WATERFORD COUNTY COUNCIL

COMHAIRLE CONTAE PHORT LÁIRGE



ANNUAL ENVIRONMENTAL REPORT 2011 MATERIALS RECOVERY FACILITY

SHANDON, DUNGARVAN CO. WATERFORD

Waste Licence Register No.W0189-01

Report Compiled by:

Mr Michéal Fahey, Facility Manager, Materials Recovery Facility Mr Paul Carroll, Executive Scientific Officer, Adamstown Laboratory

Table of Contents

Introduction

1.	Reporting Period	5
2.	Waste Activities Carried Out at the Facility	5
3.	Quantities and Composition of Material Received, Disposed of and Recovered during 2011	6
4.	Environmental Monitoring	6
4.1	Foul Water	8
4.2	Noise	14
5.	Schedule of Environmental Objectives and Targets for the forthcoming year.	20
6.	Report on the Progress towards Achievement of the Environmental objectives and targets undertaken in the previous year.	21
7.	Nuisance Monitoring	22
8.	Full Title and a written summary of any procedures developed by the licensee in the year which relates to the facility operation	23
9.	Reported incident and complaints summaries	30
10.	Management and Staffing Structure of the Facility	30
11.	Report on Training of Staff	30

List of Appendices

Appendix A Quantities and Composition of Material Received, Disposed of,

and Recovered during 2011

Appendix B Map of Monitoring Locations

Appendix C Integrity of Bunds

Appendix D Management Structure

Appendix E AER Returns Worksheet

Introduction

Waterford County Council was granted a Waste Licence (Ref W0189-01) by the Environmental Protection Agency on the 22nd March 2004 for the acceptance of non-hazardous household, commercial and industrial sourced dry recyclable wastes including; paper, cardboard, natural and manmade fibres, glass, plastics, ferrous and non-ferrous metals at the Materials Recovery Facility in Shandon, Dungarvan, County Waterford. Material was not accepted at the Materials Recovery Facility until 2005. This is the seventh Annual Environmental Report for the facility and includes the monitoring period 1st January 2011 – 31st December 2011. The report has been prepared in accordance with Condition 11.4 and Schedule F of the Waste Licence.

1. **Reporting Period**

This is the seventh Annual Environmental Report for the Materials Recovery Facility, which covers the period 1st January 2011 to 31st December 2011.

2. Waste Activities carried out at the Facility

Part 1 of the Waste Licence details the activities authorised:

Waste Management Act 1996: Third Schedule

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

This activity is limited to the bulking and transfer of waste off-site.

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:

This activity is limited to the storage of the waste prior to bulking and transfer offsite.

Waste Management Act, 1996, Fourth Schedule

Class 2. Recycling or reclamation of organic substances, which are not used as solvents (including composting and other biological transformation processes):

This activity is limited to the recovery of dry recyclables specified in Schedule A: Waste Acceptance, of the licence.

Class 3. Recycling or reclamation of metals and metal compounds:

This activity is limited to the segregation of steel and metals prior to recovery offsite.

Class 4. Recycling or reclamation of other inorganic materials:

This activity is limited to the segregation of glass, textiles and other inert waste prior to recovery off-site.

Class 11. Use of waste obtained from any activity referred to in a preceding paragraph of this Schedule:

This activity is limited to the handling of dry recyclables specified in Schedule A: Waste Acceptance, of the licence.

Class 13. Storage of waste intended for submission to any activity referred to in a preceding paragraph of this Schedule, other than the temporary storage, pending collection, on the premises where such waste is produced:

This activity is limited to the storage of the waste prior to recovery on or off-site.

3. Quantity and Composition of Waste received, disposed of and removed during the reporting period and each year previous

The quantity and composition of waste received, disposed of and removed for the reporting period 1^{st} January $2011 - 31^{st}$ December 2011 is attached in Appendix A.

4. **Environmental Monitoring**

Introduction

This report is a compilation of environmental monitoring carried out on behalf of Waterford County Council at the Materials Recovery Facility during 2011.

Monitoring of waters and noise was carried out in accordance with the waste licence (W0189-01), conditions 8, and schedule D. Drawing of monitoring locations attached.

Inspections of the foul water emission location were conducted on four dates in 2011.

Noise monitoring was conducted at four locations on the boundary of the site.

Drawing of monitoring locations is attached as Appendix B.

Section 4.1 Foul Water Monitoring

4.1.1 Introduction

Inspections of the foul water emission location were conducted on four dates in 2011. However
no samples were taken as there was no flow on any of the sampling dates or throughout the
year. The licence directs that sampling is to coincide with discharge of floor wash-down. There
were no floor wash-downs during the year.

4.1.2 Laboratory reports

Waterford County Council, Water Testing Laboratory, Kilmeaden, Co. Waterford

Materials Recovery Facility, Dungarvan Discharge to Sewer Monitoring Report

Emission	Parameter	Result

Limit Sampling Point SW1 MRF Dungarvan

Date of Sampling 01-Mar-2011

Time of Sampling 11:00:00

Sample Number 1

Sampled by PC

Testing Laboratory Adamstown

6-9 pH

400 BOD mg/l

1000 COD mg/l

250 Suspended Solids

10 Mineral oils mg/l

15 – 30 Temperature deg C

400 Sulphate

100 Ammoniacal

100 Detergents mg/l

Flow 0

Remarks: No flow present

25 January 2012 Signed off on behalf of laboratory: Paul Carroll

South East Region Materials Recovery Facility Annual Environmental Report 2011

Materials Recovery Facility, Dungarvan Discharge to Sewer Monitoring Report

Limit Sampling Point **SW1 MRF Dungarvan**

> Date of Sampling 24-May-2011

Time of Sampling 11:00:00

Sample Number 2

Sampled by PC

Testing Laboratory Adamstown

6-9 pH

400 BOD mg/l

1000 COD mg/l

250 Suspended Solids

10 Mineral oils mg/l

15 - 30Temperature deg C

400 **Sulphate**

100 Ammoniacal

100 Detergents mg/l

> Flow 0

Remarks: No flow present

Signed off on behalf of laboratory: Paul Carroll 25 January 2012

South East Region Materials Recovery Facility

Materials Recovery Facility, Dungarvan Discharge to Sewer Monitoring Report

Emission	Parameter	Result
Limit	Sampling Point	SW1 MRF Dungarvan
	Date of Sampling	26-Aug-2011

