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Appendix 1

Copy of Certificates of integrity for fuel storage tank, ad blue tank and underground waste water pipe work

Appendix 2

Copy of Electronic AER Returns Worksheet

## **1.0 INTRODUCTION**

The purpose of the Annual Environmental Report (AER) is to summarise the interaction of the licensed facility with the local environment. It is also a strategic document, by way of its analysis of how the facility achieved the objectives and targets.

This document reports on the operation of Mr. Binman Ltd transfer station and recycling centre from **1<sup>st</sup> January 2010 to 31<sup>st</sup> December 2010**. The facility is located at Luddenmore, Grange, Kilmallock, Co. Limerick.

### **1.1 WASTE LICENCE**

Mr. Binman Ltd. has conducted this Annual Environmental Report (AER) as per the condition 11.6 and includes the information specified in Schedule G of Waste Licence W0061-2.

### **1.2 SUMMARY**

This document contains the following elements as required by Agency's Guidance on Annual Environmental Reports to the Agency.

- Environmental Policy
- Site Description
- Site Development Works
- Environmental Monitoring and Emissions Summary Report
- Environmental Incidents and Complaints
- Waste Received by and Consigned from the Facility
- Environmental Management Programme Report

### **1.3 ENVIRONMENTAL POLICY**

Our Environmental Policy clearly communicates Mr. Binman's mission and core values with respect to the environment. It also acts as a company statement regarding our commitments to control and improve environmental performance with respect to significant environmental aspects of the organisation activities.

This commitment to control and improve our operations with respect to the environment has resulted in our investment in a range of infrastructure dedicated to enhancing our environmental performance, which will be demonstrated within this AER.

### 1.3.1 Mr. Binman Environmental Policy

The following statement is Mr. Binman Environmental Policy:

Mr Binman Ltd. is committed to maintaining the high standard of environmental performance it always has enjoyed. Our environmental performance is underpinned by a set of principles. We believe in conducting business in the right way. We owe our success to our customers, employees and the community in which we operate. We recognise that we have responsibilities to all of them. It is in this respect that Mr Binman shall endeavour to work towards the following objectives:

Promote environmentally sound waste management solutions by promoting recycling and the polluter-pays-principle. Our Pay-by -Weight system is both equitable to our customers and environmentally responsible as it encourages both recycling and waste minimisation.

Enhance the waste management practices within the South-West Region. Mr. Binman business plays an important role in assisting the local authorities to meet their waste management obligations under law and also the targets set out in the Regional Waste Management Plan.

Foster a wider understanding of environmental issues within the Community by sustaining a number of Community Awareness Programmes. These programmes target the younger generation by focusing its efforts on schools and universities through our Educational Program.

Manage our operations with diligence and awareness as to prevent any adverse environmental effects arising at the facility.

Provide self-monitoring to ensure compliance with relevant environmental legislation, our Environmental Policy and the requirements of the EPA.

Utilise the precautionary principle as a valuable tool in decision-making as a preventative measure towards pollution and nuisance control.

Identify and mitigate any environmental problem arising through the employment of strict regime of regular site inspections and audits. This is an important problem-solving tool as any nuisances detected are at early stage are immediately resolved.

Foster an enhanced communication system incorporating dialogue, and discussion with all stakeholders regarding our environmental performance and our environmental objectives and targets to create transparency and accountability.

To continually improve environmental performance through technological innovation accordingly our board of director's travels extensively throughout Europe and North America to source the most environmentally sound and technically advanced waste recovery system to ensure that the processes we employ are the most environmentally sound available."

## **2.0 SITE DESCRIPTION**

The Mr. Binman facility is mainly comprised of a Recycling Centre and a Waste Transfer Station. The infrastructure on-site is all directly or indirectly related to these activities. An inventory of the infrastructure will be given along with the engineering details of each item.

### **2.1 WEIGHBRIDGE**

The weighbridge operates by means of an over-ground Avery scale. All vehicles carrying refuse in to the site are weighed before and after tipping at the transfer station. The weighbridge can weigh vehicles up to 60 tonnes. The Legal Metrology checks the weighbridge for accuracy once a year. Details of each load weighed are catalogued as per section 10.2 of our EPA Waste Licence, number 61-2 using 'BridgeMont' our up-dated customised computerised weigh recording system which has been installed at the weighbridge.

### **2.2 TRANSFER STATION**

Waste which enters the transfer shed is tipped and goes through a pre-sort process to remove wood, steel or other bulky items which may interfere with the mechanical separation plant.

### **2.3 MECHANICAL SEPARATION**

In the normal day's events the transfer of MSW is tipped onto a walking floor and transferred via a conveyor into the mechanical recovery facility. See section 2.16.

### **2.4 PICKING STATION**

A picking line is available to remove bulky and recyclable materials.

### **2.5 GLASS PROCESSING PLANT**

The main components of the glass processing plant are as follows: hopper, manual removal of residual contamination, magnet for removal of loose metals, crusher, vibrating screen for removal of plastic, corks and rings, vertical conveyor, ceramic remover, cyclone, eddy current separator for removal of aluminium packaging, out feed belt, and storage bays.

### **2.6 OFFICES**

There is an office on site in which the weighbridge readings are recorded. The administrative offices are located adjacent to the site. A block of offices and canteen located on site adjacent to the weighbridge. All records relating to the environmental management of the site are stored in the Environmental Office (located in offices adjacent to the weighbridge).

### **2.7 SECURITY**

The front of the site is fenced with a high security fencing. The site is monitored 24 hours a day 7 days a week using security cameras placed strategically around the site and entrances. Security lighting has been suitably positioned with 250-watt LPS on 'dusk 'til dawn' setting. .

## **2.8 WHEEL CLEANING**

A vehicle washing area is located adjacent to the waste water treatment plant. All vehicle washing is carried out at this location. The vehicle washing area consists of a concreted area that slopes to a central slatted area where the washings drain. The slats are removable and can be removed when necessary to remove any build up of silt.

## **2.9 FUEL STORAGE**

Fuel is stored in a bunded fuel tank that is located in a bunded concrete area. Access to the fuel tank can only be achieved through the use of a key and a code. The bunded tank comprises of a separate internal rectangular storage tank, suitably braced and raised above the bund floor by mild steel sections. The outer bund tank is manufactured in a rectangular configuration, suitably strengthened and large enough to incorporate 110% of the inner tank capacity. All bunds are manufactured with pressed sidewalls to prevent formation of water traps, and are supported from ground level using heavy-duty steel sections welded to the underside.

A convex removable roof achieves total enclosure and the enclosed pipe work and valves are accessible through a lockable hatch in the roof.

## **2.10 DUST MONITORING POINTS**

There are three dust-monitoring points located on site. The monitoring points are fenced to protect them from livestock where necessary and are labelled C, E2 and G. Dust monitoring is carried out by BHP Laboratories as per licence requirements. The dust monitoring is currently being analysed using the Berger Hoff method.

## **2.11 NOISE MONITORING POINTS**

Glenside Environmental assesses noise monitoring for the site. Noise measurements are recorded at four locations including the three nearest residences bordering the site; these include the Ryan residence, the Power residence and the Hennessy residence.

## **2.12 ODOUR CONTROL**

An odour control system operates in the yard and around part of the site perimeter. This is only a precautionary measure as the manner in which we deal with waste and recyclables ensures that odour problem do not arise in the first place. The on-site odour control system which utilises several rotary atomisers which produce millions of microscopic droplets of very dilute 'Aironaut' solution. This 'Aironaut' solution consists of a combination of essential oils, odour neutralising reagent and anti-bacterial agent. The partnership of the 'Rotary Atomisers' and the 'AiroNaut' solution forms an extremely effective and pleasant way to neutralise odours, if they should occur. The perimeter odour control system works by pumping the liquid intermittently through nozzles which emit a fine spray this system has been strategically positioned along the South-Eastern border of the site.

## **2.13 ACCESS AND ROADS**

The site is located adjacent to a third class road. This road joins the Kilmallock road at approximately one kilometre west of the site. The Kilmallock road is classed as a regional road. It is by the Kilmallock road that the refuse vehicles access Limerick city and its environs.

## **2.14 LANDSCAPING**

An on-going program of suitable landscaping is been carried out around the site. Semi-mature trees have been planted to screen buildings and abate noise and dust emissions.

## **2.15 SURFACE WATER CONTROL**

The surface of the yard and truck parking area is concreted. Surface water from open concreted areas away from municipal waste processing areas and next to maintenance and diesel filling areas is drained to the percolation area via a new Class 1 oil interceptor/silt trap. Clean roof run-off is directed to soak pits away from the oil interceptor and wwtp. The main entrance to the yard is concreted and surface water from this area is drained to soak pits at the side of the entrance.



## **2.16 MECHANICAL TREATMENT PLANT**

### **2.16.1 PROCESS DESCRIPTION**

#### **MATERIALS RECOVERY FACILITY**

The site comprises of a number of recovery processes for specific waste streams. The primary facility is dedicated to recovering materials from mixed municipal waste through a system of mechanical treatments. The waste is pre-shredded to optimise exposure of the waste to the process. The shredded material passes through an optional picking line and is trommelled to remove organic fines suitable for recovery. The oversize material is passed through a series of air knives to remove refuse derived fuel (RDF) followed by a series of magnets and eddy current separators to remove ferrous and non-ferrous metals for recycling.

The material can then be reprocessed through the facility or the material can be subjected to a phase 2 recovery process where the material is passed through a second trommel to remove further organic fines followed by a manual picking line followed by an air knife to remove more RDF.

Glass is colour separated into the three different colours, blue/green, clear and brown. The glass is sent to the on-site glass processing plant for recycling. Glass cullet is conveyed to covered storage bays and recycled offsite in a glass bottling plant.

In addition other recovery/recycling activities are conducted at the facility including C&D recovery, timber recovery, bulky waste recovery and dry recyclables processing

The facility also has a waste transfer capability which is utilised when required.

#### **2.16.2 Contingency Arrangements**

In the event that a conveyor or the trommel breakdown a Hydraulic Bridge is lowered which by-passes the Mechanical Treatment Plant until the plant is operational.

To ensure that breakdowns are minimised there is a fully trained maintenance crew on-site and a full set of replacement parts for all components of the plant are stored on-site.

