1/3 Octave Band Analysis)	Bi-annual	

The noise emission limits are given in Schedule C of the licence and are tabulated below.

Table 2.2: Noise Emission Limits

Day dB(A) L_{Aeq} [30 minutes]	Night dB(A) L_{Aeq} [15 minutes]
55	45

Furthermore the EPA requires that there be no audible tones or impulsive components at any noise-sensitive location.

Noise Terminology

The noise monitoring results for the noise sensitive locations (M1-M4) are provided in Table 2.3.

In order to understand the terms used, some definitions are outlined as follows:

- L_{AF10}** Refers to those levels in the Top 10 percentile of the sampling interval; it is the level, which is exceeded for 10% of the measurement period. It is used to determine the intermittent high noise level features of locally generated noise.
- L_{AF90}/L_{AF95}** Refers to those levels in the lower 90/95 percentile of the sampling interval; it is the level which is exceeded for 90%/95% of the measurement period. It is used to estimate a background level.
- L_{Aeq}** The average level recorded over the sampling period. The closer the L_{Aeq} value is to either the L_{AF10} or L_{AF90} value indicates the relative impact of the intermittent sources and their contribution. The relative spread between the values determines the impact of noise on the background.

Noise Monitoring Locations

The following is a description of the noise sensitive locations monitored during the bi-annual noise survey.

Location	Description
M1 (E 166056 N 73491)	On roadside close to FÁS training center, east of the Ashgrove recycling facility
M2 (E 165915 N 73549)	At the “old roundabout” to the west of the facility perimeter
M3 (E 166283 N 73727)	Upper Fair Hill Road adjacent to Fair Green
M4 (E 165868 N 73758)	Outside houses on Nash’s Boreen

RESULTS

Ambient Measurements

The results of the noise monitoring at locations M1-M4 is presented in octave band data below. The 1/3 octave band data is presented in Appendix A.

Table 3.1 Ambient Measurements (Locations M1 - M4)

Monitoring Location	Time and Date	L _{Aeq, 30min} dB(A)	L _{A90, 30min} dB(A)	L _{A10, 30min} dB(A)
M1	30/10/09 12:37-13:07	61.9	52.4	63.3
M2	30/10/09 13:13-13:43	54.3	49.6	56.2
M3	30/10/09 11:57-12:27	64.4	51.8	69.2
M4	30/10/09 11:22-11:52	53.2	39.8	58.7

OBSERVATIONS

Location M1

At location M1 regular traffic movements contributed to the average noise level of 61.9dB(A). The activities in the Ashgrove facility were not considered significant at this location. Noise from the other facilities in the estate contributed to the ambient noise levels. The background noise was recorded at 52.4dB(A).

Location M2

Activities from the transfer station building, local traffic and the local industrial park were the main noise source at this monitoring location. The activities in the Waters Glass facility also contributed to the ambient noise levels.

The average noise level was recorded at 54.3dB(A) and the L90 was 49.6dB(A). The background noise level indicates that the specific noise from the Ashgrove premises is within the 55dB(A) limit as specified in the Waste Licence.

Location M3

At location M3 the traffic on the Upper Fairhill Road was the dominant source of noise. The high L_{AF10} levels are an indication of traffic noise. There was no contribution from the Ashgrove facility at this location. The L_{Aeq} was recorded at 64.4dB(A).

Location M4

There was no noise audible from the Ashgrove facility at his location. The average noise levels were influenced by local passing traffic and the background levels were influenced by the distant traffic from the Mallow Road. The L_{Aeq} was recorded at 53.2dB(A) and the L_{90} was 39.8dB(A).

CONCLUSIONS

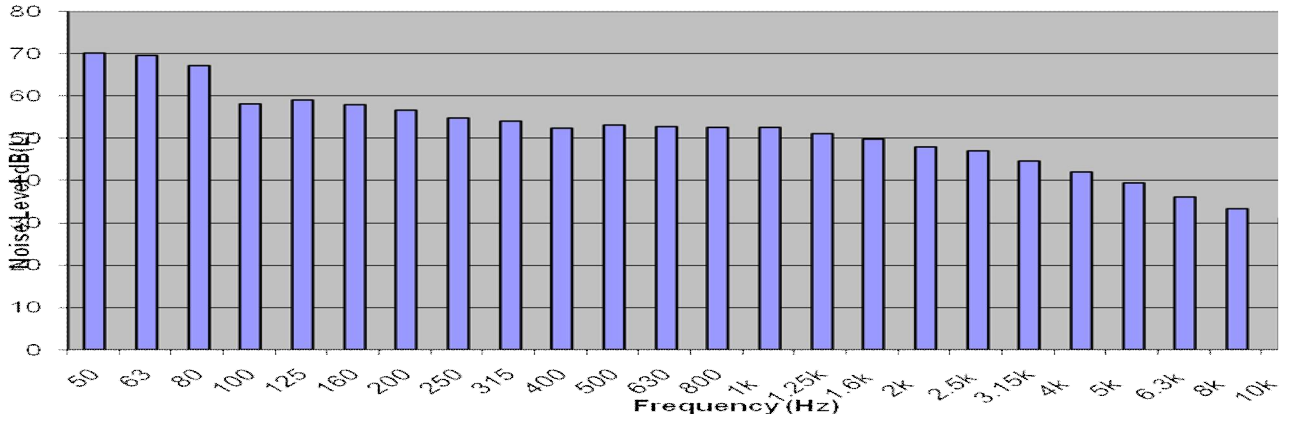
There was no audible noise from the facility at 3 of the 4 monitoring locations. Traffic movements and operational noise influenced the average noise levels. The area is zoned industrial and other local industry also contributed to the ambient levels.

In conclusion the noise levels emanating from the Ashgrove facility are considered not to be impacting on local sensitive areas.