Time of Sampling 11:00:00

Sample Number 3

Sampled by PC

Testing Laboratory Adamstown

6-9 pH

400 BOD mg/l

1000 COD mg/l

250 Suspended Solids

10 Mineral oils mg/l

15 - 30Temperature deg C

400 **Sulphate**

100 Ammoniacal

100 Detergents mg/l

> Flow 0

Remarks: No flow present

Signed off on behalf of laboratory: Paul Carroll 25 January 2012

Page 11 of 47

Materials Recovery Facility, Dungarvan Discharge to Sewer Monitoring Report

Emission	Parameter	Result
Liiiissioii	1 arameter	nesuu

Limit Sampling Point **SW1 MRF Dungarvan**

> Date of Sampling 21-Nov-2011

Time of Sampling 11:00:00

Sample Number 4

Sampled by PC

Testing Laboratory Adamstown

6-9 pH

400 BOD mg/l

1000 COD mg/l

250 Suspended Solids

10 Mineral oils mg/l

15 - 30Temperature deg C

400 **Sulphate**

100 Ammoniacal

100 Detergents mg/l

> Flow 0

Remarks: No flow present

Signed off on behalf of laboratory: Paul Carroll 25 January 2012

Page 12 of 47

Section 4.2

Noise Measurement

4.2. Noise Measurement Report

4.2.1 Introduction

Noise surveys were undertaken on the 15th, 16th and 19th March 2011 in the vicinity of Waterford County Council's Material Recovery Facility at Shandon, Dungarvan. The following locations were surveyed as shown on the attached drawing, Appendix 1.

N1- At boundary 40 m east of MRF building.

N2- 40 metres north of building, at end of existing car park.

N3- At boundary 35m west of building

N4- At boundary of access road to industrial estate 90m south.

Measurements were taken using a Type 1 sound level meter (Cirrus Model CR:831A) calibrated to traceable national standards(Calibration certificate No: 128438). The meter was further calibrated on site prior to use. The monitoring period was thirty minutes.

4.2.2 Results

4.2.2.1 Broadband measurements

Table 1 Broadband measurements.

	N1	N2	N3	N4
Date	15/12/2011	15/12/2011	16/12/2011	19/12/2011
Time	14:33:22	15:38:27	15:16:11	09:06:11
Run				
Time	00:30:00	00:30:00	00:30:00	00:30:00
Leq	51.8 dBA	51.5 dBA	54.8 dBA	50.2 dBA
Lep,d	42.4 dBA	39.5 dBA	42.7 dBA	38.2 dBA
LAE	80.2 dBA	83.9 dBA	86.9 dBA	82.5 dBA
LAFmax	82.4 dBA	68.5 dBA	67.2 dBA	60.9 dBA
Peak	83.6 dBC	96.1 dBC	91.0 dBC	86.4 dBC
L1.0	56.5 dBA	57.9 dBA	57.2 dBA	52.9 dBA
L10.0	52.1 dBA	54.3 dBA	55.6 dBA	51.5 dBA
L50.0	48.9 dBA	49.5 dBA	55.3 dBA	49.9 dBA
L90.0	45.8 dBA	46.6 dBA	53.6 dBA	49.3 dBA
L95.0	46.4 dBA	46.0 dBA	52.4 dBA	48.2 dBA
L99.0	46.1 dBA	45.5 dBA	51.5 dBA	48.5 dBA
Range	50-110 dB	50-110 dB	50-110 dB	50-110 dB

4.2.2.2 Frequency analysis

One-third octave frequency analysis was conducted at the locations above. The monitoring period was thirty minutes. Results are presented below for each location.

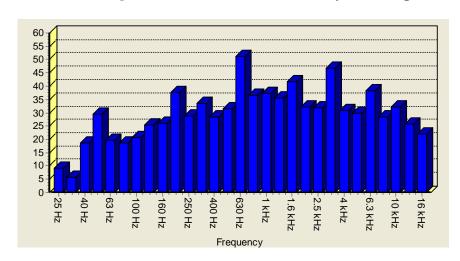


Fig 1. Location N1. 1/3 octave analysis A weighted.

Table 2. Location N1. 1/3 octave analysis A weighted.

Date	15/12/2011	N1
Time	15:05:30	
Run		
Time	00:09:36	

			26.2		37.3		38.4
25 Hz	9.3 dBA	160 Hz	dBA	1 kHz	dBA	6.3 kHz	dBA
			37.7	1.25	35.5		28.5
31 Hz	5.9 dBA	200 Hz	dBA	kHz	dBA	8 kHz	dBA
			28.7		41.8		32.2
40 Hz	18.5 dBA	250 Hz	dBA	1.6 kHz	dBA	10 kHz	dBA
			33.7		32.1	12.5	25.6
50 Hz	29.4 dBA	315 Hz	dBA	2 kHz	dBA	kHz	dBA
			28.5		31.9		22.2
63 Hz	19.7 dBA	400 Hz	dBA	2.5 kHz	dBA	16 kHz	dBA
			31.6	3.15	46.9		
80 Hz	18.7 dBA	500 Hz	dBA	kHz	dBA	LAeq	43.8 dB
			51.2		30.8		43.2
100 Hz	20.7 dBA	630 Hz	dBA	4 kHz	dBA	LCeq	dBC
			36.6		30.0		65.6
125 Hz	25.3 dBA	800 Hz	dBA	5 kHz	dBA	LZeq	dBZ

Fig 2. Location N2. 1/3 octave analysis A weighted.

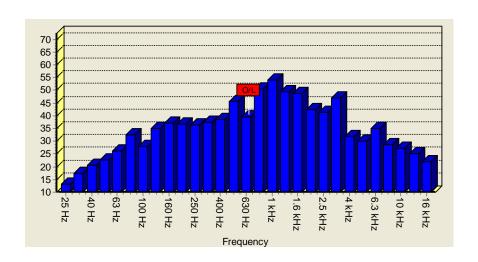


Table 3. Location N2. 1/3 octave analysis A weighted.

Date 15/12/2011 N2 Time 16:10:08

Run

Time 00:09:39

					54.1		34.9
25 Hz	13.2 dBA	160 Hz	37.1 dBA	1 kHz	dBA	6.3 kHz	dBA
				1.25	49.5		28.7
31 Hz	17.3 dBA	200 Hz	36.9 dBA	kHz	dBA	8 kHz	dBA
					48.6		27.4
40 Hz	20.7 dBA	250 Hz	36.4 dBA	1.6 kHz	dBA	10 kHz	dBA
					42.4	12.5	25.2
50 Hz	22.8 dBA	315 Hz	37.5 dBA	2 kHz	dBA	kHz	dBA
					41.5		22.0
63 Hz	26.2 dBA	400 Hz	38.5 dBA	2.5 kHz	dBA	16 kHz	dBA
				3.15	46.8		
80 Hz	32.7 dBA	500 Hz	45.6 dBA	kHz	dBA	LAeq	54.8 dB
					31.7		56.9
100 Hz	28.0 dBA	630 Hz	39.5^dBA	4 kHz	dBA	LCeq	dBC
					30.1		61.3
125 Hz	35.1 dBA	800 Hz	50.5 dBA	5 kHz	dBA	LZeq	dBZ

60 55 50 45 40 35 30 25

Fig 3. Location N3 1/3 octave analysis A weighted.