### 3.0 ENVIRONMENTAL MONITORING AND EMISSIONS SUMMARY REPORT

#### 3.1 DUST MONITORING RESULTS

##### 3.1.1 Introduction

BHP Laboratory, Thomondgate, Limerick conducts a dust monitoring programme on behalf of Mr. Binman Ltd. The period of sampling is from 1<sup>st</sup> January 2010 to 31<sup>st</sup> December 2010.

##### 3.1.2 Site Description

The Mr. Binman Ltd. facility is elevated and is located on the southern slopes of a hill such that it is exposed to prevailing winds from the south west.

##### 3.1.3 Sampling

The gauges were all placed at ground level. The locations of the sampling sites are described in the table.

**Table 3.1 Dust Monitoring Location Points**

Dust Monitor	Location
C	Near timber area
E2	Boundary
G	Boundary

##### 3.1.3.1 Sampling Procedure

All sampling and analysis was conducted with German Standard VDI 2119 using Bergerhoff dust deposition gauges. This is a standard method specified to be used in EPA licence W0061-02.

Dust monitoring was carried out as per Schedule D of EPA Licence W0061-02. The dust limit for Mr Binman Ltd. as set out in EPA Licence W0061-02 is 350mg/m<sup>2</sup>/day.

##### 3.1.4 Analysis & Results

The results of analysis for the year 2010 are presented in Table 3.1 and Figure 3.1 Below. The results of the analysis have been compared to the dust deposition limit set out in Table C.2. in EPA Waste License W0061-02.

**Table 3.2 Results from Analysis 2010**

Period	C	E2	G
June	120.5	705.5	96.1
July	102	39	93
December	20.8	49	137.3

**Note 1:** Dust Deposition Limit set out in Table C.2 in EPA Waste License 61-2.

### 3.1.5 Interpretation

Dust deposition levels were under the limits as set out in Table C.2 in EPA license 61-2 except for one elevated result at point E2 during the month of June.

Based on examination of the content of the sampling pot, it was concluded that the elevated levels at point E2 were due primarily to foliage overgrowth which caused contamination of the sampling pot. This situation was rectified and as can be seen from table 3.2 had a beneficial effect on subsequent results obtained in July and December. The adjacent gravel car park may also be a contributory factor in relation to this dust monitoring point. Planning permission was received to construct a new hard-standing car park but this is subject to the Waste Licence Review Application submitted to the Agency in July 2008. Construction of the new car park will eliminate the need for the gravel car park and will eliminate the associated dust emissions

On examination of the Location Dust Monitoring Points it was recommended by BHP to relocate Dust Monitoring Point C as it is located at a waste processing area which contravenes German Standard VDI 2119 Part 2 as the monitoring does not provide a representative assessment of the potential dust emissions from the site as a whole.

*“care shall be taken that the site is not affected by emission from immediately adjacent sources( for example, trees, building sites) which could limit the representative nature of the measurements required by the measurement task.”*

Mr. Binman Ltd. has made representations to the Agency requesting the relocation of dust monitoring point C on the basis of recommendations by BHP. In July 2008 a Licence review Application was submitted to the EPA which proposed a new site boundary and dust monitoring point C will be relocated to this new boundary to ensure there will be no impact offsite as a result of activities on-site.

In the mean time, a further control measure was introduced to reduce dust emissions further. A policy of wetting the timber prior to shredding was introduced and this has helped to reduce the dust deposition levels at monitoring point C.

### 3.1.6 Mitigation Measures

**Table 3.3: Summary of Dust sources and mitigation measures.**

Dust Sources	Mitigation Measures
Timber shredding Area	<ul style="list-style-type: none"> <li>• Move Monitoring Point C which is not representative of potential dust emissions from the site as a whole</li> <li>• Continue to wet timber prior to shredding</li> </ul>
Traffic Movement	<ul style="list-style-type: none"> <li>• New entrance roadway and carpark will eliminate dust from existing gravel carpark, subject to licence review.</li> <li>• Continue frequent on-site truck washing to minimise generation of dust from vehicles.</li> </ul>

## 3.2 Noise Monitoring Results 2010

### 3.2.1 INTRODUCTION

Glenside Environmental was commissioned by Mr. Binman Ltd. to carry out an environmental noise survey at its plant in Ballyneety, Co. Limerick, in order to determine the influence, if any, it has on the surrounding environment and to measure compliance with Waste Licence requirements (Reg. No. W0061-02).

### 3.2.2 SAMPLING

#### 3.2.2.1 Sampling Locations

Monitoring was performed at the same four noise sensitive locations where previous monitoring had occurred.

Noise sensitive locations:

1. Power's Residence (Directly opposite the site entrance).
2. Hennessy's Residence (Located to the west of the site entrance).
3. Ryan's Residence (Located to the east of the site entrance).
4. Maguire's Residence (Located to the south west of the site, approximately a half mile distant).

#### 3.2.2.2 Procedure

Measurements were taken using the following equipment:

- Precision integrating sound level meter:  
Bruel & Kjaer, Type 2260, Serial No. 2217549
- Microphone:  
Bruel & Kjaer, Type 4189, Serial No. 2174750
- Acoustical Calibrator:  
Bruel & Kjaer, Type 4231, Serial No. 1883708

Measurements were taken, to establish, as close as possible, the impact of noise produced by Mr. Binman Ltd. is having on the immediate environment.

A 1/3 octave band analysis was carried out at each location to determine if any tonal component was emanating from the plant. Measurement parameters reported include  $L_{Aeq}$ ,  $L_{A10}$  and  $L_{A90}$ . Measurement duration was 30-minutes at each noise sensitive location in accordance with licence requirements.

Measurements were taken in accordance with ISO 1996 "Determination and Measurement of Environmental Noise" and EPA Guidance Notes for "Noise in relation to scheduled activities".

### 3.2.3 Noise Sensitive Location Results

**Table 3.4**

Monitoring for June 3 <sup>rd</sup> and 4 <sup>th</sup> 2010			
Night time	L Aeq, 30 min dB(A)	L A90, 30 min dB(A)	L A10, 30 mins dB(A)
NSL-1	57.9	38.7	56.6
NSL-2	59.9	41.6	56.7
NSL-3	59.3	37.8	61.7
NSL-4	60.4	37.4	54.8

Day time	L Aeq, 30 min dB(A)	L A90, 30 min dB(A)	L A10, 30 mins dB(A)
NSL-1	64.5	42.2	58.7
NSL-2	63.3	42.9	62.9
NSL-3	61.3	39.1	59.7
NSL-4	63.5	42.4	65.3

**Table 3.5**

Monitoring for 23 <sup>rd</sup> and 25 <sup>th</sup> of Nov. 2010			
Night time	L Aeq, 30 min dB(A)	L A90, 30 min dB(A)	L A10, 30 mins dB(A)
NSL-1	62.9	42.6	64.6
NSL-2	66.0	44.1	58.8
NSL-3	67.4	43.3	62.8
NSL-4	65.1	44.6	56.6

Day time	L Aeq, 30 min dB(A)	L A90, 30 min dB(A)	L A10, 30 mins dB(A)
NSL-1	58.3	42.3	60.1
NSL-2	59.6	43.2	61.4
NSL-3	62.3	38.4	52.8
NSL-4	62.2	44.8	60.1

### 3.2.4 Interpretation

Noise Characteristics of the area are typical of a rural environment with intermittent traffic volumes. There is minimal contribution from the facility at locations NSL1 and NSL3 during the daytime periods and no noise influence at locations NSL2 and NSL4. There was no operational noise audible during the early morning monitoring at the 2 closest sensitive dwellings NSL1 and NSL3

It is considered that the noise emanating from the facility is not a source of nuisance at local sensitive areas and local traffic is the main noise source in the region. This is supported by the low L90 levels recorded as this background noise generally excludes the traffic noise component of the ambient noise levels.

### 3.3 GROUNDWATER MONITORING RESULTS 2010

#### 3.3.1 Introduction

Monitoring of the groundwater wells was conducted in June and October 2010.

As specified in the licence GW1 monitoring borehole is located up-gradient of the Mr. Binman Ltd. facility and GW2 monitoring borehole is located down-gradient of the Mr. Binman Facility.

#### 3.3.2 Site Description

The Mr. Binman site comprises a fully EPA licensed waste recovery facility, located in Luddenmore, Grange, County Limerick. The site is located on the southern slopes of a hill forming part of the Limerick Volcanics, which sweeps down to a flat valley floor. Groundwater flows beneath the site in a generally South to South-East direction, as outlined in a hydrogeological report submitted to the Agency in February of 2004.

#### 3.3.3 Groundwater Monitoring Results

The results of this analysis for the year 2010 are presented in Table 3.6 below, with the results from analysis carried out by the EPA presented in Table 3.7.

**Table 3.6: Groundwater Analysis conducted by BHP on behalf of Mr. Binman.**

04/06/2010		GW1	GW2
PH	pH units	7.56	7.28
Electrical Conductivity	uS/cm	574	802
Total Organic Carbon	mg/l	.9	4.4
Ammoniacal nitrogen	mg/l	.09	.09
Total Phosphorus	mg/l	.15	.07
Total Nitrogen	mg/l	2	6

29/11/2010		GW1	GW2
PH	p H units	8.19	7.72
Electrical Conductivity	uS/cm	493	885
Total Organic Carbon	mg/l	3	3
Ammoniacal nitrogen	mg/l	.08	.06
Total Phosphorus	mg/l	.09	.05
Total Nitrogen	mg/l	1	<1

**Table 3.7: EPA Groundwater Monitoring Results**

03/02/2010		GW1	GW2
PH	p H units	7.42	6.95
Electrical Conductivity	uS/cm	534	881
Total Organic Carbon	mg/l	3.86	4.35
Ammoniacal nitrogen	mg/l	.028	.034
Total Phosphorus	mg/l	.074	.026
Total Nitrogen	mg/l	1.88	3.07

05/05/2010		GW1	GW2
PH	p H units	7.5	7.07
Electrical Conductivity	uS/cm	551	904
Total Organic Carbon	mg/l	2.26	2.84
Ammoniacal nitrogen	mg/l	<.02	<.02
Total Phosphorus	mg/l	.035	.028
Total Nitrogen	mg/l	2.34	3.06

17/09/2010		GW1	GW2
PH	p H units	7.4	7.06
Electrical Conductivity	uS/cm	614	920
Total Organic Carbon	mg/l	1.85	2.87
Ammoniacal nitrogen	mg/l	.071	<.02
Total Phosphorus	mg/l	.013	.018
Total Nitrogen	mg/l	2.29	3.42

		GW1	GW2
PH	p H units	7.48	7.19
Electrical Conductivity	uS/cm	523	921
Total Organic Carbon	mg/l	2.05	2.67
Ammoniacal nitrogen	mg/l	<.02	<.02
Total Phosphorus	mg/l	.152	.087
Total Nitrogen	mg/l	3.24	3.26

### 3.3.4 Interpretation

The following conclusions were drawn from the data:

All of the reported values for the Waste License No. 61-2 bi-annual monitoring programme are within the Parametric Values set out in the relevant Drinking Water Standards (S.I. 439 of 2000) and below the relevant Interim Guideline Values (EPA, 2003). There are no significant variations in the current with comparison and historical data indicating that the Mr. Binman facility is not adversely impacting on ground water quality in the area.