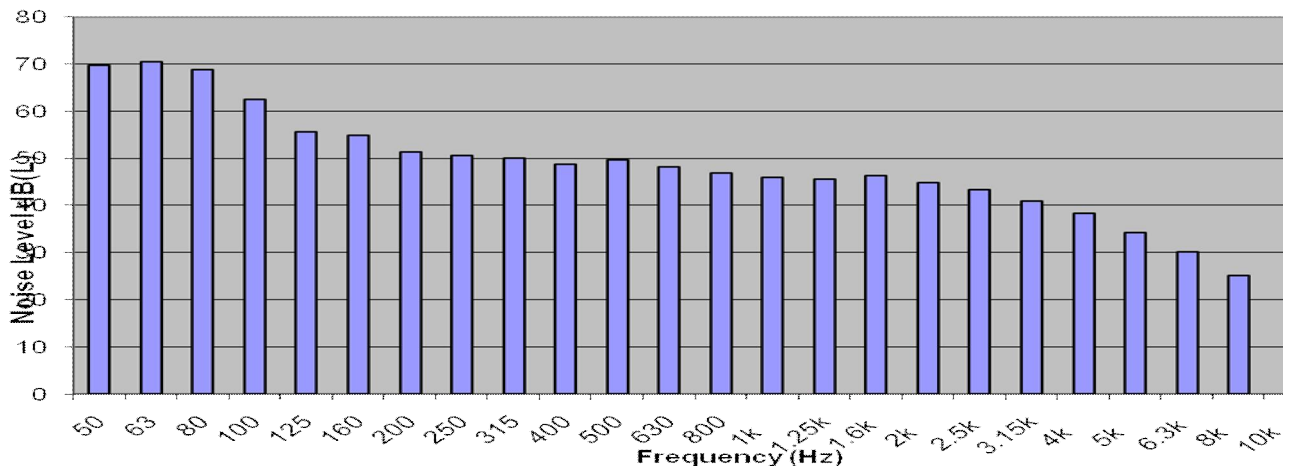
APPENDIX A

NOISE MONITORING SPECTRUM

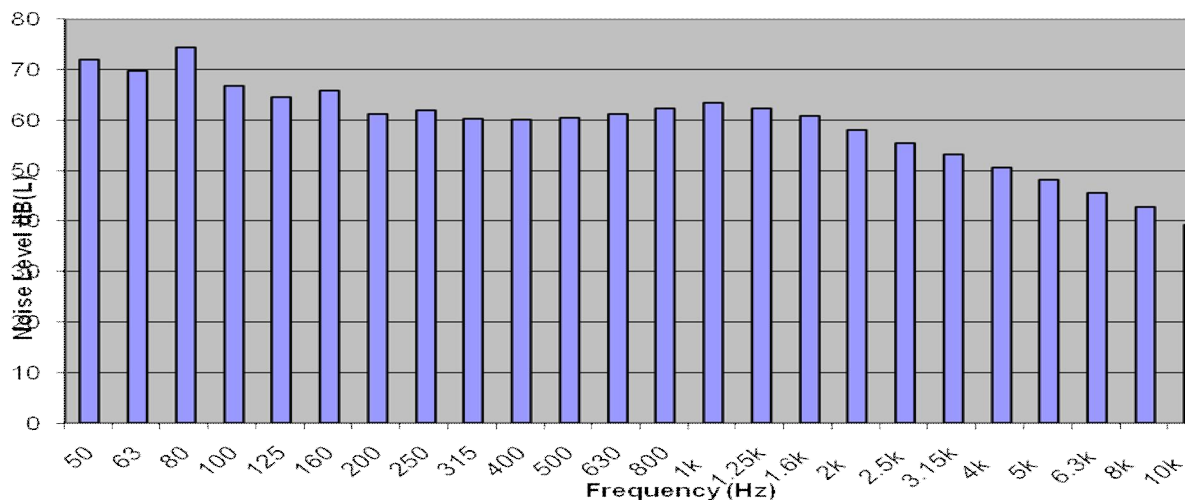
Noise Spectrum at M1

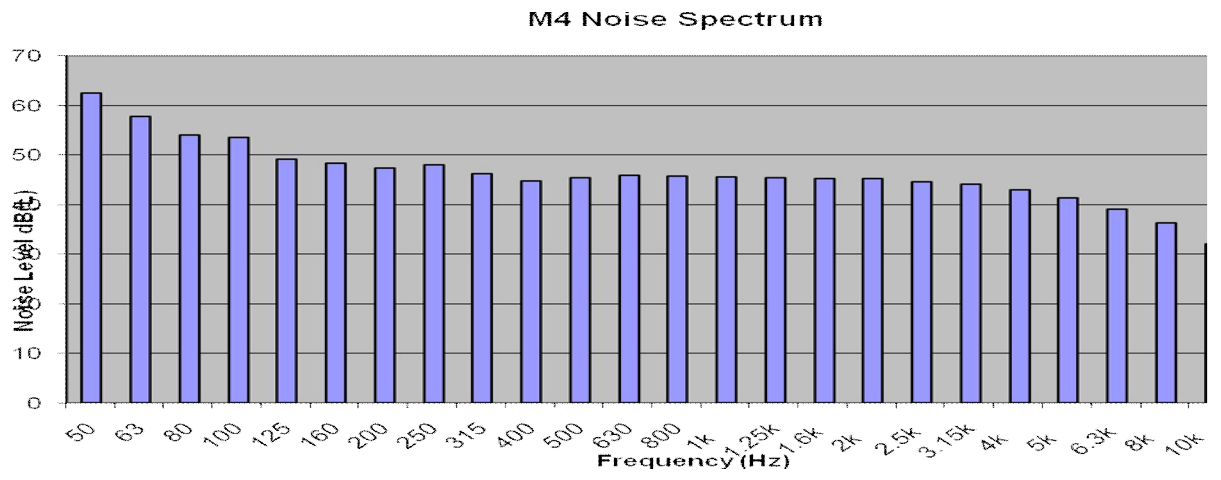


Noise Spectrum at M2



Noise Spectrum at M3





8.0 Environmental Management Plan / Schedule of Targets & Objectives

8.1 Introduction:-

This Environmental Management Plan was prepared to ensure compliance with Condition 2.3 of EPA Waste licence Registered Number 147/1 with respect to activities concerning:-

**Ashgrove Recycling,
John. F. Connolly Road,
Churchfield Industrial Estate,
Churchfield,
Cork.**

The Environmental Management System involves the implementation of a system, which forms the basis for continuous, structured and quantifiable improvement in a facilities environmental performance.

Ashgrove Recycling operates a Materials Recovery Facility in conjunction with a skip hire business at Churchfield Industrial Estate, Cork. The waste, which is collected primarily from Construction/Demolition and Commercial Activities within the functional areas of Cork City and County Council, is separated into recyclable and unrecoverable fractions at the facility. The redeemable material is transferred to various associated industries for recycling with the residual unrecoverable materials being landfilled.

8.2 Purpose

The purpose of this Environmental Management Programme is to ensure that the schedule of targets and objectives are supported and fully implemented throughout the company. It will help the company achieve continual improvement in an environmental context. It will provide the facility with the framework to operate in conjunction with the waste licence and strive to achieve good environmental practice for the operation of the facility.

The development of a set of comprehensive procedures for Ashgrove Recycling across all departments continued from what was initiated in 2004. A number of additional procedures have been implemented at Ashgrove Recycling Centre in relation to facility operations in 2005. These include;

- a) **Communications Procedure** – This procedure ensures that effective and responsive measures are in place at Ashgrove Recycling Centre to deal with requests for environmental information at the facility.
- b) **Vehicle Emergency Response Procedure** – This procedure is designed to protect driving employees during emergency situations.
- c) **Fire Extinguisher Installation Standard** – This procedure has unified the way in which fire extinguishers are mounted in Ashgrove Recyclings facility. The standard complies with all aspects of I.S.291: 1986, the Irish standard for the use, sitting, inspection and maintenance of portable fire extinguishers.
- d) **No Smoking Procedure** - This is an important procedure for the protection of the safety of all employees. All aspects of the Public Health (Tobacco) Act 2004 are considered in this procedure and bring the Ashgrove Recycling Operations into line with the requirements of the Act.
- e) **Hot Works Permit Procedure** – In conjunction with the No Smoking Procedure, a ‘Hot Works Procedure’ is now in place at Ashgrove Recycling operations. This is to ensure that all the appropriate measures are taken to reduce the risk of fire in the event of hot works taking place.
- f) **Control of Sub Contractors** – As all employees are exposed to the hazards and risk that the Ashgrove Recycling operations present, so to are all contractors that work on our sites. This procedure will ensure that the contractors that are brought onto work on Ashgrove Recycling operations are trained, certified and experienced operators of there equipment. It will also ensure that the standard of sub-contractors that Ashgrove Recycling utilises, comply with all aspects of the law in regards to there operations whilst on Ashgrove Recycling operations.