_1.6 kHz

-2.5 kHz

-4 kHz

-10 kHz

16 kHz

Table 4. Location N3. 1/3 octave analysis A weighted.

-630 Hz

Frequency

-400 Hz

-250 Hz

160 Hz

Date 16/12/2011 N3 Time 15:50:24 Run Time 00:15:36

-63 Hz

100 Hz

			42.2		50.1		33.9
25 Hz	20.8 dBA	160 Hz	dBA	1 kHz	dBA	6.3 kHz	dBA
			43.4	1.25	51.5		31.6
31 Hz	30.0 dBA	200 Hz	dBA	kHz	dBA	8 kHz	dBA
			44.3		49.7		30.1
40 Hz	32.8 dBA	250 Hz	dBA	1.6 kHz	dBA	10 kHz	dBA
			44.3		46.5	12.5	27.9
50 Hz	41.3 dBA	315 Hz	dBA	2 kHz	dBA	kHz	dBA
			43.4		45.9		25.6
63 Hz	39.4 dBA	400 Hz	dBA	2.5 kHz	dBA	16 kHz	dBA
			44.0	3.15	38.9		
80 Hz	37.7 dBA	500 Hz	dBA	kHz	dBA	LAeq	54.4 dB
			43.9		39.5		70.5
100 Hz	39.1 dBA	630 Hz	dBA	4 kHz	dBA	LCeq	dBC
			47.6		36.8		71.3
125 Hz	40.6 dBA	800 Hz	dBA	5 kHz	dBA	LZeq	dBZ

50 45 40 35 30 25 20 _2.5 kHz -63 Hz -400 Hz 630 Hz 1.6 kHz 25 Hz 160 Hz 250 Hz 10 kHz 100 Hz Frequency

Fig 4. Location N4 1/3 octave analysis A weighted.

Table 5. Location N4. 1/3 octave analysis A weighted.

Date	19/12/2011	N4
Time	09:41:24	
Run		
Time	00:09:38	

			27.8		45.3		28.2
25 Hz	16.1 dBA	160 Hz	dBA	1 kHz	dBA	6.3 kHz	dBA
			35.7	1.25	37.1		28.1
31 Hz	21.2 dBA	200 Hz	dBA	kHz	dBA	8 kHz	dBA
			34.3		44.8		29.0
40 Hz	16.6 dBA	250 Hz	dBA	1.6 kHz	dBA	10 kHz	dBA
			31.5		42.3	12.5	25.7
50 Hz	15.0 dBA	315 Hz	dBA	2 kHz	dBA	kHz	dBA
			33.2		36.5		23.2
63 Hz	22.7 dBA	400 Hz	dBA	2.5 kHz	dBA	16 kHz	dBA
			33.8	3.15	33.1		
80 Hz	28.7 dBA	500 Hz	dBA	kHz	dBA	LAeq	49.8 dB
			41.0		31.8		56.3
100 Hz	27.4 dBA	630 Hz	dBA	4 kHz	dBA	LCeq	dBC
			40.2		30.9		58.3
125 Hz	28.2 dBA	800 Hz	dBA	5 kHz	dBA	LZeq	dBZ

4.2.3 Comments

The L_{Aeq} broadband measurements (table 1) complied with the facility licence daytime noise emission limit of 55 dB(A) (30 minutes).

The frequency analysis indicated the absence of significant peaks at high frequencies and that there was no nuisance high pitch tonal noises at the facility

Conclusions

Inspections of the foul water emission location were conducted on four dates in 2011. However no samples were taken as there was no flow on any of the sampling dates or throughout the year. The licence directs that *sampling is to coincide with discharge of floor wash-down*. There were no floor wash-downs during the year.

Noise monitoring was conducted at four locations on the boundary of the site. All locations were within the daytime noise emission limits of 55 dB L_{Aeq} 30 mins.

In summary, there was no evidence of detrimental impact on the environment due to this facility.

5. Schedule of Environmental Objectives and Targets for the forthcoming year.

Aspects associated with significant impacts

Objective 1 – Air- Minimisation of odour associated with operation of facility **Target 1.1** Less than 10 complaints per year. – (Review at the end of year)

Objective 2 – Water- Minimisation of impact on ground and surface water quality

Target 2.1 No breaches of surface water emission criteria. – (Ongoing)

Objective 3 – Water- Minimisation of impact on ground and surface water quality Target 3.1 –. No uncontrolled spillage to ground or surface waters. – (Ongoing)

Objective 4 – Land and Soil- Minimisation of impact of facility on land and soil **Target 4.1-** No spillages to land or soil-(Ongoing)

Resource depletion

Objective 5 Minimise power usage commensurate with proper operation of facility

Target 5.1 Average 5% reduction in energy requirements per unit processed per annum. First operational year (2005) used as baseline.

Local environmental and community issues

Objective 6- Complaints- Minimise complaints by members of public regarding litter, noise, dust, odours, traffic

Target 6.1 Less than 20 complaints per year

Objective 7-Response to complaint- Respond quickly to any complaints

Target 7.1 Acknowledge 90% of complaints within 2 working days; follow up with report of ameliorative action taken, within 5 working days. (2011)

Acknowledge 100% of complaints within 2 working days, follow up with report of ameliorative action taken, within 5 working days. (2011)

Legal and other requirements

Objective 8 Compliance with licence requirements

Target 8.1 Full Compliance (Ongoing)

6. Report on the Progress towards Achievement of the Environmental objectives and targets undertaken in the previous year.

Aspects associated with significant impacts

Objective 1 – Air- Minimisation of odour associated with operation of facility

Target 1.1 - Less than 10 complaints per year

2011 - No complaints received. Target achieved.

Objective 2 – Water-Minimisation of impact on ground and surface water.

Target 2.1 – No breach of surface water emissions criteria.

2011 - No breaches. Target achieved.

Objective 3 – Water-Minimisation of impact on ground and surface water.

Target 3.1 – No uncontrolled spillages to ground or surface waters.

2011 - No spillages. Target achieved

Objective 4 – Land and Soil – Minimisation of impact of facility on land and soil.

Target 1.1 – No spillages to land or soil.

2011 - No spillages. Target achieved

Resource Depletion

Objective 5 – Minimise power usage commensurate with proper operation of facility.

Target 5.1 – Average 5% reduction in energy requirements per unit processed per annum.

First operational year (2005 - 600 amps) used as baseline. Target reduction of 25% after 5 years.

2011 – Max demand complied with, reduction from 600 amps to 175 amps.

Target achieved.

Local environmental and community issues

Objective 6- Complaints- Minimise complaints by members of public regarding litter, noise, dust, odours, traffic

Target 6.1 Less than 20 complaints per year

2011 - No complaints. Target achieved

Objective 7 – Response to complaint- Respond quickly to any complaints

Target 7.1 Acknowledge 90% of complaints within 2 working days, follow up with report of ameliorative action taken, within 5 working days.