## 3.4 WASTE WATER MONITORING RESULTS 2010

### 3.4.1 Introduction

**Table 3.8: waste water Monitoring Location**

Monitoring Location	Code
<i>The emission point from the outlet of the waste water treatment plant prior to entry to the percolation area</i>	FE1

The Mr. Binman site is located on the southern slopes of a hill. The yard has a mild southward gradient with a much steeper gradient from the yard down to the road. The waste water from the processing yard areas drain into the Wastewater Treatment Plant (WWTP) which is located on the lowest point of the site. The monitoring reference for the discharge at the WWTP is FE1. There were no discharges to emission point FE1 in 2010.

It was agreed with the Agency in 2007 that all WWTP effluent would be further treated offsite until compliant effluent discharges from the WWTP were achieved consistently.

A programme of additional control measures was proposed to the EPA in order to achieve compliance and significant progress was made in 2010 towards achieving compliance. Details of these controls are provided below.

In 2010 3,907 cubic meters of waste water was transported off site to be treated at Limerick Main drainage or Castletroy waste water works. this includes an estimated 3000 metres cubed from the waste water treatment plant and 900 metres cubed from the oil interceptor.

### 3.4.2 Continuous improvements projects

In quarter 3 of 2010 a filter trial was carried out following lab bench trials indicated effluent from the waste water treatment plant could be treated to below the limits as set out in schedule C.3 of the licence. Initial results were positive but further filter trials will be carried out in 2011. This project is just one of number of projects put in place since 2007 to provide better WWTP control, the following details work carried out to improve the efficiency of the WWTP since 2007.

In 2007, a wastewater storage tank was modified and a pump chamber installed to ensure all waste water effluent could be removed from site for off-site treatment.

Additional modifications were completed to the WWTP in 2007 including addition of an aeration system in the storage tanks to provide better control and the organic fines storage area and the glass bays were all covered in order to minimise leachate from these areas and to reduce the impact on the WWTP.

In 2008, the optibag storage area and the cardboard storage areas were covered to minimise any leachate that may arise from these areas. A roof water diversion project was completed in order to minimise uncontaminated roofwater discharging to



the WWTP and preventing additional hydraulic loading, thereby providing better control.

A full-time environmental analyst/wwtp operator was employed in 2008 and a laboratory was established to ensure regular monitoring and maintenance of the WWTP was conducted in order to achieve better WWTP control and ELV compliance. As can be seen from the data above these control measures have ensured the wwtp has significantly improved.

The tanker allows Mr. Binman to transport large volumes of water off site in the event of heavy rainfall preventing the plant from over flowing. In the event waste water with higher concentrations than the wwtp can deal with enters the pump chamber the tanker can be used to remove the concentrated waste water before it affects the bacteria in the aeration tanks.

A polymer dosing system was installed to flocculate suspended solids in the discharge to the clarifier in order to reduce the residual suspended solids and thereby further improve emission discharges. In early 2010 in house trials using the polymer dosing system and using the effluent storage tank for further settlement showed potential 50% reduction in solids.

### 3.5 SURFACE WATER MONITORING RESULTS 2010

#### 3.5.1 Introduction

**Table 3.9: Surface water monitoring location**

Monitoring Location	Code
<i>The emission point from the Class 1 interceptor prior to discharge to the percolation area</i>	FE2

In September, 2008 new oil interceptor and certified percolation area was installed. A new manhole was constructed at the discharge point to facilitate sampling.

#### 3.5.2 Results table

The results of sampling and analysis carried out in early 2010 are summarised in the Table 3.10 below.

Monitoring	Suspended solids	COD	BOD	Ammonia	mineral oils	pH
EPA 20/01/2010	121		510	2.35	.76	6.69

#### 3.5.3 Interpretation

Following correspondence with the EPA in quarter 1 of 2010, discharges from FE2 were stopped in 2010 and it was agreed with the EPA incoming water to the oil interceptor would be removed off site until no discharges of environmental significance occur.

### 3.5.4 Continuous improvements projects

In quarter 3 of 2010 extensive work was carried out in order to optimise the drainage system on site. All areas of the yard now drain to the WWTP bar the vehicle parking which runs adjacent to the fence on the east boundary of the facility. Further monitoring of the discharges to/from the oil interceptor will be conducted in 2011 as recently agreed with EPA.

New housekeeping procedures have also been put in place in order to optimise discharges to the drainage/abatement systems on-site including.

- Weekly site inspections carried out
- A person dedicated to on-site house keeping
- Increased use of road sweeper in critical areas
- Spill kits available at a number of locations around the site
- Drainage system cleaned on a weekly basis

In 2008 & 2009 the following actions were taken to optimize discharges to emission point FE2:

- A new Klargestor NS 200 Class 1 oil interceptor unit was installed in 2008 which includes a core tube with replaceable filter media. Separated Liquid passes through the filter to the outlet. A closure device is located within the core tube. The coalescer media requires maintenance and replacing at intervals.
- The original oil interceptor was modified to a solid settlement system to remove solids from water before entering the NS 200 oil interceptor.
- Uncontaminated water from roofs was diverted from the oil interceptor to ensure the abatements systems are optimised.
- The yard has been separated into process & non process areas, with drains from and around the process areas diverted to the waste water treatment plant. Sources of all waters that will be treated via the settlement system and the oil interceptor was reduced to open areas away from municipal waste processing areas, maintenance areas and diesel filling areas.
- A standard operating procedure for the operation and maintenance of the solids settlement system and hydrocarbon interceptor is in place. Following a recent review the maintenance frequency of the solid settlement system will be increased.
- An on-site laboratory is in place to allow regular monitoring of the operation of the oil interceptor.
- Filters on the oil interceptor were replaced on the 15<sup>th</sup> of August 2009. Following the recent investigation, it was confirmed that the filter seals were not replaced at this time and it was concluded that this was a contributory factor to the recent results obtained. Monitoring data confirmed this.

- Upstream analysis was carried out to develop a better understanding of discharges to the solids settlement system/hydrocarbon interceptor prior to treatment. While there are no drains from process areas discharging directly to the oil interceptor, it was concluded that there is some potential carry-over from the process yard area into the non-process yard areas which may be contributing to indirect discharges to the oil interceptor. Further improvement measures will be implemented in 2010 to minimise these discharges to the oil interceptor.

## 3.5 LITTER

### 3.5.1 Introduction

Litter is monitored for the yard and the perimeter of the facility on a weekly basis and recorded and filed as required by **Condition 8.9.1** of the waste licence. It is the responsibility of the Environmental Officer to record the level of litter control and to take action if necessary. It is the responsibility of the Yard Manager to ensure that litter control measures are enforced on a daily basis. A litter report is compiled on a weekly basis and action is taken based on recommendations outlined in the report.

### 3.5.2 Litter Control Measures in Operation for the Facility:

- All waste carrying vehicles entering and leaving the yard must be fully enclosed or netted to ensure that rubbish does not fall from them.
- The yard is swept on a regular basis during the day using a dedicated road sweeper truck and manual means.
- The transfer building and all processing areas is cleaned of all waste by the end of each working day.
- The plant and buildings are enclosed to minimise the possibility of litter arising.
- The yard, surrounding area and approach roads are checked for litter on a daily basis and any litter that arises at the facility is removed.

## 3.6 VERMIN

### 3.6.1 Vermin Control Mitigation Measures

As per **Condition 8.9.1** evidence of the presence of vermin such as rats, mice, birds, flies and wild animals is recorded for the yard and the perimeter of the facility on a weekly basis. Action is taken based on recommendations outlined in the report. It is the responsibility of the Environmental Officer to maintain these records and to organise prevention of vermin problems if necessary.

Vermin traps are set up in designated areas by an external pest control contractor around the facility. The number of traps set in a certain area depends on the degree of activity in that area. Extra traps may be placed in particular areas depending on activity there.

The vermin traps are inspected regularly by the pest control contractor and reports are provided after each inspection.

### **3.7 ODOUR**

As per **Condition 8.9.1** odour is monitored on a weekly basis and results are recorded in the Nuisance. Monitoring is carried out manually and records of odour are taken for the yard and the perimeter of the facility.

#### **3.7.1 Mitigation Measures**

- Waste is collected from households weekly which ensures the waste is "fresh" and does not cause an odour nuisance at the facility.
- A "clean as you go" policy operates at the facility during the day and all areas are thoroughly cleaned at the end of each day.
- No waste is stored on site long-term.
- Wastes with a high odour risk are not accepted onsite such as sludge.
- An odour abatement system is installed at designated areas around the facility as a precautionary measure

#### **3.8 Bund, tank and container integrity assessment**

As per condition 3.11.5 of our waste licence the integrity and water tightness of all the bunds and their resistance to penetration by water or other materials stored therein shall be confirmed every 3 years.

In 2010 a contracting engineering firm tested the integrity of two bunded areas and the pipe work on site. Find certificates attached confirming the integrity of the Fuel Storage Tanks, the Ad Blue Tanks and the underground water pipework.

### **4.0 ENVIRONMENTAL INCIDENTS AND COMPLAINTS SUMMARY**

There were no environmental incidents or complaints during 2010

## 5.0 WASTE RECEIVED BY AND CONSIGNED FROM THE FACILITY

### 5.1 Introduction

Only non-hazardous wastes are collected and/or accepted by Mr. Binman Ltd. at our Waste transfer Station. The following are the European Waste Catalogue (EWC) Codes of the waste types accepted by Mr. Binman Ltd.