8.3 Schedule of Objectives and Targets 2010

<u>Objectives</u>	<u>Targets</u>
1. Increase area of concreted surface, i.e.:- Impermeable Hard standing at the facility	To increase concrete surface area by 1803m ² within the next 3 years and d to commence in May of this year.
2. To reduce the amount of residual waste going to landfill.	To reduce residual waste going to landfill by 2% per annum.
3. Water Conservation	Reduce annual consumption by 5%.
4. Reduce energy wastage at the facility	10% reduction in consumption compared to last years usage.
5. Reduce litter within and around the site vicinity	Eradicate all extraneous litter from Ashgroves activities in and around the site. Carry out daily Inspections.
6. Reduce emissions from the development	Reduce dust emissions to the atmosphere by 10% for the beginning of 2008. Implement further dust suppression equipment
7. Reduce instances of hazardous waste coming to the facility	Negotiate with customers. Site audits to identify non-compliant waste streams and report back to site/facility manager
8. To eliminate adverse spillages of engine oil	To reduce incidences of oil spillage by regular checks and providing suitable bunding
9. To reduce emissions from vehicles	To reduce vehicular emissions and carry out further research on running Ashgrove's fleet of trucks on bio fuels within a two year period

Objective 1:- Increase area of concreted surface, i.e.:- Impermeable Hard standing at the facility

<p>Advantages to implement objective:-</p>	<p>The success of the project will yield several benefits to the environmental performance of the facility. It will also help the site by increasing the operational area.</p> <p>The concreting development will prevent the development of mud nuisance, and prevent runoff, etc from entering groundwater and possibly effecting soils.</p> <p><i>Note:- Hard standing to conform to British Standard 8110</i></p> <p>In keeping with the EPA Guidance note for Annual Environmental Report, Ashgrove have set targets, which are “demanding”. It should be noted that the targets set in the EMP are just “targets”. However, Ashgrove will endeavour to make every reasonable effort to achieve the set targets.</p>
<p>Target:-</p>	<p>To have 1803m² of the yard concreted within the next 2 years. This is to continue on from the existing concreted area.</p> <p>Task 1:- Identify area to be concreted and calculate area.</p>
<p>Programme for achieving Target</p>	<p>Task 2 :- Take levels to identify areas that need fill</p> <p>Task 3:- Divide into sections and prepare construction schedule and bill of quantities.</p> <p>Task 4:- Calculate flow rates for maximum rainfall intensity from Irish climatic data and identify if current interceptor is of sufficient size to deal with surface run off.</p> <p>Task 5:- Installation of silt traps and associated works.</p> <p>Task 6:- Order steel, aggregate and 30N Concrete</p> <p>Task 7:- Obtain quotations from Concrete Contractors, subsequent to identifying best tender, set date for commencement of works.</p>
<p>Responsibility for Project:-</p>	<p>The facility Manager and Environmental Manager are responsible for implementing this project, through to project completion.</p>

Table 1.1:-

2010	Jan	Feb	Mar	April	May	June	July	August	Sept	Oct	Nov	Dec
Task 1												
Task 2												
Task 3												
Task 4												
Task 5												
Task 6												
Task 7												

Objective 2:- To reduce the amount of residual waste going to landfill.

<p>Advantages to implement objective:-</p>	<p>Any reduction in residual waste going to landfill has several positive environmental effects. It helps to conserve natural resources when recycling, etc is carried out. It also has the added benefit of preventing the unnecessary land filling of materials as land filling must be the last option once all other possibilities have been explored.</p>
<p>Target:-</p>	<p>In keeping with the EPA Guidance note for Annual Environmental Report, Ashgrove have set targets, which are “demanding”. It should be noted that the targets set in the EMP are just “targets”. However, Ashgrove will endeavour to make every reasonable effort to achieve the set targets.</p> <p>To reduce residual waste going to landfill by 5% per annum.</p>
<p>Programme for achieving Target</p>	<p>Task 1:- Identify existing rates of recovery</p> <p>Task 2:- Carry out regular assessments within the Material Recovery Building to identify if any recycled material is being waste stockpiled to be destined to landfill.</p> <p>Task 3:- If it is evident that recyclable material is being stockpiled for landfill, then a meeting will be held with MRB staff whereby the materials which are relevant will be displayed.</p> <p>Task 4:- Identify the best method to segregate these recyclable materials.</p> <p>Task 5:- Review process regularly with the possibility of investing more in recycling infrastructure</p> <p>Task 6:- Implement any findings.</p>
<p>Responsibility for Project:-</p>	<p>The Facility Manager is responsible for implementing this project with the assistance of the Waste Controller. The Waste Inspector will assist with Task 2. It will be the responsibility of the Environmental Manager to assist with providing information to the Agency in relation to proposed destination for recovered materials.</p>

Table 2.1:-

2010	Jan	Feb	Mar	April	May	June	July	August	Sept	Oct	Nov	Dec
Task 1												
Task 2												
Task 3												
Task 4												
Task 5												
Task 6												

Objective 3:- Water Conservation

<p>Advantages to implement objective:-</p>	<p>Water conservation is very significant as it's a precious resource whose significance is undermined by many. Water conservation makes good economic sense as an industrial activity the water consumption is metered and any reduction in consumption patterns will have a positive effect in financial savings.</p>
<p>Target:-</p>	<p>In keeping with the EPA Guidance note for Annual Environmental Report, Ashgrove have set targets, which are “demanding”. It should be noted that the targets set in the EMP are just “targets”. However, Ashgrove will endeavour to make every reasonable effort to achieve the set targets.</p> <p>Reduce annual consumption by 10% compared to last year's usage .i.e. 2008.</p>
<p>Programme for achieving Target</p>	<p>Task 1:- Identify plant and appliances that consume water</p> <p>Task 2:- Evaluate if the water consumption can be reduced without hindering performance of equipment.</p> <p>Task 3:- Look at water saving equipment such as press valve taps, etc. The use of water sprayer for dust control is being filled off rain water run-off.</p> <p>Task 4:- Compile information sheet and distribute to employees.</p> <p>Task 5:- See if surface water collection from the roof is feasible, water collected from the roof can be used for power washing.</p> <p>Task 6:- Have a meeting with other employees and outline the importance of water conservation.</p> <p>Task 7:- Installation and implementing recommendations</p>
<p>Responsibility for Project:-</p>	<p>The facility Manager and Environmental Manager will have responsibility for implementing this Objective.</p>

Table 3.1:-

2010	Jan	Feb	Mar	April	May	June	July	Aug	Sept	Oct	Nov	Dec
Task 1												
Task 2												
Task 3												
Task 4												
Task 5												
Task 6												
Task 7												