Acknowledge 100% of complaints within 2 working days; follow up with report of ameliorative action taken, within 5 working days.

2011 - No complaints. Target achieved.

Legal and other requirements

Objective 8 Compliance with licence requirements

Target 8.1 Full Compliance.

2011 - Full Compliance. Target achieved.

7. Nuisance Monitoring

Nuisance Control is carried out in accordance with Condition 7 and 8.12 of the Waste Licence. The site is inspected daily and weekly by the Facility Manager and recorded on the weekly inspection sheets. The weekly inspection sheet records environmental nuisances such as birds, loose litter, odour, dust, mud and vermin. A litter picker cleans the facility once a week or in the case of abnormal amounts of litter arising, on a more frequent basis. A road sweeper cleans the site on a weekly basis.

Vermin Control

A pest control company sets poison in specially manufactured bait boxes on the site every six weeks all year round.

Vermin control was carried out in accordance with Condition 11.5 of the waste licence.

Vermin activity was very low for the reporting period due to implementation of a good eradication programme.

8. Full title and a written summary of any procedures developed during the reporting period

8.1 Emergency Procedures

8.1.1 Purpose

The purpose of this document is to set out the procedure and plans to be followed in the event of an emergency.

Procedures are designed to ensure the safety of people in buildings during emergencies by co-ordinating and controlling building evacuations until the appropriate emergency services arrive. An emergency can be defined as any event, natural or man-made, which by its occurrence endangers the lives of staff and visitors within the building and which requires an immediate response.

8.1.2 Reference Documents

Safety Statement

8.1.3 Responsibilities

8.1.4 Management Responsibility

The persons responsible for the implementation and management of emergency evacuation procedures are those with appropriate management authority over the building. For these procedures the responsible person will be the Project Leader/Senior Engineer.

The Plant Manager is responsible for:

- a) The appointment of a Fire Warden and deputy.
- b) Ensuring that resources are available to all wardens to fulfil their role.
- c) Ensuring that Fire Wardens' recommendations are implemented.
- d) Ensuring the effective implementation and management of the emergency evacuation procedures in buildings under his control.

Fire Wardens are responsible for:

- a) Carrying out their duties in the event of an emergency as described in these procedures.
- b) Attending a debrief following any emergency evacuation drill.
- c) Reporting to the Plant Manager any observed fire or evacuation hazards or unsafe conditions present within the plant or as identified during a fire drill.
- d) Conducting regular fire and evacuation safety inspections.
- e) Attending Fire Warden training at least biannually.
- f) The regular inspection and maintenance of all fire alarms.
- g) Activating the fire alarm to enable a drill to be conducted.

Team Leaders are responsible for:

- a) Inducting new members of staff around the building pointing out room exits, the location of escape stairwells and final exit points and assembly points.
- b) Instructing their staff to evacuate immediately in the event of an alarm activation.
- c) Informing Fire Wardens/Gardai/Fire Brigade of any known missing persons.

The Health and Safety Officer is responsible for:

- a) The co-ordination, implementation and review of the Emergency and Evacuation Procedure.
- b) Liaison with the emergency services to maintain emergency preparedness.
- c) Co-ordinating the training programme for Fire Wardens.
- d) Maintaining a master list of Fire Wardens and schedule evacuation drills.
- e) Organising a Fire Warden debrief following scheduled drills.

8.1.5 Fire Alarm System

NB: The building fire alarm is automatically activated where more than one detector is activated or where a "Break Glass" unit is activated.

8.1.6 *Emergency Procedure*

8.1.6.1 Any person discovering a fire shall:

- a) Activate the nearest fire alarm "Break Glass" unit IMMEDIATELY.
- b) Extinguish the fire if it is safe to do so (no more than one extinguisher to be operated. If fire has not been extinguished, evacuate immediately).
- c) Call emergency number 999 or reception on Extn 2333 and make your way to the Fire Assembly Point.
- d) Provide details to reception/Fire Brigade of exact location and extent of fire.

8.1.6.2 *On hearing the fire alarm, building occupants shall:*

- a) Evacuate the building immediately via the nearest available fire exit.
- b) Comply with all directions given by Fire Wardens.
- c) Where possible assist less able bodied persons/visitors to evacuate to safety.
- d) Proceed to the "Fire Assembly Point" for the building.
- e) Remain outside the building until the all clear is given.

8.1.6.3 *On hearing the fire alarm, Fire Wardens shall:*

- a) Don high visibility "Fire Warden" vests.
- b) Enter all accessible rooms on their floor and instruct occupants to evacuate the building, closing all doors whilst progressing through the floor.
- c) Direct building occupants to their nearest emergency escape routes.
- d) Proceed to the "Fire Assembly Point" when the floor has been evacuated.
- e) Take control at the assembly point and ensure that no-one re-enters the building until the all clear has been given by security/Fire Brigade and the emergency stood down.
- f) Attend the post-evacuation debrief and report any particular difficulties encountered during the evacuation.

8.1.7 Evacuation Drill Frequency

Each building shall conduct at least one evacuation drill per year. Key Holders List;

Na	ame	Contact No.
1.	AA Security Services	(058)-24355
2.	Michéal Fahey	(086)-170-3780
3.	Bernard Moloney	(086)-805-7670

8.2 Freedom of Access to Information on the Environment

The European Council Directive 90/313/EEC on the *Freedom of Access to Information on the Environment* recognises the significance of the public's access to information relating to the environment. At present, copies of all documents and correspondence relating to Waste Licence W0189-01 are held at the Material Recovery Facility.

A communications programme will be put in place as required under condition 2.4.1 of the Waste Licence to ensure that members of the public can obtain information concerning the environmental performance of the Dungarvan Materials Recovery Facility. This in turn will address any local community concerns and allow the public the opportunity to provide feedback on the facility.

The Facility Manager will be responsible for the implementation of this programme, which shall form part of the routine operation and management of the facility. Further support will be provided from the Environment Section of Waterford County Council if required.

Programme

Information to be provided at the Facility

The following information will be available for inspection at the Material Recovery Facility, and will be maintained by the Facility Manager.

- Map of the Facility showing all environmental monitoring points
- Current Waste Licence for the Facility
- All records relating to the Facility
- Nuisance Inspection
- Integrity Tests of Bunds
- Complaints Register
- Incidents Register
- Environmental Monitoring Records (Groundwater, Surface water and Noise Data).
- Emergency Response Procedure
- Programme for the control and Eradication of Vermin
- Annual Environmental Report
- Visitors Book

The Waste Acceptance hours under condition 1.8.1 of the Waste Licence are

Monday – Saturday 0800-2000

All visitors are required to sign a Visitors Book at the site office outlining their reason for visiting. Unauthorised personnel are not allowed access to the site.