**Table 5.1: EWC Codes of Waste Types accepted by Mr. Binman Ltd**

Code	Description
02 01 03	Plant-tissue waste.
02 01 04	Waste plastics (except packaging)
02 01 10	Waste metal.
02 06 01	Materials unsuitable for consumption or processing.
03 01 01	Waste bark and cork.
03 01 05	Sawdust, shavings, cuttings, wood, particle board and veneer other than those mentioned in 03 01 04.
03 03 08	Waste from sorting of paper and cardboard destined for recycling.
10 11 03	waste glass-based fibrous materials
15 01 01	Paper and cardboard packaging.
15 01 02	Plastic packaging.
15 01 03	Wooden packaging.
15 01 04	Metallic packaging.
15 01 05	Composite packaging.
15 01 06	Mixed packaging.
15 01 07	Glass packaging.
15 01 09	Textile packaging.
15 02 03	Absorbents, filter materials, wiping clothes and protective clothing other than those mentioned in 15 02 01.
16 01 17	Ferrous metal.
16 01 18	Non-ferrous metal.
16 01 19	Plastic.
16 01 20	Glass.
16 02 14	Discarded equipment other than those mentioned in 16 02 09 to 16 02 13.
16 02 16	Components removed from discarded equipment other than those mentioned in 16 02 15.
16 03 04	Inorganic wastes other than those mentioned in 16 03 03.
16 03 06	Organic wastes other than those mentioned in 16 03 05.
17 01 01	Concrete.
17 01 02	Bricks.
17 01 03	Tiles and ceramics.
17 01 07	mixture of concrete, bricks, tiles and ceramics other than those mentioned in 17 01 06
17 02 01	Wood.
17 02 02	Glass.
17 02 03	Plastic.
17 04 01	Copper, bronze, brass.
17 04 02	Aluminium.
17 04 03	Lead.

Code	Description
17 04 04	Zinc.
17 04 05	Iron and steel.
17 04 06	Tin.
17 04 07	Mixed metals.
17 04 11	cables other than those mentioned in 17 04 10
17 05 04	Soil and stones other than those mentioned in 17 05 03.
17 06 04	Insulation materials other than those mentioned in 17 06 01 and 17 06 03.
17 08 02	gypsum-based construction materials other than those mentioned in 17 08 01
17 09 04	Mixed construction and demolition wastes other than those mentioned in 17 09 01, 17 09 02 and 17 09 03.
18 01 04	wastes whose collection and disposal is not subject to special requirements in order to prevent infection (for example dressings, plaster casts, linen, disposable clothing, diapers)
19 05	Wastes from aerobic treatment of solid wastes.
19 10 01	Iron and steel waste.
19 10 02	Non-ferrous waste.
19 10 04	Fluff-light fraction and dust other than those mentioned in 19 10 03.
19 12 01	Paper and cardboard.
19 12 02	Ferrous metal.
19 12 03	Non-ferrous metal.
19 12 04	Plastic and rubber.
19 12 05	Glass.
19 12 07	Wood other than that mentioned in 19 12 06.
19 12 08	Textiles.
19 12 09	Minerals (for example sand, stones).
19 12 10	Combustible refuse (refuse derived fuel).
19 12 12	Other wastes (including mixtures of wastes) from mechanical treatment of wastes other than those mentioned in 19 12 11.
20 01 01	Paper and cardboard.
20 01 02	Glass.
20 01 08	Biodegradable kitchen and canteen waste.
20 01 10	Clothes.
20 01 11	Textiles.
20 01 25	Edible oil and fat.
20 01 28	Paints, inks, adhesives and resins other than those mentioned in 20 01 27.
20 01 30	Detergents other than those mentioned in 20 01 29.
20 01 36	Discarded electrical equipment other than those mentioned in 20 01 21, 20 01 23 and 20 01 35.
20 01 38	Wood other than that mentioned in 20 01 37.
20 01 39	Plastics.
20 01 40	Metals.
20 01 41	Wastes from chimney sweeping.
20 02	Garden and park wastes (including cemetery waste).
20 03 01	Mixed municipal waste.
20 03 02	Waste from markets.
20 03 03	Street-cleaning residues.
20 03 07	Bulky waste.

## **5.2 QUANTITIES OF WASTE ACCEPTED/CONSIGNED**

All waste details consigned from the facility in 2009 are included in the electronic report (Appendix 2 attached). In 2010, a total of 131,449.28 tonnes was accepted on-site.

## **5.3 PROPOSAL TO INCREASE THE ANNUAL THROUGHPUT OF THE FACILITY**

It was agreed with the Agency that a Waste Licence Review was required to increase the total amount of waste accepted by the facility.

In July 2008 a Licence Review Application was submitted to revise the site boundary and specify facility changes required for an increase in waste acceptance tonnage up to 200,000 tonnes/annum. The Application specified a number of improvement projects with planning permission, where required, to ensure there was no significant impact on the environment from the facility.

An Environmental Impact Statement was prepared in Quarter 4, 2008 and it was submitted to the EPA in January 2009. The Licence Review Application is currently under consideration by the EPA. It is understood that the application is being actively reviewed and a decision is pending.

While awaiting this decision, and in an effort to comply with the existing Licence requirements Mr Binman is undertaking two additional corrective actions:

1. Mr Binman is submitting a proposal to the EPA to increase the annual throughput of the facility for 2011 to 105,000 tonnes, as per condition 11.4 as set out in licence W0061-02. The proposal addresses the requirements under Conditions 11.4. and 3.9 and the infrastructure, controls and contingency now in place to ensure the facility is capable of accepting and treating up to 105,000tpa without any impact of environmental significance.
2. In order to meet this waste acceptance limit, Mr Binman has arranged for approximately 10,000tpa of waste to be transferred to an alternative approved facility to reduce the quantity of waste accepted at the facility during 2011.



## 6.0 EMP REPORT SUMMARY

The remainder of this document contains the following elements as required by Agency's 'Draft Guidance on Environmental Management Systems and Reporting to the Agency.

- Schedule Of Objectives And Targets 2010
- Proposed Schedule Of Objectives And Targets 2011
- Resource And Energy Consumption
- Site Management
- Financial Provision

## 6.1 PROGRESS REVIEW OF SCHEDULE OF OBJECTIVES AND TARGETS 2010

### 6.1.1 Introduction

Environmental Objectives are specific and defined goals that need to be achieved in order to meet the requirements of the Environmental Policy. The purpose of establishing objective and targets is to ensure that the process of continual improvement is formalised and clearly set out.

**Table 6.1: Summary of the Schedule of Objectives and Targets 2010**

Objective	Target
<b>1. Diversion of biodegradable Waste from landfill</b>	<ul style="list-style-type: none"> <li>▪ Receive planning and commence construction of a Biogas/Composting facility</li> <li>▪ Further roll out of brown bin to commercial and domestic customers</li> </ul>
<b>2. Increase Recycling Rates</b>	<ul style="list-style-type: none"> <li>▪ Expand source separated collection of organic waste to reduce quantity of organic fines to landfill</li> <li>▪ Waste Recycling Educational Campaign</li> <li>▪ Expand Fleet of Dual Compartment Trucks and Composting trucks</li> </ul>
<b>3. Improve On-Site Drainage and Waste Water Treatment Facilities</b>	<ul style="list-style-type: none"> <li>▪ Extend drains for waste processing area to ensure all potential carryover from relevant areas enter WWTP. Optimise discharge and assure compliance with elvs by generating at least six weeks of continuous data</li> <li>▪ Apply to EPA to revert to discharging to FE1</li> <li>▪ Replace filters/seals in oil interceptor</li> <li>▪ Improve yard cleaning/maintenance to minimise carryover from process yard to non-process yard</li> <li>▪ Enclose can bays adjacent to BOA plant.</li> </ul>
<b>4. Assure Compliance with Waste Licence</b>	<ul style="list-style-type: none"> <li>▪ Complete Waste Licence Review</li> </ul>

### **6.1.2. Objective 1: Diversion of biodegradable Waste from landfill**

#### Target 1: Receive planning for Biogas/Composting facility

A site for the development of a biogas/composting facility was acquired and change of use planning application was submitted in 2008. The purpose of the facility will be to treat and compost organic fines and brown bin materials generated through Mr. Binman. This system will significantly reduce the amount of untreated biodegradable waste currently sent to landfill.

#### Action Plan:

- Submit Stage 2 Application to Department of Agriculture & Food by Q4 2010
- Initiate facility construction and commissioning Q4 2010

#### Progress:

Planning permission was granted in quarter 2 of 2010 to develop a biogas/composting facility capable of processing up to 50,000 tonnes per annum at the Greenport site in Foynes county limerick. However construction at the facility cannot commence until the waste licence is granted by the EPA (condition of planning). Work on the stage 2 application has begun and will be complete upon construction and commissioning of the facility which is expected to be complete in the New Year.

#### Target 2: Further roll out of brown bin to commercial customers and domestic customers

#### Action Plan

- Expand brown bin collection of commercial waste in Q1-Q4 2010
- Expand brown bin collection of household waste in Q1-Q4 2010.

#### Progress:

During 2010 domestic brown bin routes have been rolled out urban areas of county Limerick, Limerick city, North Tipp and urban areas of county Clare in line with the food waste regulations. Brown bins have been rolled out to commercial customers producing greater than 50kg of food waste per week. To demonstrate this increase, over 1900 tonnes of source separated brown bin (SSBB) material was collected in 2010 compared with the 420 tonnes of SSBB collected in 2009.

### **6.1.3. Objective 2 Increase Recycling Rates**

#### Target 1: Further roll out of brown bin to commercial customers and domestic customers

See target 2 of objective 1

Target 2: Waste Recycling Educational Campaign

Action Plan:

- Mail shots to all customers with invoices which will include recycling information, and incentives to recycle(discounts) by Q4 2010
- Complete awareness campaign with domestic customers in brown bin roll out areas to optimise organic collection in Q1 - Q4 2010
- Continue school tours of our Recycling facility to encourage children to recycle at home and at school by Q1-Q4 2010

Progress:

All domestic and commercial customers who received the brown bin during 2010 were provided with brown bin information packs. A number of commercial facilities also received training on using the brown bin. Over 20 school tours of the facility took place during 2010 with visits to other schools taking place to improve awareness.

Target 3: Upgrade of Fleet

Mr. Binman will continue upgrading its fleet of bin trucks to dual compartment trucks which will allow for simultaneous segregated collection of dry recyclables and municipal waste

Action Plan:

Purchase new dual compartment trucks and one composting truck by Q4 2010. This will be subject to securing finance for fleet upgrade.