Objective 4:- Reduce energy wastage at the facility

<p>Advantages to implement objective:-</p>	<p>The reduction in energy will reduce the unnecessary release of CO₂, along with other pollutants to the atmosphere. This is due to the fact that most electricity is generated by fossil fuels in Ireland. Renewable energies are not been exploited to their potential. It will also reduce running costs for the facility as energy costs have rising by over 30% in the past three years.</p>
<p>Target:-</p>	<p>In keeping with the EPA Guidance note for Annual Environmental Report, Ashgrove have set targets, which are “demanding”. It should be noted that the targets set in the EMP are just “targets”. However, Ashgrove will endeavour to make every reasonable effort to achieve the set targets. 10% reduction in consumption compared to last years usage.</p>
<p>Programme for achieving Target</p>	<p>Task 1:- Identify the major sources of energy usage at the facility and conduct energy audit.</p> <p>Task 2:- Report findings to licensee. Suggest ways in improving controls, etc.</p> <p>Task 3:- Compile energy awareness literature and distribute amongst staff, incorporating findings of energy audit.</p> <p>Task 4:- Regularly show employees where energy is being wasted, such as leaving heating and light on unnecessarily. Also, switching plant machinery and vehicles off when not in use. This will also have a positive effect on reducing emissions.</p> <p>Task 5:- Asses the effect the above is having on energy consumption. Look at electrical/fuel billing for the previous three months since project implementation and compare with the subsequent three months. Take seasonal variations into account.</p> <p>Task 6:- Install control mechanisms if deemed necessary for project success.</p> <p>Task 7:- Review programme regularly</p>
<p>Responsibility for Project:-</p>	<p>The responsibility for this lies with the Environmental Manager</p>

Table 4.1:-

2010	Jan	Feb	Mar	April	May	June	July	Aug	Sept	Oct	Nov	Dec
Task 1												
Task 2												
Task 3												
Task 4												
Task 5												
Task 6												
Task 7												

Objective 5:- Reduce litter within and around the site vicinity

<p>Advantages to implement objective:-</p>	<p>It's a stipulation of the waste licence under condition 7.4 that all loose litter not permitted by the licensee shall be removed from the vicinity of the facility as soon as possible. This type of litter is visually unacceptable and has the potential to create a nuisance.</p>
<p>Target:-</p>	<p>In keeping with the EPA Guidance note for Annual Environmental Report, Ashgrove have set targets, which are "demanding". It should be noted that the targets set in the EMP are just "targets". However, Ashgrove will endeavour to make every reasonable effort to achieve the set targets.</p> <p>To maintain a well maintained site, site boundary and access roads while removing extraneous material from causing visual intrusion and possibly becoming an attraction for vermin.</p>
<p>Programme for achieving Target</p>	<p>Task 1:- Evaluate regularly the situation with respect to litter. It may be windblown or illegally dumped.</p> <p>Task 2:- Nominate litter patrol personnel.</p> <p>Task 3:- Compile relevant paperwork records</p> <p>Task 4:- Discuss abatement measures with other adjoining facilities that may be a source for some of the litter.</p> <p>Task 5:- Check quality of all netting and replace if necessary.</p> <p>Task 6:- Check Integrity of fencing, and also monitor the growth of trees as this provides screening. If necessary, feed trees with phostrogen to encourage growth and speed up maturing process.</p>
<p>Responsibility for Project:-</p>	<p>The Waste Controller is responsible for the implementation of this program. The Environmental Manager will assist with Tasks 1, 4 and 5.</p>

2010	Jan	Feb	Mar	April	May	June	July	Aug	Sept	Oct	Nov	Dec
Task 1												
Task 2												
Task 3												
Task 4												
Task 5												
Task 6												

Objective 6:- Reduce emissions from the development

<p>Advantages to implement objective:-</p> <p>Target:-</p> <p>Programme for achieving Target</p> <p>Responsibility for Project:-</p>	<p>Condition 6.2 of the Waste Licence requires that all the activities shall be carried out in a manner such that emissions do not result in significant impairment of, or significant interference with the environment beyond the facility boundary.</p> <p>In keeping with the EPA Guidance note for Annual Environmental Report, Ashgrove have set targets, which are “demanding”. It should be noted that the targets set in the EMP are just “targets”. However, Ashgrove will endeavour to make every reasonable effort to achieve the set targets.</p> <p>To curb emissions to well within the limits prescribed by the waste licence. To remove any possibility of future emissions being released and having an adverse environmental impact.</p> <p>Task 1 – evaluate and compare current monitoring results with licence limits and current monitoring results with licence limits and current handling figures of the facility.</p> <p>Task 2 – Identify any problems areas that exist with adverse emissions to the environment.</p> <p>Task 3 – Identify sources / processes that may lead to problematic results.</p> <p>Task 4:- Evaluate the effectiveness of all emission abatement equipment currently installed.</p> <p>Task 5 :- Discuss any findings with the Agency</p> <p>Task 6:- Install, subject to approval from the Agency, any abatement equipment deemed necessary by the Agency.</p> <p>Task 7:- Look into possibility of installation of an electrical generator and power machinery from this to reduce source noise emissions.</p> <p>The Environmental Manager will have responsibility for this project. Any implementations will be overseen by the Facility Manager subsequent to being approved by the Agency.</p>
--	---

2010	Jan	Feb	Mar	April	May	June	July	Aug	Sept	Oct	Nov	Dec
Task 1												
Task 2												
Task 3												
Task 4												
Task 5												
Task 6												

Objective 7:- Reduce instances of hazardous waste coming to the facility

<p>Advantages to implement objective:-</p>	<p>Condition 1.6 of the Waste Licence states that “ <i>No hazardous wastes or liquid wastes shall be accepted at the facility</i>”.</p> <p>Ashgrove Recycling & Waste Management does not wish to allow hazardous waste streams enter the facility.</p>
<p>Target:-</p>	<p>In keeping with the EPA Guidance note for Annual Environmental Report, Ashgrove have set targets, which are “demanding”. It should be noted that the targets set in the EMP are just “targets”. However, Ashgrove will endeavour to make every reasonable effort to achieve the set targets.</p> <p>To reduce instances of hazardous material arriving at the facility.</p>
<p>Programme for achieving Target</p>	<p>Task 1 – Evaluate current situation with regard to level hazardous waste arriving at the facility.</p> <p>Task 2 – Identify sources & Problematic customers where the majority of the identified waste streams come from.</p> <p>Task 3 – Compile Report on findings (Sources of hazardous waste).</p> <p>Task 4:- Arrange meetings with problematic customers to discuss situation and findings.</p> <p>Task 5:- Assist customer with approach to removing problematic waste from Ashgrove Recycling Receptacles.</p> <p>Task 6:- Review effectiveness of the above regularly.</p>
<p>Responsibility for Project:-</p>	<p>The Facility Manager is responsible for the implementation of this project. The waste controller will be responsible for communications with customers. The waste inspector will assist with inspection and identification of customers who offend regularly. Environmental Manager will advise in accordance with the Waste Licence Regulations.</p>

2010	Jan	Feb	Mar	April	May	June	July	Aug	Sept	Oct	Nov	Dec
Task 1												
Task 2												
Task 3												
Task 4												
Task 5												
Task 6												