Members of the public may arrange a site visit by contacting the Facility Manager prior to their visit. For Health and Safety reasons all visitors must have appropriate clothing (High Vis-jacket, Safety Helmets Walking boots/Wellingtons). The Facility Manager or suitable qualified persons shall accompany all visitors on site visits.

Written Requests for Information

All requests concerning the environmental performance of the facility should be made in writing to:

Facility Manager,

South East Region Materials Recovery Facility,

Shandon,

Dungarvan,

Co. Waterford

The Facility Manager shall copy all requests to:

Senior Engineer,

Environment Section,

Waterford County Council,

Civic Offices,

Dungarvan,

Co. Waterford

Each request should indicate the name, address and contact telephone number of the concerned party, an outline of the required information and the manner in which they require the information i.e. copy of record, e-mail etc.

Waterford County Council shall make replies in writing within twenty working days of receiving the written request.

The information required shall be issued in paper format unless otherwise requested by the concerned party. Requests that require information in digital format may require more time than the twenty working days as outlined previously.

If requested Waterford County Council will provide a clear explanation of the information provided.

South East Region Materials Recovery Facility Annual Environmental Report 2011 8.2.1 If the concerned party requests the examination of a particular report/document relating to the facility, then it will be made available for viewing at the Material Recovery Facility.

Media Requests

The Director of Services within the Environment Section of Waterford County Council shall nominate a liaison person to respond to requests made by the media for information relating to the environmental performance of the facility.

Feedback from the public

The Facility Manager will record any comments or suggestions made by the public during their visits and the opportunity will also be available to submit a written comment to the Material Recovery Facility. Copies of such minutes or submissions will be kept in a register by the Facility Manager and will also be copied to the Environment Section, for the attention of the Senior Engineer. If requested a reply will be provided by the Council within twenty working days.

Emergency Response Procedures Scope

The Emergency Response Procedures apply but is not limited to the following incidents occurring:

- Fire / Explosions
- Spillages
- Environmental Pollution
- Injury or serious accident to persons
- Any other incident, which may pose a significant threat to persons or the environment.

Responsibility

- 1. The Facility Manager is responsible for the implementation of the Emergency Response Procedure and for the training of all Material Recovery Facility personnel and contractors in effective emergency response procedures.
- 2. In the event of a major fire or an explosion, the Monitoring Station alarm will be activated. The Senior Rostered Fire Officer will be notified immediately via the Regional Fire Department.

- **3.** In the event of a serious accident or injury to a person the ambulance service should be contacted.
- **4.** In the event of other incidents e.g. spillages or environmental pollution the Senior Environment Engineer will be notified and will assume responsibility along with the Facility Manager.

Procedure

In the event of an accident occurring the following procedure will be adopted:

- Evacuate the immediate area within the site if necessary
- Inform other site users
- Remain upwind of any hazard area
- Contact site office and advise in detail of the emergency
- Ensure entrance/exit gate is not obstructed
- Contact fire brigade, ambulance, Gardaí, and / or Senior Engineer, Waterford County
 Council as required by dialing 999 or 112
- If incident occurs outside office hours an emergency telephone contact number will be provided on the site notice board. The Material Recovery Facility also has on-site security and drive-by security.
- Personnel shall report to the designated assembly point on the Material Recovery Facility
- All areas affected by the incident shall remain closed until given the all-clear by an authorised person

In the event of a spillage, the Facility Manager shall apply a suitable absorbent material to contain and absorb any spillage at the facility. Once contained the Facility Manager shall have regard to the Corrective Action Procedure.

In the event of a serious threat to the environment, the Facility Manager shall take all necessary short-term action to minimise any further impact and allow the Corrective Action Procedure.

Records

Details of any incident will be recorded in a written register, which will be maintained at the site office

9. Reported incident and complaints summaries

No Incidents or Complaints occurred during the reporting period.

10. Management and Staffing of the Facility

Management and staffing of the facility is attached in Appendix D.

11. Report on training of staff

The Facility Manager has completed the Fás Waste Management Course. All Waterford County Council employees have participated in the Fás Safe Pass Course. All staff have been trained on how to respond if a fire occurs. PEMAC (Preventive Maintenance Program) has also been implemented at the Material Recovery Facility. This is a software program which controls the day-to-day running of the Material Recovery Facility.

APPENDIX A

Quantity and Composition of Waste Received, Disposed of and Recovered during 2011

Total Incoming Tonnage Per Customer 2011

	Jan-11	Feb-11	Mar-11	Apr-11	May-11	Jun-11	Jul-11	Aug-11	Sep-11	Oct-11	Nov-11	Dec-11
Wat Co. Co.	132.04	108.90	158.70	85.10	174.50	90.48	181.12	90.34	172.77	82.76	135.40	130.22
Fennells (CAS)	7.04	6.98	8.84	6.22	9.68	6.46	10.16	6.30	11.04	7.68	7.24	8.86
Dungarvan T.C.	22.70	19.66	31.38	15.00	31.80	16.68	33.08	14.88	31.58	14.72	25.26	24.62
Wat City Co.	138.30	104.96	40.28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
South Tipperary Co. Co.	150.00	126.28	107.60	123.53	105.50	88.90	108.34	65.40	125.84	94.50	0.00	0.00
Wexford Co. Co.	320.36	267.14	279.04	278.78	288.46	252.22	252.44	223.78	368.26	190.52	275.80	153.72
Commercial	2.40	6.24	3.62	5.70	4.68	3.88	4.20	1.58	6.82	5.30	3.14	1.70
	772.84	640.16	629.46	514.33	614.62	458.62	589.34	402.28	716.31	395.48	446.84	319.12

Total Incoming Tonnage 2011 = 6,499.40

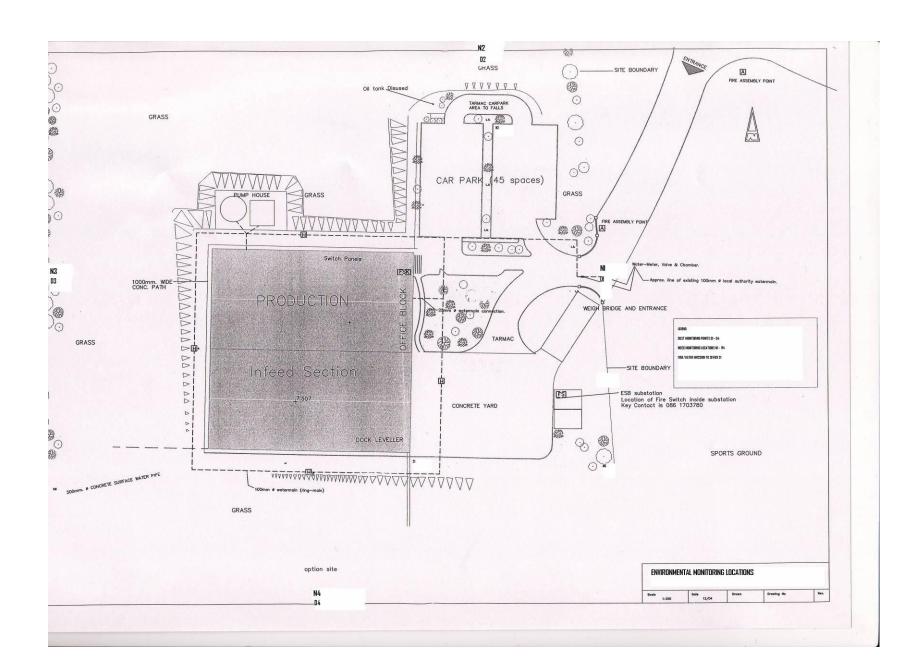
South East Region Materials Recovery Facility