Progress

4 vehicles have been added to the fleet in 2010 including two dedicated vehicles for collecting organic waste.

### **6.1.4. Objective 3: Improve On-Site Drainage and Waste Water Treatment Facilities**

Target 1: Extend drains to ensure all runoff from waste processing areas enters WWTP

Action Plan:

Initiate enclosure of RDF baler/can area by Q4 2010. Extend WWTP drainage to ensure carry over from relevant process yard areas is diverted to WWTP.

Progress:

A significant amount of work was carried out on the drainage systems during quarter 3 of 2010 to ensure the yard areas surrounding the main recycling building and glass plant are contained. The gully adjacent to the glass recycling facility was extended and a new gully was put in place east of the main recycling facility to contain any potential discharges from these areas. The drainage system servicing the yard/road south of the main recycling building was diverted to the waste water treatment plant. The enclosure of the RDF baler/can bay is subject to planning and measures are underway to apply for planning permission which will include this enclosure.

Target 2: Measure influent/effluent in wwtp to determine compliance with limits and identify further control measures

The waste water treatment plant is now operating in a steady state but further modifications will be required to ensure compliance on a consistent basis.

Action Plan:

- Continue regular monitoring and maintenance of wwtp
- Optimise use of polymer dosing system
- Complete full trial on effluent from final storage tank to verify initial trial improvement on meeting discharge limits
- Optimise discharge and assure compliance with elvs by generating at least six weeks of continuous data
- Apply to EPA to revert to discharging to FE1
- Generate at least six weeks of continuous data to demonstrate compliance by Q3 2010.
- Apply to EPA to revert to discharging to FE1 by Q4 2010

Progress:

Regular monitoring of the waste water treatment plant has continued during 2010. Sand, carbon and zeolite filters are currently in place and a weeklong trial was carried out in quarter 3. Further trials are necessary to support initial trial data

Target 3: Replace filters/seals in oil interceptor

Progress:

Maintenance work was carried out on the oil interceptor in quarter 1 of 2010 which included replacement of filters.

Target 4: Improve yard cleaning/maintenance to minimise carryover from process yard to non-process yard

Progress

New housekeeping procedures have also been put in place in order to optimise discharges to the drainage/abatement systems on-site including.

- Weekly site inspections carried out
- A person dedicated to on-site house keeping
- Increased use of road sweeper in critical areas
- Spill kits available at a number of locations around the site
- Drainage system cleaned on a weekly basis

Target 5: Enclose can bays adjacent to BOA plant.

Progress

The enclosure of the RDF baler/can bay is subject to planning and measures are underway to apply for planning permission which will include this enclosure.

## **6.1.5 Objective 4: Assure Compliance with Waste Licence**

Target 1: Complete Waste Licence Review

A Waste Licence Application was submitted in July 2008 in order to resolve a number of potential compliance issues. Additional information was requested including an Environmental impact statement which was prepared in 2008 and submitted in January 2009. The application is currently being reviewed by the EPA.

There are a number of compliance issues that will be resolved through a Waste Licence Review:

- Compliance with waste tonnage accepted at the facility
- Definition of new site boundary to allow movement of dust monitoring points to more appropriate locations
- Definition of new site boundary to allow new roadway and carpark which will ensure safer access egress and parking for the facility and will reduce dust emissions from the facility.
- Permission to apply for alternative opening hours in exceptional circumstances, subject to agreement with the Agency.

Action Plan:

- Liaise with EPA regarding progress of Licence Application Review
- Review new Licence when received to ensure compliance with all conditions of Licence

Progress:

Further information was provided to the EPA on 2 separate occasions during quarter 1 of 2010 regarding the waste licence application. Information was provided on the waste water treatment plant, oil interceptor, drainage system, ground water, noise locations and quantity of waste accepted at the facility. A decision on the review application is awaited.

## 6.2 Proposed Objectives and Targets 2011

**Table 6.2: Summary of the Schedule of Objectives and Targets 2011**

Objective	Target
<b>1. Diversion of biodegradable Waste from landfill</b>	<ul style="list-style-type: none"> <li>▪ Receive licence and commence construction of a Biogas/Composting facility</li> <li>▪ Further roll out of brown bin to commercial and domestic customers</li> <li>▪ Equipment to be installed to eliminate contamination &gt;20mm from mechanically separated organic material to optimise diversion away from Landfill.</li> </ul>
<b>2. Increase Recycling Rates</b>	<ul style="list-style-type: none"> <li>▪ Expand source separated collection of organic waste to reduce quantity of organic fines to landfill</li> <li>▪ Waste Recycling Educational Campaign</li> <li>▪ Expand Fleet of Dual Compartment Trucks</li> </ul>
<b>3. Improve On-Site Drainage and Waste Water Treatment Facilities</b>	<ul style="list-style-type: none"> <li>▪ Extend drains for waste processing area to ensure all potential carryover from relevant areas enter WWTP.</li> <li>▪ Seal joints in concrete</li> <li>▪ Optimise discharge and assure compliance with elvs by generating at least six weeks of continuous data</li> <li>▪ Analyse Influent and discharge from Oil interceptor</li> </ul>
<b>4. Assure Compliance with Waste Licence</b>	<ul style="list-style-type: none"> <li>▪ Increase approved tonnage accepted at the facility under current licence to 105,000 tpa.</li> <li>▪ Transfer 10,000 tonne of waste to an alternative approved facility.</li> <li>▪ Complete Waste Licence Review</li> </ul>

### 6.2.1. Objective 1: Diversion of biodegradable Waste from landfill

#### Target 1: Progress development Biogas/Composting facility

A site for the development of a biogas/composting facility was acquired and change of use planning application was submitted in 2008 and planning was granted in quarter 2 of 2010. The purpose of the facility will be to treat and compost organic fines and brown bin materials generated through Mr. Binman. This system will significantly reduce the amount of untreated biodegradable waste currently sent to landfill. However it is a planning condition that development of the facility is subject to the EPA licence. A decision on this is pending with the EPA. Subject to receipt of licence, the following action plan will be implemented.

Action Plan:

- Submit Stage 2 Application documentation to Department of Agriculture & Food by Q4 2011
- Initiate facility construction and commissioning Q2 2011

Target 2: Further roll out of brown bin to commercial customers and domestic customers

Action Plan:

- Expand brown bin collection of commercial waste in Q1-Q4 2011.
- Expand brown bin collection of household waste in Q1-Q4 2011.

Target 3: Equipment to be installed to eliminate contamination >20mm from mechanically separated organic material to optimise diversion away from Landfill.

Action Plan:

- Install screening equipment to remove contamination >20mm from mechanically separated organic material (Q2 2011).
- Seek approval from EPA for <20mm mechanically separated organic material to be sent to a recycling/recovery facility (Q2 2011).

## 6.2.2 Increase Recycling Rates

Target 1: Further roll out of brown bin to commercial customers and domestic customers

Action Plan:

See target 2 of objective 1

Target 2: Waste Recycling Educational Campaign

Action Plan:

- Mail shots to all customers with invoices which will include recycling information, and incentives to recycle(discounts) by Q4 2011.
- Complete awareness campaign with domestic customers in brown bin roll out areas to optimise organic collection in Q1 - Q4 2011.
- Continue school tours of our Recycling facility to encourage children to recycle at home and at school by Q1-Q4 2011.
- On-site training/Waste management system recommendations for the larger commercial customers to optimise diversion of waste from landfill.

Target 3: Upgrade of Fleet

Mr. Binman will continue upgrading its fleet of bin trucks to dual compartment trucks which will allow for simultaneous segregated collection of dry recyclables and municipal waste

Action Plan:

Purchase 2 new dual compartment trucks Q4 2011. This will be subject to securing finance for fleet upgrade

### **6.2.3. Objective 3: Improve On-Site Drainage and Waste Water Treatment Facilities**

#### Target 1: Extend drains to ensure all runoff from waste processing areas enters WWTP

A significant amount of work was carried out on the drainage systems during 2010. The gully adjacent to the glass recycling facility was extended and a new gully was put in place east of the main recycling facility to contain any potential discharges from these areas and ensure discharge to the waste water treatment plant. The drainage system servicing the yard/road south of the main recycling building was diverted to the waste water treatment plant.

#### Action Plan:

Divert drainage between security cabin and bin wash area to WWTP away from Oil interceptor.

#### Target 2: Seal joints in concrete

#### Action plan:

Seal joints in concrete by quarter 3 subject to weather conditions

#### Target 3: Measure influent/effluent in wwtp to determine compliance with limits and identify further control measures

The waste water treatment plant is now operating in a steady state but further modifications will be required to ensure compliance on a consistent basis

#### Action Plan:

- No discharges during 2011, unless otherwise agreed with the Agency
- Continue regular monitoring and maintenance of wwtp
- Optimise Filtration system
- Optimise discharge and assure compliance with elvs by generating at least six weeks of continuous data
- Generate at least six weeks of continuous data to demonstrate compliance by Q3 2010.
- Apply to EPA to revert to discharging by quarter 4 to FE1

#### Target 4: Analyse Influent and discharge from Oil interceptor as agreed with the EPA

There is currently no discharge from the Oil interceptor, but following a recent audit, it was proposed by the EPA to conduct further analysis on the discharges to and from the oil interceptor following improvements to the drainage system in 2010.

#### Action Plan

- No Discharge from the Oil interceptor unless agreed with the EPA
- Send proposal for agreement with EPA to analyze influent and discharge
- Apply to EPA to revert to discharging by quarter 4 to FE2



## 6.2.4 Objective 4: Assure Compliance with Waste Licence

A waste licence review application for W0061-02 was submitted to the Agency on the 11-07-08. Mr. Binman has applied for a waste tonnage acceptance limit up to 200,000t/annum. A decision on this review application is with the Agency and while awaiting this decision, and in an effort to comply with the existing Licence requirements Mr Binman is undertaking two additional corrective actions:

Target 1: Increase the approved tonnage accepted at the facility under current licence to 105,000 tpa.

Action Plan:

Submit a proposal in quarter 1 of 2011 to the EPA to increase the annual throughput of the facility for 2011 to 105,000 tonnes, as per condition 11.4 as set out in licence W0061-02. The proposal must address the requirements under Conditions 11.4. and 3.9 and the infrastructure, controls and contingency now in place to ensure the facility is capable of accepting and treating up to 105,000tpa without any impact of environmental significance.