Objective 8:- Eliminate the possibility of adverse spillages

<p>Advantages to implement objective:-</p>	<p>To eliminate the ingress of oil, etc to sewers in the event of a spillage. Also this will help the ELV;s not being exceeded.</p>
<p>Target:-</p>	<p>In keeping with the EPA Guidance note for Annual Environmental Report, Ashgrove have set targets, which are “demanding”. It should be noted that the targets set in the EMP are just “targets”. However, Ashgrove will endeavour to make every reasonable effort to achieve the set targets.</p>
<p>Programme for achieving Target</p>	<p>To reduce instances of spillages occurring at the facility, and prevent the ingress of spilt liquids into drainage system.</p> <p>Task 1:- Evaluate current situation with regard to level of spillages.</p> <p>Task 2: – Obtain quotes for suitable spillage kits and containment/bunded systems.</p> <p>Task 3: – Conduct Staff Training and also issue copies of procedure for cleaning up spillages.</p> <p>Task 4:- Review effectiveness of the above regularly.</p>
<p>Responsibility for Project:-</p>	<p>The Facility Manager is responsible for the implementation of this project. The waste controller will be responsible for communications with customers. The waste inspector will assist with inspection and identification of customers who offend regularly. Environmental Manager will advise in accordance with the Waste Licence Regulations.</p>

2010	Jan	Feb	Mar	April	May	June	July	Aug	Sept	Oct	Nov	Dec
Task 1												
Task 2												
Task 3												
Task 4												
Task 5												
Task 6												

Objective 9:- Reduce vehicular emissions

<p>Advantages to implement objective:-</p>	<p>Vehicular emissions are harmful to the environment. As the majority of movements by the skip truck fleet are within Cork it will be beneficial in reducing contribution to air pollution in the city. Also, unsightly “smoky” vehicles will not help public image of recycling company.</p>
<p>Target:-</p>	<p>To maintain all combustion driven machinery in good working order to prevent unnecessary emissions to the atmosphere.</p>
<p>Programme for achieving Target</p>	<p>Task 1 – Compile list with detailed information on all vehicles and machinery with combustion engines at the facility.</p> <p>Task 2 – Identify any necessary repair work that should be carried out.</p> <p>Task 3 – Put all road vehicles through the roadworthy test</p> <p>Task 4:- Carryout regular servicing of all machinery and vehicles.</p> <p>Task 5:- Create a file for all service records.</p> <p>Task 6:- Use of Fuel Oil Catalyst to increase efficiency and reduce emissions</p> <p>Task 7:- Investigate if it is possible to have all of Ashgroves fleet to be powered on bio fuel within a three year period.</p>
<p>Responsibility for Project:-</p>	<p>The Mechanic is responsible for the implementation of this project. The Maintenance Manager will carryout all evaluations and works required. The Environmental Manager will assist in carrying out feasibility study to see the viability in using bio fuels.</p>

2010	Jan	Feb	Mar	April	May	June	July	Aug	Sept	Oct	Nov	Dec
Task 1												
Task 2												
Task 3												
Task 4												
Task 5												
Task 6												
Task 7												

8.4 Benefits Associated with EMS Implementation

The initial drivers, which influenced the scope and focus of EMS development, reflect anticipation of the following benefits:

- An ability to demonstrate due diligence, and therefore operational confidence, more effectively.
- Improved morale by empowering employees to take ownership of the environmental aspects of their jobs.
- Heightened environmental awareness
- More effective emergency procedures
- A platform for implementation of green procurement
- Improved communication within and between staff, management, , public, and regulators.
- Improved corporate image—especially within the community.
- Provides a system for continual improvement.

8.5 Progress Review on Targets & Objectives for 2009

2009 Objectives

1. Increase area of concreted surface, i.e.:- Impermeable Hard standing at the facility
2. To reduce the amount of residual waste going to landfill.
3. Water Conservation
4. Reduce energy wastage at the facility
5. Reduce litter within and around the site vicinity
6. Reduce emissions from the development
7. Reduce instances of hazardous waste coming to the facility
8. To eliminate adverse spillages of engine oil
9. To reduce emissions from vehicles
10. Replacing of all non-efficient Lighting
11. Construction of permanent Offices
12. Replacement of all motors and appliances with energy efficient ones
13. Reduction of Noise Nuisance

Objective 1:- In August 2009 the main floor of the Material Recovery Building was concreted again as the original floor finish became defective.

Also, an area of was concreted to the south of the site and this proved to be very effective, particularly in reducing the amount of mud generated on site.

Furthermore, the ramp approaching the wheelwash was concreted as the Tarmacadam was becoming defective in this area.

Objective 2 :- Regular Inspections of waste destined for Landfill was carried out to prevent the land filling of recyclables. This proved effective and also increased staff awareness, particularly for operators in the material Recovery Building.

Objective 3:- Water consumption at the facility decreased by 5% when compared with 2008 metrics. This was achieved by rainwater harvesting at the facility. Furthermore, the original taps in toilets were replaced with the timed release type.

Objective 4:- Whilst the energy consumption has remained fairly constant with little variation, the licensee is confident that the eight floodlights used for night lighting of yard when replaced with the more energy efficient metal halide type will further reduce energy consumption. Management regularly conduct checks to ensure that no electrical items are left on unnecessarily, particularly heating appliances.

Objective 5:- Regular litter Inspections are carried out and an operator has been designated the task of clearing any litter when required.

Objective 6:- The water bowser seems to prove very effective in reducing dust nuisance. The cladding of the material recovery building is inspected to ensure full integrity so as to mitigate against noise and odour nuisance.

Objective 7:- Customer waste profiling is carried out for new regular customers. Also, staff in reception advise customers of non-conforming waste streams. Additionally, letters of acceptance are issued to new waste collectors arriving at the facility that specifies that the facility cannot accept liquid or hazardous waste. The quarantine area contains non-conforming items and these are removed to a permitted facility as agreed with the Agency.

Objective 8:- A set of twelve spillage kits were purchased in addition to the existing ones to facilitate the cleanup of any oil spills that may arise. Staff have been trained in the proper use of the kits.

Objective 9 :- The conversion of vehicles to run on bio-fuel is still ongoing. Some of the fleet needs to be upgraded before further investment/consideration is given to this objective. The use of a fuel catalyst (Spectrum D) helps with reduced emissions of up to 50% and fuel savings of up to 10%.

Objective 10:- All lights within recovery building and main yard are changed to metal halide type, which consume only a fraction of the conventional type floodlight. This objective is now completed fully.

Objective 11:- The construction of permanent offices has not started and this is still under review.

Objective 12:- An assessment was undertaken by our Electrical contractor and the advice provided suggested that most of the motors are new and would be quite efficient. This in conjunction with regular maintenance helps with efficiency.

Objective 13:- The processing plant is housed internally and noise generation does not appear to be a problem externally. To ascertain if the facility was creating a noise nuisance we asked the developer of the nearest receptor (Exchange Business Park) and the findings were that the recycling facility has had no adverse impact.

Furthermore, independent bi-annual noise surveys conducted by Glenside Environmental have concluded same.

8.6 Corrective Action Procedures

A review of the Environmental Management System will be undertaken at appropriate times and progress and environmental budgetary measures will be discussed.

A meeting dedicated to this will be arranged and the success of the targets and objectives that were identified will be reviewed.

A file will be compiled and reasons will be thoroughly investigated. Any emissions or emergency that may occur will be notified to the Agency.