Total Tonnage Outgoing Material 2011

Company	Product	Jan-11	Feb-11	Mar-11	Apr-11	May-11	Jun-11	Jul-11	Aug-11	Sep-11	Oct-11	Nov-11	Dec-11	
Green Dragon Ltd.	Aluminium Cans	5.56	3.69	2.53	1.74	2.51	3.56	1.46	3.24	3.125	1.74	0.00	1.87	31.03
Boost Recycling	Ferrous Cans		50.24		24.48	24.54				24.84				124.10
Marwin Environmental (EMR)	Ferrous Cans											25.48	24.22	49.70
Dungarvan CAS	Mixed Municipal Waste			2.18										2.18
Marwin Environmental	Cardboard						22.44					25.50		47.94
Gaelic Environmental	Paper & Card	175.20	398.92	47.54	202.10	102.12	324.58	50.58	201.16	124.84	164.62	222.04	95.58	2,109.28
Marwin Environmental	Paper & Card	364.80		392.26	48.56	273.14	24.36	271.90	24.64	317.78	124.90		97.70	1,940.04
Marwin Environmental	Plastic Bottles	59.64	74.66	59.58										193.88
Cherry Polymers	Plastic Bottles				33.44	50.88	47.64	33.80	33.16	50.10	41.22	29.20	14.42	333.86
Cookstown Textiles	Clothes/Textiles	0.54				0.46					0.30			1.30
Holmestown Landfill	Mixed Municipal Waste	175.38	168.74	164.14	100.82	149.40	171.92	134.46	72.66	195.60	141.76	122.24	95.74	1,692.86
		781.12	696.25	668.23	411.14	603.05	594.50	492.20	334.86	716.29	474.54	424.46	329.53	6,526.17

Total Outgoing Material 2011 = 6,526.17

Appendix BMap of Monitoring Locations



Appendix CBund Integrity Test

WATERFORD COUNTY COUNCIL, ADAMSTOWN LABORATORY, KILMEADEN, COUNTY WATERFORD

PHONE: 051-384393 FAX: 051-384238

LABORATORY REPORT

MRF Oil Tank Bund Check

INTRODUCTION

The integrity of the bund surrounding the oil storage tank at the Materials Recovery Facility (MRF), Dungarvan, Co Waterford, was checked on Monday, **31/01/09**, as per condition 3.11.5 of the Waste Licence 189-1. The depth of standing water within the bund was checked over a period of 5 hours. Weather was dry on the day of the test.

In addition in 2011 the bund area has been completely covered and no water now penetrates to or from the bund as per report sent to EPA in March 2011.

RESULTS -

Operator(s)	Date	Time	Depth (mm) to Top Water Level
P Carroll/M	31/01/09	11.30	875
Fahey			
D Helping/M	31/01/09	16.30	875
Fahey			

COMMENTS

The bund was watertight.

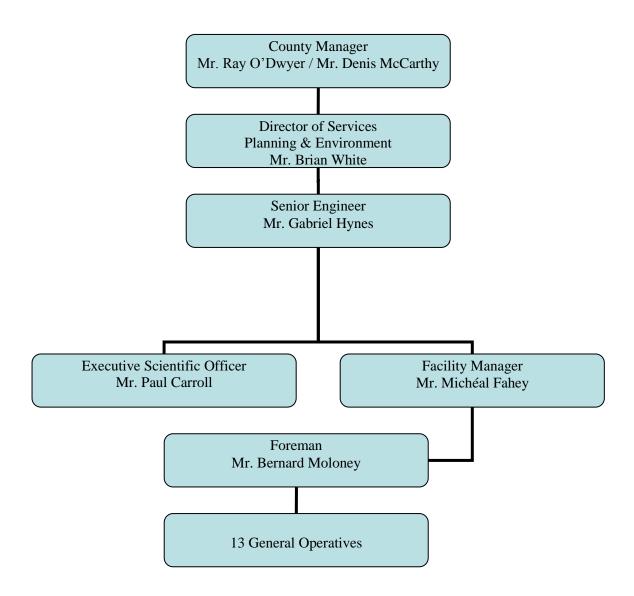
Signed: Paul Carroll

Date: **02/02/09**

Appendix D

Management Structure

Management Structure of Waterford County Council



Appendix E

AER Returns Worksheet



| PRTR# : W0189 | Facility Name : Waterford County Council Materials Recovery Facility | Filename : AER PRTR 2011.xls | Return Year : 2011 |

Guidance to completing the PRTR workbook

AER Returns Workbook

Version 1.1.13

REFERENCE YEAR	2011
	V 6131011 1.1.13

1. FACILITY IDENTIFICATION

Parent Company Name	Waterford County Council
Facility Name	Waterford County Council Materials Recovery Facility
PRTR Identification Number	W0189
Licence Number	W0189-01