Target 2: Transfer 10,000 tonne of waste to an alternative approved waste facility.

Action Plan:

In order to meet the waste acceptance limit as set out in target 1, arrangements have been made for approximately 10,000tpa of waste to be transferred to an alternative approved facility to reduce the quantity of waste accepted at the facility during Quarters 1-4 2011. In addition further measures will be considered to assure compliance.

Target 3: Complete Waste Licence Review

A Waste Licence Application was submitted in July 2008 in order to resolve a number of potential compliance issues. Additional information was requested including an Environmental impact statement which was prepared in 2008 and submitted in January 2009. The application is currently being reviewed by the EPA.

There are a number of compliance issues that will be resolved through a Waste Licence Review:

- Compliance with waste tonnage accepted at the facility
- Definition of new site boundary to allow movement of dust monitoring points to more appropriate locations
- Definition of new site boundary to allow new roadway and carpark which will ensure safer access egress and parking for the facility and will reduce dust emissions from the facility.
- Permission to apply for alternative opening hours in exceptional circumstances, subject to agreement with the Agency.

Action Plan:

- Liaise with EPA regarding progress of Licence Application Review
- Review new Licence when received to ensure compliance with all conditions of Licence

## 6.3 Resource and Energy Consumption

### 6.3.1 WATER CONSUMPTION

**Table 6.3: Water Consumption for the reporting period Jan. - Dec. 2010**

Source	Total m <sup>3</sup>
Truck Wash	1190
Onsite water usage	670

\*Estimate based on 2007 volumes

### 6.3.2 Electricity Consumption

**Table 6.4 Mr. Binman Ltd. Electricity Consumption January– December 2010**

Month	Electricity Consumed( KWH )
January	122,807
February	113,376
March	127,843
April	130,358
May	118,785
June	109,632
July	116,573
August	110,475
September	115,965
October	121,572
November	122,633
December	126,603
<b>Total</b>	<b>1,436,622</b>

### 6.3.3 Fuel Consumption

**Table 6.5: Fuel Consumption for the reporting period Jan-Dec 2010**

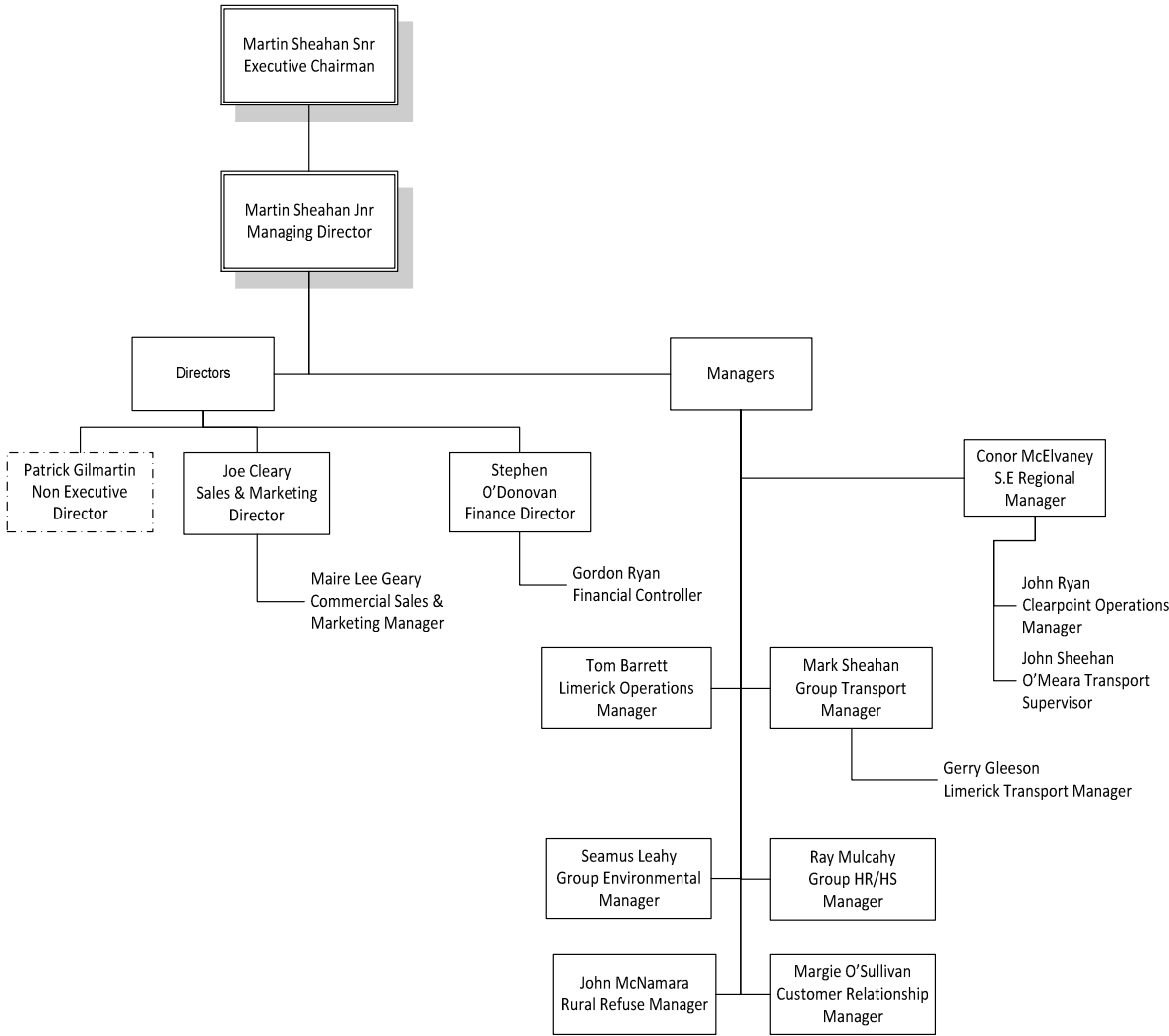
Diesel off-site consumption	1,936,182 litres
Diesel on-site consumption	210,915 litres

## 7.0 SITE MANAGEMENT

### 7.1 FORMAL MANAGEMENT STRUCTURE

This management structure hierarchy sets out the chain of command within Mr. Binman Ltd.

Figure 7.1: Mr. Binman Ltd. Management Structure



### **7.1.2 SITE PERSONNEL WITH MANAGERIAL RESPONSIBILITY**

Mr. Binman Ltd. has an expert Management Team that is responsible for the Management and Supervision of all Waste Activities at the Mr. Binman facility. The Management Team was extended significantly during 2007 and the Team is committed to ensuring current operations and future growth occurs in an environmentally sustainable manner.

Details of new Management Personnel with Environmental responsibilities were submitted to the EPA in January 2008 in line with the conditions of the Waste Management Licence.

## 8.0 FINANCIAL PROVISION

### 8.1 REVIEW OF ENVIRONMENTAL LIABILITIES RISK ASSESSMENT & RESIDUALS MANAGEMENT PLAN

The existing ELRA for the facility was originally prepared in 2001 and was reviewed annually for submission to the EPA as part of the AER. A comprehensive review of the ELRA and the financial provisions in place was conducted in 2008 with the co-operation of our insurance company and bank and it was identified that a significant elements of the ELRA are no longer relevant or appropriate. Along with the existing insurance in place for the facility, it was also confirmed that a limited financial provision was put in place in 2001 but this did not reflect the current status of the site.

A Licence Review Application was submitted to the EPA in July 2008 and a revised Waste Licence is anticipated in 2011. It is anticipated that the conditions relating to the ELRA/RMP and related financial provision will be revised as part of the Licence Review. Mr Binman is committed to completing a comprehensive review of the ELRA/RMP in line with the requirements of the new Licence conditions and following discussions with our insurance company and bank, it is committed to putting in place an appropriate and up to date financial provision which reflects the current status of the site.

### 8.2 CURRENT ELRA

The original costing for the potential site environmental liabilities was based on those considered to be restricted to the confines of the site. As such, this review of the original ELRA is restricted to the confines of the site and therefore, any costs incurred in addressing same will be based on the following: -

- The confines of the site.
- Costs were limited to removal and safe disposal of waste remaining on-site following an emergency event or decommissioning and closure of the site.
- A maximum of 500 tonnes of waste can be stored on site at any one time, - environmental liabilities cover should account for the cost for the clean-up and removal of the maximum amount of waste that may be stored on-site at any given time, i.e. 500 tonnes.
- Costs associated with the dismantling of infrastructure are covered within the sites general insurance cover.
- Costs associated with undertaking Bund Integrity Assessments of all bunds at the site.
- Costs associated with paving the remaining gravel hardcore area of the site with concrete hardstanding (to render the site yard impervious).
- Costs associated with the implementation of the recommendations of the firewater retention risk assessment.
- The removal and safe disposal of firewater remaining on-site following an emergency event.
- Costs for the removal of all waste materials from the site, in the event of closure/decommissioning of the site.

A summary of the overall liabilities and costs, i.e. the findings of the audit and recommended actions along with estimated costs, where relevant, associated with the waste transfer facility are given in Table 9.1.

Where potential contamination issues have been identified, and no investigations have been undertaken to determine the presence and extent of any contamination, estimated site investigation/remedial costs have been provided. These figures are based on a 'worst case scenario' taking into account the nature of the potential contamination, the environmental sensitivity of the site and the size of the potentially contaminated area. These figures do not take into account costs, which could be incurred in relation to clean-up, off-site, or third party damages. The sums should not be considered as precise estimates as they may be subject to large variances.