9.0 Bunded Tank Integrity Test



ASHGROVE RECYCLING

CHURCHFIELD INDUSTRIAL ESTSTE, CORK

ASSESSMENT OF BUND INTEGRITY

WASTE LICENCE W0147-01

REPORT BY:

PAT POWER

DATE: 10TH DECEMBER 2009

1.0 Introduction

Glenside Environmental was commissioned by Ashgrove Recycling to carry out bund testing at their facility. The fuel bunds were inspected on 10th and 17th November 2009 and this report presents the findings.

2.0 Scope

The scope of this report is determined by conditions 3.11 and sub-conditions of Waste Licence W0147-01. The sub-conditions state as follows:-

3.11 Tank and Drum Storage Areas

3.11.1 All tank and drum storage areas shall be rendered impervious to the materials stored therein.

3.11.2 All tank and drum storage areas shall, as a minimum, be banded, either locally or remotely, to a volume not less than the greater of the following:

- (a) 110% of the capacity of the largest tank or drum within the banded area; or
- (b) 25% of the total volume of substance which could be stored within the banded area.

3.11.3 All drainage from banded areas shall be diverted for collection and safe disposal.

3.11.4 All inlets, outlets, vent pipes, valves and gauges must be within the banded area.

3.11.5 The integrity and water tightness of all the bunds and their resistance to penetration by water or other materials stored therein shall be confirmed by the licensee and shall be reported to the Agency following its installation and prior to its use as a storage area.

This confirmation shall be repeated at least once every three years thereafter and reported to the Agency on each occasion.

3.0 Methodology

The assessment of the bunds' integrity was based on visual inspection of the type and standard of construction, evidence for structural failure or potential failure and evidence of water ingress or leakage from the structures. The bunds were then filled with water to a pre-calculated, recorded level, reflecting sub-condition 3.11.5 above. After this the period the water level was recorded to calculate any fluctuations. The total permissible drop in level, during the testing period, after allowing for evaporation and rainfall, should not exceed 1/500th or 10mm of the average water depth of the full tank.

4.0 Bund Inspection

There was no evidence (dampness) to suggest that liquid is seeping from the interior to the exterior in any of the bunds.

All of the bunds comply with the storage capacity requirements i.e. >110% of the largest tank therein allowing for that part of the bund capacity taken up by the tank volume within the bund.

5.0 Results

The results are presented in Tables 1 and 2.

6.0 Conclusion

The structural integrity of the fuel bunds were satisfactory on the day tested

Table 1: Ashgrove Recycling: Bund 1 Schedule and Inspection Notes

Largest Tank Size (l)	Construction [1]	Inspection	Liquid inside	Dampness or staining outside
220	Steel	No visible cracks or bulges. In excellent condition.	Yes	No

Table 2: Ashgrove Recycling: Bund Schedule and Inspection Notes

Largest Tank Size (l)	Construction [1]	Inspection	Liquid inside	Dampness or staining outside
220	Steel	No visible cracks or bulges. In excellent condition.	Yes	No

Table 3: Ashgrove Recycling: Final Bund Inspection Notes

Bund ID	Vol. Water Added (L)	Height from top after Filling (m)	Height from top @ 7 days (m)	Total Loss / gain (l)	Total Loss / gain (%)
Bund No. 1 – Fuel Bund	0	0.390	0.390	0	0

Table 4: Ashgrove Recycling: Final Bund Inspection Notes

Bund ID	Vol. Water Added (L)	Height from top after Filling (m)	Height from top @ 7 days (m)	Total Loss / gain (l)	Total Loss / gain (%)
Bund No. 2 – Fuel Bund	0	0.320	0.320	0	0

9.1 Drainage Integrity Testing:-

Pipeline hydrostatic testing of both surface water and foul water drainage systems was undertaken by Mescal & Associates, Pollution Control Engineers. The testing was carried out in January 2008 and all systems demonstrated to be watertight. The results of this testing can be viewed at the facility upon request. It is scheduled to have this testing carried out again in January 2011 as per licence condition.

Furthermore, remedial works undertaken by a contractor on behalf of Cork City Council conducted a CCTV survey of the surface and foul water system north of the facility and it transpired that no defects in the system was evident.

10. Reported Incidents & Complaints Summary:-

10.1 Complaints

No public complaints were received at the facility or reported to the Facility Manager during the reporting period.

10.2 Incidents

The following table shows a summary of the incidents that occurred at the facility in 2009. These were reported to the Agency and preventive measures put in place to prevent re-occurrence.

Number	Incident Description	Reported
1.	Exceedence in ELV for foul Water – (F01) Sulphate 185mg/l	Yes
2.	Exceedence in ELV for Surface Water – (SO1) BOD 105mg/l, Suspended solids 66mg/l	Yes

11.0 Review of Nuisance Controls:-

11.1 Odour Control

The loading of residual waste only occurs in the main recovery building. All waste is removed from the facility in an efficient manner and normally within 24 hours from arriving at the facility to prevent adverse odour impact.

The facility has never received complaints with respect to odour. If putrescent material arrives onsite, an additive can be used in the probe atomiser to mitigate against odour until the waste is removed on site.

11.2 Litter

The facility is checked for litter on a daily basis. Any litter nuisance is cleaned up immediately. Waste vehicles bringing waste to site are all covered with appropriate netting and some are thoroughly enclosed. This also prevents litter nuisance in transit. The facility owns and operates a mechanical sweeper on a daily basis. Records of a weekly nuisance inspection are on file at the facility.

11.3 Noise

The facility has never had complaints in relation to excessive noise emanating from the facility. The cladding installed in the material recovery building has a large noise Reduction index and good acoustic properties which helps reduce noise levels at sensitive receptors. Furthermore, noise monitoring is conducted bi-annually at the facility and these respective reports are contained within this report.

The exhaust and baffle systems are checked and maintained by our Mechanical Fitter.

11.4 Flies

The facility does not process large quantities of organic or putrescent material. Historically, flies were never a problem at the facility. However, if fly infestation becomes problematic, a contractor will be engaged to conduct insecticide fogging.

11.5 Mud

Excessive mud generation was never a serious problem at the facility or on nearby access roads. The facility has a wheel wash installed and this has proved effective in the spread of mud.

11.6 Rodents

Rats and mice are not a significant problem at the facility. Pest control companies have provided surveillance visits and placed rodenticide at strategic points since the facility started operations. Full written records of such visits are available at the facility for Inspection.

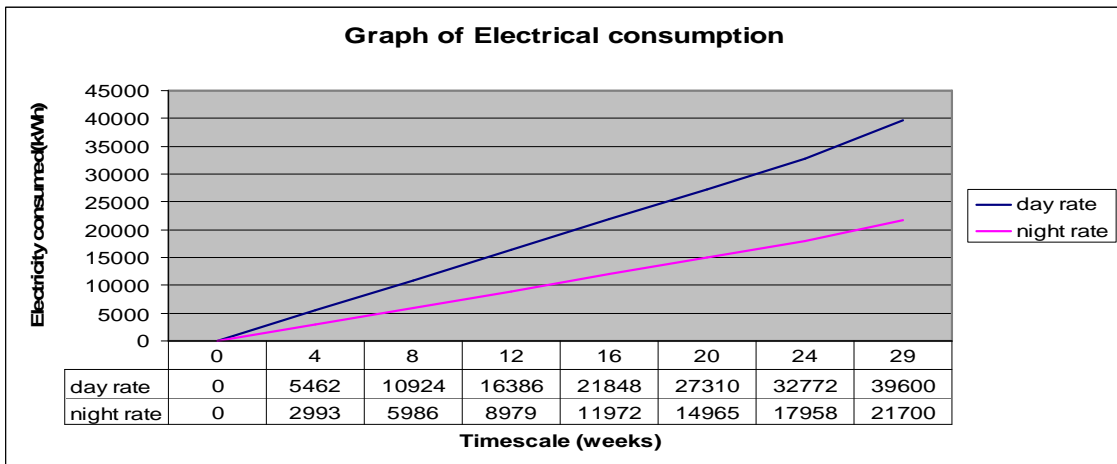
11.7 Dust Control

The facility is monitored for dust deposition three times annually. As the facility is quite elevated and exposed, windblown dust during dry hot weather coupled with vehicular movements can generate unfavourable dust. The hard standing areas of the facility are wetted with a water bowser and also swept using a mechanical sweeper. This practice in conjunction with a wheel wash is effective in reducing dust generation and associated nuisance.