Waste or IPPC Classes of Activity

Recycling or reclamation of organic substances which are not used as solvents (including composting and other biological transformation processes). Repackaging prior to submission to any activity referred to in a preceding paragraph of this Schedule. Storage prior to submission to any activity referred to in a preceding paragraph of this Schedule, other than temporary storage, pending collection, on the premises where the waste concerned is produced. Use of waste obtained from any activity referred to in a preceding paragraph of this Schedule. Storage of waste intended for submission to any activity referred to in a preceding paragraph of this Schedule, other than temporary storage, pending collection, on the premises where such waste is produced. 4.13 4.14 Recycling or reclamation of metals and metal compounds. 4.25 Address 1 Shandon Address 2 Dungarvan Address 4
preceding paragraph of this Schedule, other than temporary storage, pending collection, on the premises where the waste concerned is produced. Use of waste obtained from any activity referred to in a preceding paragraph of this Schedule. Storage of waste intended for submission to any activity referred to in a preceding paragraph of this Schedule, other than temporary storage, pending collection, on the premises where such waste is produced. 4.13 Recycling or reclamation of metals and metal compounds. 4.4 Recycling or reclamation of other inorganic materials. Address 1 Shandon Address 2 Dungarvan Address 3 Co Waterford
4.11 preceding paragraph of this Schedule. Storage of waste intended for submission to any activity referred to in a preceding paragraph of this Schedule, other than temporary storage, pending collection, on the premises where such waste is produced. 4.13 Recycling or reclamation of metals and metal compounds. 4.4 Recycling or reclamation of other inorganic materials. Address 1 Shandon Address 2 Dungarvan Address 3 Co Waterford
referred to in a preceding paragraph of this Schedule, other than temporary storage, pending collection, on the premises where such waste is produced. 4.3 Recycling or reclamation of metals and metal compounds. 4.4 Recycling or reclamation of other inorganic materials. Address 1 Shandon Address 2 Dungarvan Address 3 Co Waterford
4.3 Recycling or reclamation of metals and metal compounds. 4.4 Recycling or reclamation of other inorganic materials. Address 1 Shandon Address 2 Dungarvan Address 3 Co Waterford
4.4 Recycling or reclamation of other inorganic materials. Address 1 Shandon Address 2 Dungarvan Address 3 Co Waterford
Address 1 Shandon Address 2 Dungarvan Address 3 Co Waterford
Address 3 Co Waterford
Address 3 Co Waterford
Address 4
Waterford
Country Ireland
Coordinates of Location -7.62761 52.097
River Basin District IESE
NACE Code 3832
Main Economic Activity Recovery of sorted materials
AER Returns Contact Name Michéal Fahey

South East Region Materials Recovery Facility Annual Environmental Report 2011

AER Returns Contact Email Address	mlfahy@waterfordcoco.ie
AER Returns Contact Position	Facility Manager
AER Returns Contact Telephone Number	(058)-21333
AER Returns Contact Mobile Phone Number	(086)-170-3780
AER Returns Contact Fax Number	(058)-24474
Production Volume	0.0
Production Volume Units	
Number of Installations	0
Number of Operating Hours in Year	0
Number of Employees	0
User Feedback/Comments	
Web Address	

2. PRTR CLASS ACTIVITIES

Activity Number	Activity Name
50.1	General
50.1	General

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

Is it applicable?	No
Have you been granted an exemption?	
If applicable which activity class applies (as per Schedule 2 of the regulations)?	
Is the reduction scheme compliance route being	
used?	

PRINT THIS SHEET

HELP

CREATE AER XML
RETURN & UPLOAD

4.1 RELEASES TO AIR

SECTION A: SECTOR SPECIFIC PRTR POLLUTANTS

RELEASES TO AIR				Please enter all quantities in this section in KGs					
POLLUTANT		METHOD			ADD EMISSION POINT	QUANTITY			
			Me	ethod Used					
No. Annex II	Name	M/C/E	Method Code	Designation or Description	Emission Point 1	T (Total) KG/Year	A (Accidental) KG/Y	ear F (Fugitive) K	G/Year
					0.0		0.0	0.0	0.0
ADD NEW ROW DELETE ROW *	* Select a row by double-clicking on the Pollutant Name (Colum	n B) then cl	lick the delete button						

SECTION B: REMAINING PRTR POLLUTANTS

	RELEASES TO AIR				Please enter all quantitie	s in this section in KG	is	
	POLLUTANT	METHOD			ADD EMISSION POINT	T QUANTITY		
				Method Used				
No. Annex II	Name	M/C/E	Method Code	Designation or Description	Emission Point 1	T (Total) KG/Year	A (Accidental) KG/Year	F (Fugitive) KG/Year
					0.0	(0.0	0.0
ADD NEW ROW DELETE ROW *	* Select a row by double-clicking on the Pollutant Name (Colum	n B) then cl	ick the delete button					

SECTION C: REMAINING POLLUTANT EMISSIONS (As required in your Licence)

Link to previous years emissions data

OLOTION O : REMAINING OLLOTAN	micorono (Astequirea in your Electrice)							
	RELEASES TO AIR			Please enter all quantitie	s in this section in K	Gs		
	POLLUTANT		ME	THOD	ADD EMISSION POINT		QUANTITY	
				Method Used				
Pollutant No.	Name	M/C/E	Method Code	Designation or Description	Emission Point 1	T (Total) KG/Year	A (Accidental) KG/Year	F (Fugitive) KG/Year
					0.0		0.0 0.	0.0
ADD NEW ROW DELETE ROW *	* Select a row by double-clicking on the Pollutant Name (Colum	n B) then c	lick the delete button					

Additional Data Requested from Landfill operators

For the purposes of the National Inventory on Greenhouse Gases, landfill operators are requested to provide summary data on landfill gas (Methane) flared or utilised on their facilities to accompany the figures for total methane generated. Operators should only report their Net methane (CH4) emission to the environment under T(total) KG/yr for Section A: Sector specific PRTR pollutants above. Please complete the table below:

Waterford County Council Materials Recovery Landfill: Facility

Landini.	1 dointy				_	
Please enter summary data on the						
quantities of methane flared and / or						
utilised			Meth	nod Used		
				Designation or	Facility Total Capacity	
	T (Total) kg/Year	M/C/E	Method Code	Description	m3 per hour	
Total estimated methane generation (as per						
site model)	0.0				N/A	
Methane flared	0.0				0.0	(Total Flaring Capacity)
Methane utilised in engine/s	0.0				0.0	(Total Utilising Capacity)
Net methane emission (as reported in						
Section A above)	0.0				N/A	

13/03/2012 18:13

4.2 RELEASES TO WATERS

Link to previous years emissions data

| PRTR# : W0189 | Facility Name : Waterford County Council Materials Recovery Facility | Filename : AER PRTR 2011.xls | Return Year : 2011 |

13/03/2012 18:13

SECTION A: SECTOR SPECIFIC PRTR POL	LUTANTS	Data on ar	mbient monitoring	g of storm/surface water or gr	oundwater, conducted as part	of your licence requires	ments, should NOT be subr	mitted under AER / PRTR
	RELEASES TO WATERS				Please enter all quantitie	s in this section in KO	Gs	
POI	LUTANT				ADD EMISSION POINT		QUANTITY	
				Method Used				
No. Annex II	Name	M/C/E	Method Code	Designation or Description	Emission Point 1	T (Total) KG/Year	A (Accidental) KG/Year	F (Fugitive) KG/Year
					0.0	0.0	0.0	0.0

DELETE ROW * ADD NEW ROW

* Select a row by double-clicking on the Pollutant Name (Column B) then click the delete button