**Table 8.1: Overall Environmental Liabilities and Estimated Costs**

<b>Potential Contamination Issue</b>	<b>Site Sensitivity</b>	<b>Recommendation Action</b>	<b>Estimated Costs</b>
<p>The surface water and truck wash drainage system at the site is quite old and the integrity of the system has not been tested.</p>	<p>In case of a leak from any part of the surface water or truck wash drainage system, potentially polluting substances may discharge to ground prior to treatment/containment in the wastewater treatment plant at the site, (thereby resulting in potential contamination of groundwater quality).</p>	<p>Implement an inspection/assessment of the surface water and truck wash collection/drainage system at the site to determine the integrity of the system. Following the inspection of the surface water and truck wash drainage network, carryout repairs on all sections of the surface water and/or foul sewerage drainage system at the site that is not fully watertight, sealed or intact.</p>	<p><b>€3K</b></p> <p>To be determined based on findings of the inspection of the surface water and foul sewerage drainage system.</p>
<p>Any ground contamination on-site has the potential to impact upon groundwater quality, soils and surface water quality in the area.</p>	<p>Due to the nature of site activities, there is a potential to contaminate groundwater and/or soils underlying the site.</p>	<p>The groundwater sampling and analysis program should be continued, (extended over a longer period of time) to monitor the groundwater quality beneath the site during the winter and summer months, determine if there is any change in groundwater quality over time.</p> <p>The groundwater monitoring programme should also be continued upon closure of the site to ensure that any potential for residual contamination does not pose a risk to groundwater quality post-closure and determine the requirement or otherwise for implementation of measures for remediation of soil/groundwater, notwithstanding additional remedial work that may be required, particularly if the site is to be redeveloped for non-industrial use. Cost of carrying out the groundwater monitoring programme for a period of 1 year is estimated at approx. <b>€2,500</b>.</p> <p>The cost for implementation of measures, if required, in relation to remediation of potential groundwater contamination cannot be determined at this stage, as no contamination has been detected to date. In the event that future monitoring results detect contamination, remedial costs will be determined at that time to account for the nature and level of contamination detected, if any.</p>	<p><b>€2.5K.</b></p> <p>Costs to be determined based on findings of ongoing monitoring conducted at the site.</p>

**Table 8.2: Overall Environmental Liabilities and Estimated Costs (continued)**

Potential Contamination Issue	Site Sensitivity	Recommendation Action	Estimated Costs
<p>Materials handling and storage shortcomings were observed.</p> <p>All used and disused underground storage tanks (slurry tank previously used to store wastewater) should be decommissioned.</p> <p>The integrity of fuel storage bund adjacent to the transfer building and the oil storage bund to the rear of the site garage has not been tested.</p>	<p>Inadequate secondary containment of potentially polluting substances within the site garage area. In case of a leak or spillage, potentially polluting substances may discharge to ground (thereby resulting in potential contamination of groundwater quality and/or soils) or enter the on-site surface water drainage system resulting in potential contamination of the receiving environment: Potential liability with respect to Water Pollution Acts 1977 and 1990 and the Fisheries Consolidation Act 1959.</p> <p>Leakage from these storage areas may pose threat to the underlying ground water beneath the site.</p> <p>Small remaining truck parking area and plant storage area is surfaced with hardcore material.</p>	<p>Implement bunding measures required to improve storage facilities within the site garage and provide adequate secondary containment throughout the site, and recommend proposals for the decommissioning of disused underground/over ground storage tanks.</p> <p>Undertake a bund integrity assessment of all bunds constructed at the site to establish that all other bunds constructed at the site provide completely sealed containment.</p> <p>When completed, it is recommended that any defects be remedied, and the effectiveness of the remedial works be checked when completed.</p> <p>The remaining hardcore surfaced area of the site should be paved with concrete hardstanding to render the site yard impervious.</p>	<p><b>€5K</b></p> <p>To be determined based on findings of bunding assessment.</p> <p><b>€2K</b></p>



Potential Contamination Issue	Site Sensitivity	Recommendation Action	Estimated Costs
<p>There is currently little provision for the containment of firewater that may be generated at the site in the event of an accident/emergency situation (fire event) at the site.</p>	<p>In the event of fire at the site, firewater and/or extinguishers used to fight the fire may potentially become contaminated and discharge to the surface water drainage system at the site resulting in pollution of the receiving environment.</p>	<p>Provide for the costs associated with the implementation of the recommendations of the firewater retention risk assessment.</p> <p>Removal and safe disposal of firewater remaining on-site following an emergency event.</p>	<p>To be determined based on further assessment of the Fire Water Retention Risk Assessment. ~€70K €40K</p>
<p>In the event of cessation of activities at the site, any residual waste would need to be removed and disposed of in an appropriate manner.</p>	<p>Removal and safe disposal of waste remaining on-site following an emergency event (e.g. fire or spillage event) or decommissioning and closure of the site.</p>	<p>Provide for the cost for the clean-up of the maximum amount of waste that may be stored on-site at any given time, i.e. removal, transportation and disposal for total quantity of waste of up to 500 tonnes.</p>	<p>€110K</p>

### 8.3 DECOMMISSIONING/CLOSURE OF THE SITE

Environmental liabilities cover in the event of decommissioning/closure of the site should account for the cost for the clean-up and removal of the maximum amount of waste that may be stored on-site at any given time. The maximum amount of waste that can be stored on site at any one time is approximately 500 tonnes. The site remains low risk with respect to potential soil and groundwater contamination as, although there has been an increase in the tonnage of waste materials processed at the facility, there have been no significant changes in nature of on-site waste management practices.

Implementation of the recommendations specified within the Fire Water Retention Risk Assessment will ensure that inputs to, and subsequent contamination of groundwater, surface water, air and soil environments do not occur from accident or emergency conditions (fire event) at the facility. The costs associated with the implementation of the recommendations of the firewater retention risk assessment (i.e. installation of a static fire fighting water storage tank at the site and provision of hose reels throughout the facility) are not quantifiable at present. The costs associated with the installation of the fighting water storage tank and the firewater retention pond/storage tanks are estimated at approximately €70,000.

The costings associated with the dismantling of infrastructure arising from malicious damage or decommissioning and closure of the waste transfer and recycling facility is already covered within the existing site's general insurance cover. However, it is contended that the site infrastructure would not require dismantling on closure as the general buildings and offices could be converted to use for agricultural practices or sold as part of any future on-site industrial developments at the site.

The cost for the clean-up (removal/transport and disposal by Mr. Binman Ltd.) of the maximum amount of waste that may be stored on-site at any given time at the Mr. Binman Ltd., waste transfer facility (500 tonnes) is estimated at a maximum of €110,000; 500 tonnes of waste @ €220 per tonne. It is recommended that the groundwater monitoring programme should be continued for a period of at least 1 year after closure of the site, in the event of decommissioning/closure of the Mr. Binman Ltd. Facility, estimated cost of €2,500.

<b>Cost</b>	<b>€182,500</b>
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## 8.4 EMERGENCY EVENT

Environmental liabilities cover in the event of an accident/emergency event at the site should account for the cost for the removal of contaminated fire-water, if generated (for fire event only). Implementation of the recommendations specified within the Fire Water Retention Risk Assessment will ensure that inputs to, and subsequent contamination of groundwater, surface water, air and soil environments do not occur from accident or emergency conditions (fire event) at the facility. The costs associated with the implementation of the recommendations of the firewater retention risk assessment (i.e. installation of a static fire fighting water storage tank at the site and provision of hose reels throughout the facility) are not quantifiable at present. The costs associated with the installation of the fighting water storage tank and the firewater retention pond/storage tanks are estimated at approximately €70,000.

The maximum volume of contaminated fire-water (should it be produced) that may be generated during a worst case scenario fire event at the Mr. Binman Ltd. waste transfer facility is 140.4 m<sup>3</sup> (approximately 140 m<sup>3</sup>). Subsequent to the review of results of the water quality composition of the fire-water collected within the fire-water retention facility, uncontaminated fire-water will be discharged to the surface water drainage network, while contaminated fire-water will be discharged to the foul sewer or transported off-site for treatment/disposal by an appropriate waste contractor. Given that a specific limit value for the COD parameter is not currently quantified for a domestic type fire or a fire in industrial offices/warehouses, etc., it is assumed that the COD associated with the fire-water generated from a typical domestic type fire could be in the range of >1000 mg/l. The cost for the removal/transport (estimated at €635 per 20 m<sup>3</sup>:  $€635 \times 140 \text{ m}^3 / 20 \text{ m}^3 = €4,550$ ) and disposal (estimated at €205 per m<sup>3</sup>:  $€205 \times 140 \text{ m}^3 = €35,000$ ) of this volume of contaminated firewater is estimated at €39,550 (€4,550 + €35,000), i.e., approximately €40,000. It is recommended that the groundwater monitoring programme should be continued for a period of at least 1 year after closure of the site, in the event of an accident/emergency event at the Mr. Binman Ltd. Facility, estimated cost of €2,500.

<b>Cost</b>	<b>€112,500</b>
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## 8.5 SUMMARY

It is contended that the environmental liability aspects identified in Sections 6.2 – 6.3 should be considered for the following situations: -

**Scenario 1:** Company remains solvent and continues to operate.

**Scenario 2:** Company experiences financial difficulties and ceases to operate.

**Scenario 1:** In the event of a fire outbreak at the site, the site's existing general insurance policy will cover the costings associated with the reconstruction of on-site damaged buildings and infrastructure arising from a fire event. There will be no cost implications for the disposal of waste on-site as the customer will already have paid the company for this waste handling/disposal service. Therefore, it is likely that the company will remain solvent and continue to operate after the fire-event i.e., fire-outbreak and site closure unlikely to occur simultaneously. The cost of liabilities cover for Scenario 1 should provide for the containment, removal/transport and disposal of firewater in addition to undertaking the groundwater monitoring programme for a period of 1 year; and would amount to **€112,500** (excluding VAT) (refer to Section 6.3).

**Scenario 2:** In the event that the company were to experience financial difficulties and cease to operate then a worst case scenario will be assumed i.e. that the costs for the clean-up and removal of the maximum amount of waste that may be stored on-site at any given time will not be covered by fees previously paid by the customer for the waste handling/disposal service. The cost of liabilities cover for Scenario 2 should provide for the implementation of the recommendations of the firewater retention risk assessment, and the removal and safe disposal of waste remaining on-site following closure of the site and the costs associated with undertaking the groundwater monitoring programme for a period of 1 year; and would amount to **€182,500 (excluding VAT)** (refer to Section 6.1).

In calculating the value of financial provision for the site the sum required will be based on the greater of the costs for the two scenarios identified i.e. Scenario 2. In summary, it is considered that this reviewed environmental liabilities risk assessment requires the financial provision of a preliminary environmental liabilities pollution cover of **€182,500 (excluding VAT)** (in the form of bonding, financial allocation or an insurance premium) which, based on current information available, is expected to cover the environmental liabilities arising at the site in respect of the operational and decommissioning phases, i.e. will guarantee that the liabilities arising from:

Any environmental accident occurring during the operational phase of the site, and the decommissioning and closure of the waste transfer facility are financially provided for.