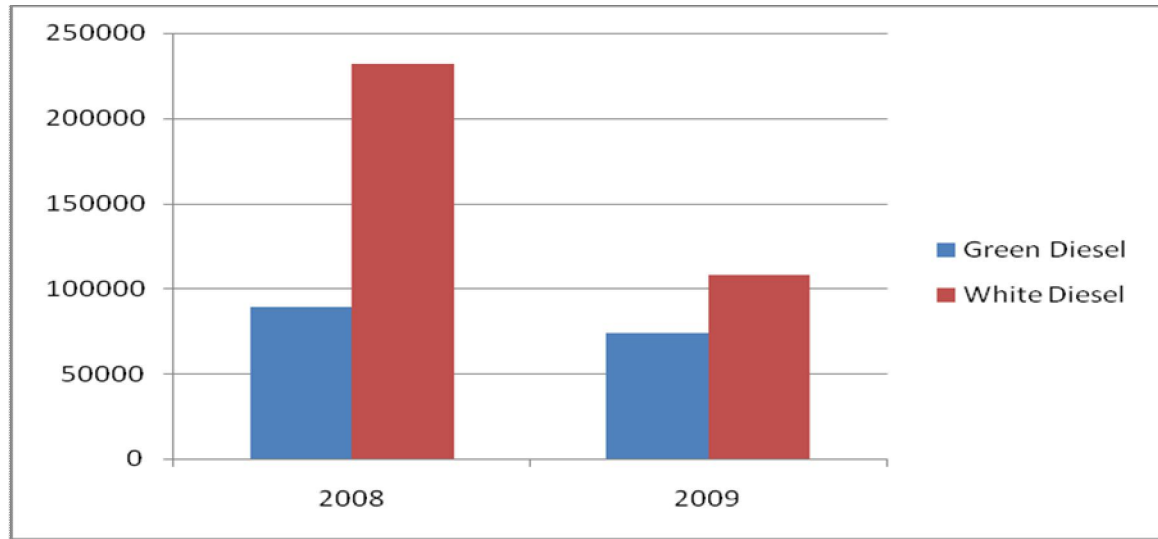
The Material Recovery Building has a probe atomiser in operation that sprays a fine mist to reduce dust levels within the building. Furthermore, dust sprays are concentrated on the finger screen and on the stockpiles and these are activated when necessary.

12. Resource &Energy Consumption

Type	Consumption and Unit
2008 Electricity	64,134 kw/h
2009 Electricity	64,566 kw/h
2008 Diesel Fuel – Green	89009 litres
2009 Diesel Fuel – Green	73940 litres
2008 Diesel Fuel – White	231657 Litres
2009 Diesel Fuel - White	107739 Litres



Diesel Usage



12.1 Diesel Fuel Usage

The usage of green diesel used in 2008 and 2009 showed no significant variation. This is due to the fact that plant and machinery will have very similar usage patterns.

However, the difference between the white road diesel when 2008 and 2009 are compared shows a very significant decrease in usage. This is due to the fact the number of collection vehicles have reduced marginally and the articulated vehicle work is now sub-contracted out.

12.2 Water Consumption 2009

The facility used 1012 m³ of water derived from the public water supply network operated by Cork City Council.

Usage Values

Toilet Flush 8 litres

Dishwasher cycle 50 litres

Running hose pipe 600 litres per hour

12.3 Foul Water

The facility has a 20m³ limit per day for the volume emitted to public sewer north of the facility. This limit was not exceeded for the reporting period.

The foul water is conveyed to a waste water treatment plant operated by Cork City Council.

The volume of foul water discharged to public sewer during reporting period equated to 5532 m³.

13. Financial Provision

Ashgrove Plant Ltd had traded successfully as a Limited Company for over two decades. The company has sufficient assets that would finance any environmental remediation works that may be required should an Environmental Incident arise.

The company has independently audited accounts and when these are reviewed it can be concluded that the company is financially strong and any incidents that may arise will not hinder the financial solvency of the company.

In addition, the company has submitted to the Agency an ELRA and the company has provisions to cater for incidents that may inadvertently arise. Ashgrove Plant Ltd is insured by Zurich Insurance Plc for Pollution and Contamination that may occur at the facility. See Appendix B.

14. Management and Staffing Structure

Directors

Jim Collins Snr
Pauline Collins

Facility Manager

Mr. Jim Collins Jnr

Environmental Manager

Mr. Trevor Parry

HR Manager/ Accounts Manager

Mrs. Susan Wallace

Weighbridge/Dispatch Manager

Mr. Alan Meade

15. Programme for Public Information:-

Ashgrove Recycling are fully committed to providing the general public, neighbouring residences and businesses with information relating to the Environmental Performance of the facility if requested.

The facility has a designated meeting room which can be used for the public if they wish to review various reports, etc.

All information in respect to the operation of the facility is maintained onsite and can be viewed upon request. Furthermore, if an individual wishes to see the facility in operation, we operate an open door policy and endeavour to provide information to the public in both a timely and accurate manner.

16. Noise Reduction Measures

All recovery activities are conducted internally within the material recovery building. The structure has acoustic cladding with very good sound insulation properties to reduce noise levels that may become a nuisance to nearby properties or sensitive receptors.

The landscaping to the south and west boundaries of the site has developed well and it is planned to feed the trees and thin them at the appropriate times to encourage further growth which will help noise nuisance and visually screen the site.

Vehicles that have a defective exhaust system will have the system replaced immediately so as to reduce noise generated from mobile vehicles.

17. Development / Infrastructural Works

The plant type currently utilised was discussed in the beginning of this report. It is anticipated that the Viper City Sizer vibrating finger screen will be replaced by a rotating trommel. The trommel will be used in conjunction with a vibrating flip flow screen to increase the volume of clean inert material such as concrete and soil. An increase in the number of air knives and blowers is also to be considered.

Additional magnetic belts will also be incorporated into the design to increase the quantity of ferrous metals that will be recovered.

Its anticipated these works should commence shortly and will yield positive results for the processing capacity of the plant.

The trommel is more efficient in processing waste streams than the existing finger screen. Additionally, the planned modifications will help achieve a safer environment for the employees within the waste transfer station. The implementation of the above shall result in increased recovery rates.

Currently, all mechanical work on vehicles is subcontracted out, however the licensee is considering renting adjacent premises so this work can be done in-house.