SECTION B: REMAINING PRTR POLLUTANTS

	RELEASES TO WAT	Please enter all quantities in this section in KGs						
	POLLUTANT				ADD EMISSION POINT		QUANTITY	
				Method Used				
No. Annex II	Name	M/C/E	Method Code	Designation or Description	Emission Point 1	T (Total) KG/Year	A (Accidental) KG/Year	F (Fugitive) KG/Year
					0.0	0.0	0.0	0.0
ADD NEW ROW DELETE ROW	* Select a row by double-clicking on the Polluta	ant Name (Column B) then cl	ick the delete buttor	1				

SECTION C: REMAINING POLLUTANT EMISSIONS (as required in your Licence)

CECTION O: REMAINING CEECTAIN EMI	bolono (as required in your Election)							
	RELEASES TO WATERS				Please enter all quantitie	s in this section in K	Gs	
POI				ADD EMISSION POINT		QUANTITY		
				Method Used				
Pollutant No.	Name	M/C/E	Method Code	Designation or Description	Emission Point 1	T (Total) KG/Year	A (Accidental) KG/Year	F (Fugitive) KG/Year
					0.0	0.0	0.0	0.0

SECTION A: PRTR POLLUTANTS

OFFSITE TRA	NSFER OF POLLUTANTS DESTINED FOR WASTE-V	VATER TR	EATMENT OR SEWE	R	Please enter all quantities in this section in KGs				
P	OLLUTANT	METHOD			ADD EMISSION POINT	QUANTITY			
			M	lethod Used					
No. Annex II	Name	M/C/E	Method Code	Designation or Description	Emission Point 1	T (Total) KG/Year	A (Accidental) KG/Year	F (Fugitive) KG/Year	
					0.0	(0.0	0.0	
ADD NEW ROW DELETE ROW *	* Select a row by double-clicking on the Pollutant Name (Colum								

SECTION B : REMAINING POLL	JIANT EMISSIONS (as required in your Licence)							
OFFS	SITE TRANSFER OF POLLUTANTS DESTINED FOR WAS	TE-WATER TE	REATMENT OR SEWER	R	Please enter all quantitie			
	POLLUTANT		METH	IOD	ADD EMISSION POINT	QUANTITY		
			Me	ethod Used				
Pollutant No.	Name	M/C/E	M/C/E Method Code Designation or Description		Emission Point 1	T (Total) KG/Year	A (Accidental) KG/Year	F (Fugitive) KG/Year
					0.0)	0.0	0.0

4.4 RELEASES TO LAND

Link to previous years emissions data

| PRTR# : W0189 | Facility Name : Waterford County Council Materials Recovery Facility | Filename : AER PRTR 2011.xls | Return Year : 2011

13/03/2012 18:13

SECTION A : PRTR POLLUTANTS

	RELEASES TO LAND		Please enter all quantities in this section in KGs				
F	POLLUTANT		METHO	D	ADD EMISSION POINT		QUANTITY
			Metl	nod Used			
No. Annex II	Name	M/C/E	Method Code	Designation or Description	Emission Point 1	T (Total) KG/Year	A (Accidental) KG/Year
					0.0	0.0	0.0
ADD NEW ROW DELETE ROW *	* Select a row by double-clicking on the Pollutant Name (Colum	n R) then clic	k the delete button				

SECTION B: REMAINING POLLUTANT EMISSIONS (as required in your Licence)

SECTION B: REMAINING POLLUT	ANT EMISSIONS (as required in you	r Licence)					
	RELE	Please enter all quantitie	s in this section in KG	s			
	POLLUTANT		ME	THOD	ADD EMISSION POINT		QUANTITY
				Method Used			
Pollutant No.	Name	M/C/E	Method Code	Designation or Description	Emission Point 1	T (Total) KG/Year	A (Accidental) KG/Year
					0.0	0	.0 0.0

			Quantity (Tonnes per Year)	all quantities on this sheet in Tonnes	Waste		Method Used		Haz Waste: Name and Licence/Permit No of Next Destination Facility Non Haz Waste: Name and Licence/Permit No of Recover/Disposer	Haz Waste: Address of Next Destination Facility Non Haz Waste: Address of Recover/Disposer	Name and License / Permit No. and Address of Final Recoverer / Disposer (HAZARDOUS WASTE ONLY)	Actual Address of Final Destination i.e. Final Recovery Disposal Site (HAZARDOUS WASTEONLY)
Transfer Destination	European Waste Code	Hazardous		Description of Waste	Treatment Operation	M/C/E	Method Used	Location of Treatment				
Within the Country	20 03 01	No	1692.86	mixed municipal waste	D1	М	Weighed	Offsite in Ireland	Holmestown Landfill,W0191- 02	Co. Wexford,.,,,,Ireland		
Within the Country	20 03 01	No	2.18	mixed municipal waste	D1	М	Weighed	Offsite in Ireland	Civic Amenity Site,WD032/02	Ballinamuck, Dungarvan, Co. Waterford,, Ireland		
Within the Country	15 01 04	No	31.03	metallic packaging	R4	М	Weighed	Offsite in Ireland	Green Dragon Recycling Ltd.,WCP-CK-09-0629-02	Corbally North, Glanmire, Co. Cork,., Ireland		
To Other Countries	15 01 04	No	124.1	metallic packaging	R4	М	Weighed	Abroad	Riwald BV,IRE/GO82/11	Buitenhaven,Oostzijde 2,7604 PJ,Almelo,Ireland		
To Other Countries	15 01 04	No	49.7	metallic packaging	R4	M	Weighed	Abroad	EMR,IRE/GO27/11	Uncouth House,Uncouth Road,Milnrow Rochdale,Lancs OL16 3DD,United Kingdom		
To Other Countries	15 01 01	No	47.94	paper and cardboard packaging	R3	М	Weighed	Abroad	Depriya Industries,IRE/AG027/11	Meerut,,,,,,India		
To Other Countries	15 01 01	No	2109.28	paper and cardboard packaging	R3	M	Weighed	Abroad	Gautam Enterprises,IRE/G019/11	Mrigsir NIII No.8,3961 95,Vapi,.,India		
To Other Countries	15 01 01	No	1940.04	paper and cardboard packaging	R3	М	Weighed	Abroad	NR Agarwal,IRE/AG027/11	Gujarat,.,.,India		
To Other Countries	15 01 02	No	193.88	plastic packaging	R3	М	Weighed	Abroad	Marwin Environmental,IRE/AG027/1 1	.,,,,,Hong Kong		
To Other Countries	15 01 02	No	333.86	plastic packaging	R3	M	Weighed	Abroad	Cherry Polymers, WCP-DC-08-1134-01	Unit 5 Nutts Corner Business Park,Dundrod Road,Crumlin,BT29 4SR,United Kingdom		
Within the Country	20 01 10	No	1.3	clothes	R3	М	Weighed	Offsite in Ireland	CTR Cookstown Textiles Recyclers,N/A	36 Magheralane Road,Randalstown,County Antrim,BT41 2NT,United Kingdom		