Staff Training

- Manual Handling
- Safe Pass Training
- Waste licence Familiarisation
- Induction
- Fire / ERP Training
- Machinery Operation and driver certification

Site Security

In addition to a night watchman and his guard dog, management are obtaining quotations to upgrade the CCTV system within the facility.

ISO 14001

It is envisaged that a vote take place between management and see if sufficient funds are available within environmental budget to achieve ISO 14001 accreditation.

18. Plant Capacity

A detailed report on plant capacity and standby provisions, etc was previously submitted to the Agency as required under the existing Waste Licence.

For the tonnages that are processed at the facility, the existing plant has the capabilities to process it.

Ashgrove Recycling employs a fulltime mechanical fitter who ensures that spare parts for items of plant that are deemed critical are always in stock.

The table below outlines the plant & machinery along with spares and contingency plans if appropriate. The processing capacity of plant outlined below was specified in previous report submitted to the Agency.

Plant / Machinery	Spare
Leibher 924	Leibher 902
Kawasaki Loading Shovel	Manitou Telescopic Loading Shovel
Viper City Sizer	Powerscreen Trommel (Rental)
Hitachi 18 Ton Excavator	Hitachi 16 Ton Excavator

In the event of a complete shutdown of the facility due to unforeseen circumstances, waste material will be brought to an alternative facility for processing. The facility is licensed to accept 50,000 tonnes of waste per annum, which is approximately 137 tonnes per day. The plant outlined above is capable of processing this quantity.

5. ONSITE TREATMENT & OFFSITE TRANSFERS OF WASTE

| PRTR#: W0147 | Facility Name : Ashgrove Recycling | Filename : w0147_2009(1).xls | Return Year : 2009 |

11/05/2010 18:32

Transfer Destination	European Waste Code	Hazardous	Quantity (Tonnes per Year)	Description of Waste	Waste Treatment Operation	Method Used		Location of Treatment	Haz Waste : Name and Licence/Permit No of Next Destination Facility	Non-Haz Waste : Name and Licence/Permit No of Recoverer/Disposer	Name and License / Permit No. and Address of Final Recoverer / Disposer (HAZARDOUS WASTE ONLY)	Actual Address of Final Destination i.e. Final Recovery / Disposal Site (HAZARDOUS WASTE ONLY)
						M/C/E	Method Used		Haz Waste : Name and Licence/Permit No of Recoverer/Disposer	Non-Haz Waste : Address of Recoverer/Disposer		
Within the Country	19 12 07	No	609.0	Shredded Uncontaminated Timber	R3	M	Weighed	Offsite in Ireland	Eirebloc Ltd,CK (S) 503/07		Lissarda,..Co. Cork,..Ireland	
Within the Country	19 12 07	No	2635.0	Shredded Uncontaminated Timber	R1	M	Weighed	Offsite in Ireland	Wayerheuser Ltd,P 0027-02		Clonmel Co. Tipperary,..,..Ireland	
Within the Country	20 03 01	No	6891.0	Mixed Dry Recyclables	R5	M	Weighed	Onsite in Ireland	Thorntons Recycling,W0242/01		Killeen Road,..,..Dublin,Ireland	
Within the Country	15 01 01	No	282.0	Cardboard	R3	M	Weighed	Onsite in Ireland	Cork Recycling Ltd,CK (S) 263/05		Lehenaghmore,Togher,Cork,..Ireland	
Within the Country	15 01 07	No	1325.0	Glass Packaging	R5	M	Weighed	Onsite in Ireland	Clare Recycling,015/05/WPT/CL		Tullagower,..,..Co. Clare,Ireland	
Within the Country	15 01 07	No	224.0	Glass Packaging	R5	M	Weighed	Onsite in Ireland	Glassdon Ltd,LN/08/103		52 Creagh Road,Toomebridge,..,..Ireland	
Within the Country	17 01 07	No	8969.0	Mixture of Concrete, bricks, Tiles & Ceramics	R10	M	Weighed	Onsite in Ireland	Mallow Contracts Ltd,CK N277/05		Mourneabbey,Mallow Road,Co. Cork,..Ireland	
Within the Country	17 05 04	No	7337.0	Soil & Stone	R10	M	Weighed	Onsite in Ireland	Mallow Contracts Ltd,CK N277/05		Mourneabbey,Mallow Road,Co. Cork,..Ireland	
Within the Country	17 02 03	No	29.0	Plastic Pipes, etc	R5	M	Weighed	Onsite in Ireland	W.F Recycling Ltd,09/01/2010		Centre Park Rd,..Cork,..Ireland	
Within the Country	17 02 03	No	58.0	Plastic Pipes, etc	R5	M	Weighed	Onsite in Ireland	Bernard O Brien,CK S 437/07		Waterfall,..Co. Cork,..Ireland	
Within the Country	20 01 39	No	7.0	Plastic	R5	M	Weighed	Onsite in Ireland	Cork Recycling Ltd,CK (S) 263/05		Lehenaghmore,Togher,Cork,..Ireland	
Within the Country	20 01 39	No	14.76	Plastic	R5	M	Weighed	Onsite in Ireland	Glyntown Enterprises Ltd,CK S 329/06		Glanmire,..Cork,..Ireland	
Within the Country	17 04 02	No	6.0	Aluminium	R4	M	Weighed	Onsite in Ireland	Cork Metal,CK S 491/07		Dublin Hill,..Cork Metal,..Ireland	
Within the Country	17 04 11	No	5.86	Cable	R4	M	Weighed	Onsite in Ireland	Cork Metal,CK S 491/07		Dublin Hill,..Cork Metal,..Ireland	
Within the Country	17 04 02	No	8.78	Aluminium	R4	M	Weighed	Onsite in Ireland	National Recycling,04/01/2010		Churchfield Ind. Est,..Cork,..Ireland	
Within the Country	17 04 07	No	1354.0	Mixed Metals	R4	M	Weighed	Onsite in Ireland	Cork Metal,CK S 491/07		Dublin Hill,..Cork Metal,..Ireland	
Within the Country	17 08 02	No	368.0	Gypsum Plasterboard	R5	M	Weighed	Onsite in Ireland	Sandyhills Environmental,WPT 112		St Margarets,..Co. Dublin,..Ireland	
Within the Country	20 03 01	No	221.0	Residual Waste	D1	M	Weighed	Onsite in Ireland	Youghal Landfill,W0068/02		The Mudlands,Youghal,Co. Cork,..Ireland	
Within the Country	20 03 01	No	4706.0	Residual Waste	D1	M	Weighed	Onsite in Ireland	Gortadroma Landfill,W0017/02		Gortadroma,Ballyahill,Co. Limerick,..Ireland	
Within the Country	17 05 04	No	882.0	Soil & Stone	R10	M	Weighed	Onsite in Ireland	Humphrey Desmond,CK S 352/06		The Glebe,Templemartin,Bandon Co. Cork,..Ireland	

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

Appendices

Appendix A : Weighbridge Calibration & Certificate of Conformity

Appendix B : Pollution & Contamination Insurance

Appendix C : Monitoring Locations Map

Appendix D : Certificate of Conformity Fuel Bunds

Appendix E : Toxicity Test

Appendix A

Appendix B

Appendix C

Appendix D

Appendix E