# Appendix 1

**Copy of Certificates of integrity for fuel storage tank, ad blue tank and  
underground waste water pipe work**



Seamus Leahy  
Group Environment Manager  
Mr Binman Ltd  
Luddenmore  
Grange  
Kilmallock  
Co. Limerick

14<sup>th</sup> July 2010

Dear Seamus,

Re: **Fuel Storage Tanks**

This is to certify that I have carried out a 24hr integrity test to bund of fuel storage tanks at Mr Binman, Luddenmore, Grange, Kilmallock, Co Limerick and found bund to be in perfect condition.

Yours sincerely,

  
Joe Sheahan



Seamus Leahy  
Group Environment Manager  
Mr Binman Ltd  
Luddenmore  
Grange  
Kilmallock  
Co. Limerick

12<sup>th</sup> August 2010

Dear Seamus,

**Re: Ad-Blue Tanks**

This is to certify that I have carried out a 24hr integrity test to bund of fuel storage tanks at Mr Binman, Luddenmore, Grange, Kilmallock, Co Limerick and found bund to be in perfect condition.

Yours sincerely,

  
Joe Sheahan



Seamus Leahy  
Group Environment Manager  
Mr Binman Ltd  
Luddenmore  
Grange  
Kilmallock  
Co. Limerick

31<sup>st</sup> August 2010

Dear Seamus,

**Re: Underground waste water pipework integrity test**

This is to certify that all underground waste water pipework has been tested including all recent modifications carried out to pipework in northwest, east and south of the main recycling facility at Luddenmore, Grange, Kilmallock. All pipework was found to be in perfect condition.

Yours sincerely,

Joe Sheahan



# **Appendix 2**

## **Copy of Electronic AER Returns Worksheet**

Transfer Destination	European Waste Code	Hazardous	Quantity (Tonnes per Year)	Description of Waste	Waste Treatment Operation	Method Used		Location of Treatment	Name and Licence/Permit No of Recover/Disposer
						M/C/E	Method Used		
To Other Countries	15 01 07	No	13090.46	glass packaging metallic packaging (aluminium cans)	R5	M	Weighed	Abroad	Quinn Glass Ltd ,NR092005561
To Other Countries	15 01 04	No	153.96	paper and cardboard packaging	R4	M	Weighed	Abroad	Novelis UK Ltd,BL6802
Within the Country	15 01 01	No	3368.94	other wastes (including mixtures of materials) from mechanical treatment of wastes other than those mentioned in 19 12 11	R3	M	Weighed	Offsite in Ireland	Irish Packaging & Recycling Ltd ,WPR 021/2
Within the Country	19 12 12	No	107.56	(oversize)	D1	M	Weighed	Offsite in Ireland	North Tipperary County Council ,W0078-01
To Other Countries	15 01 01	No	636.04	paper and cardboard packaging	R3	M	Weighed	Abroad	Highlander International Recycling Ltd ,SCO/044794/CB
To Other Countries	15 01 04	No	49.41	metallic packaging (Steel cans)	R4	M	Weighed	Abroad	Highlander International Recycling Ltd ,SCO/044794/CB
To Other Countries	15 01 01	No	240.0	paper and cardboard packaging	R3	M	Weighed	Offsite in Ireland	Boost recycling,CB/ZP3714Q

Within the Country	15 01 02	No	19.1	plastic packaging other wastes (including mixtures of materials) from mechanical treatment of wastes other than those mentioned in 19 12 11	R3	M	Weighed	Offsite in Ireland	Panda waste services,W0140-03
Within the Country	19 12 12	No	8414.14	(oversize) other wastes (including mixtures of materials) from mechanical treatment of wastes other than those mentioned in 19 12 11	D1	M	Weighed	Offsite in Ireland	Greenstar Connaught regional residual landfill,W0178-01
Within the Country	19 12 12	No	8749.02	(undersize) mixed construction and demolition wastes other than those mentioned in 17 09 01, 17 09 02 and 17 09 03	D1	M	Weighed	Offsite in Ireland	Greenstar Connaught regional residual landfill,W0178-01
Within the Country	17 09 04	No	557.67	combustible waste (refuse derived fuel)	D1	M	Weighed	Offsite in Ireland	Greenstar Connaught regional residual landfill,W0178-01
Within the Country	19 12 10	No	14458.7		R13	M	Weighed	Offsite in Ireland	Mr. Binman Ltd ,WP100A

Within the Country	20 01 39	No		479.04	plastics	R3	M	Weighed	Abroad	Asia Global Trage LTD.,TNE/377194/B
Within the Country	20 01 08	No		1035.18	biodegradable kitchen and canteen waste	R3	M	Weighed	Offsite in Ireland	O' Toole Composting ,WP01/07
Within the Country	15 01 03	No		139.98	wooden packaging	R3	M	Weighed	Offsite in Ireland	Eirebloc Ltd.,CK (s) 503/07
To Other Countries	20 01 39	No		166.9	plastics	R3	M	Weighed	Abroad	Alternative Waste Solutions Ltd.,YNA/838807/CB
To Other Countries	15 01 04	No		25.34	metallic packaging (Steel cans)	R4	M	Weighed	Abroad	Alternative Waste Solutions Ltd.,YNA/838807/CB
Within the Country	15 01 03	No		300.64	wooden packaging	R3	M	Weighed	Onsite in Ireland	Finsa Forest Products Ltd.,P00 22-02
To Other Countries	15 01 04	No		12.32	metallic packaging (Aluminium cans)	R4	M	Weighed	Abroad	WRC recycling,SEPA WMX/W/26455
To Other Countries	15 01 04	No		173.9	metallic packaging (Steel cans)	R4	M	Weighed	Abroad	WRC recycling,SEPA WMX/W/26455
To Other Countries	20 01 39	No		117.16	plastics	R3	M	Weighed	Abroad	WRC recycling,SEPA WMX/W/26455
To Other Countries	15 01 04	No		34.94	metallic packaging (Steel cans)	R4	M	Weighed	Abroad	Novelis UK Ltd,BL6802
To Other Countries	15 01 02	No		224.16	plastic packaging	R3	M	Weighed	Abroad	Choice Waste Management Limited,CB/W/E5536VU
To Other Countries	15 01 04	No		13.2	metallic packaging (aluminium cans)	R4	M	Weighed	Abroad	Asia Global Trage LTD.,TNE/377194/B

Within the Country	19 12 12	No	147.98	other wastes (including mixtures of materials) from mechanical treatment of wastes other than those mentioned in 19 12 11 (oversize)	D1	M	Weighed	Offsite in Ireland	Greenstar West Dublin, W0188-01
Within the Country	19 12 12	No	222.62	other wastes (including mixtures of materials) from mechanical treatment of wastes other than those mentioned in 19 12 11 (undersize)	D1	M	Weighed	Offsite in Ireland	Greenstar West Dublin, W0188-01
Within the Country	19 12 12	No	764.16	other wastes (including mixtures of materials) from mechanical treatment of wastes other than those mentioned in 19 12 11 (oversize)	D1	M	Weighed	Offsite in Ireland	Greenstar limited, WL53-03

Within the Country	19 12 12	No		2926.64	other wastes (including mixtures of materials) from mechanical treatment of wastes other than those mentioned in 19 12 11 (undersize)	D1	M	Weighed	Offsite in Ireland	Greenstar limited,WL53-03
Within the Country	19 12 12	No		3699.5	other wastes (including mixtures of materials) from mechanical treatment of wastes other than those mentioned in 19 12 11 (oversize)	D1	M	Weighed	Offsite in Ireland	Greenstar Limited,W146-01
Within the Country	19 12 12	No		1647.48	other wastes (including mixtures of materials) from mechanical treatment of wastes other than those mentioned in 19 12 11 (undersize)	D1	M	Weighed	Offsite in Ireland	Greenstar Limited,W146-01

Within the Country	20 01 08	No		489.6	biodegradable kitchen and canteen waste	R3	M	Weighed	Offsite in Ireland	Acorn Recycling,W0249-01
Within the Country	17 02 01	No		212.4	wood	R3	M	Weighed	Offsite in Ireland	Acorn Recycling,W0249-01
Within the Country	19 12 12	No		17593.48	other wastes (including mixtures of materials) from mechanical treatment of wastes other than those mentioned in 19 12 11 (oversize)	D1	M	Weighed	Offsite in Ireland	Limerick County Council,WL0017-04
Within the Country	19 12 12	No		20454.15	other wastes (including mixtures of materials) from mechanical treatment of wastes other than those mentioned in 19 12 11 (undersize)	D1	M	Weighed	Offsite in Ireland	Limerick County Council,WL0017-04
To Other Countries	15 01 01	No		384.82	paper and cardboard packaging	R3	M	Weighed	Abroad	Marwin Environmental Trading Ltd , IRE/G027/08
To Other Countries	15 01 04	No		733.6	metallic packaging (steel cans)	R4	M	Weighed	Abroad	Marwin Environmental Trading Ltd , IRE/G027/08

To Other Countries	15 01 01	No				783.2	paper and cardboard packaging	R3	M	weighed	Abroad	Peute Papier Recycling, Authorised by Milieudienst Zuid-Holland Zuid Postbus 550 3300 AN DORDRECHT Gebiedsteam Dordrecht
Within the Country	15 01 07	No				2758.3	glass packaging	R5	M	weighed	Offsite in Ireland	Tullagower Quarries Ltd., 044/08/WPT/CL
Within the Country	16 10 02	No				253.11	aqueous liquid wastes other than those mentioned in 16 10 01	R3	M	weighed	Offsite in Ireland	Limerick County Council, D0019-01
Within the Country	20 01 35	Yes				5.08	discarded electrical and electronic equipment other than those mentioned in 20 01 21 and 20 01 23 and 20 01 23 containing hazardous components	R4	M	weighed	Offsite in Ireland	KMK metals Recycling Ltd., W0113-03
Within the Country	20 01 35	Yes				1.84	discarded electrical and electronic equipment other than those mentioned in 20 01 21 and 20 01 23	R4	M	weighed	Offsite in Ireland	Electrical Waste Management Ltd., WFP-DS-09-0012-01



To Other Countries	15 01 01	No				915.94	containing hazardous components paper and cardboard packaging	R3	M		weighed	Abroad	NV VOPC,TNE/377194/B Mark Lydon Paper Enterprises (uk) Limited,IRE/G021/08						
To Other Countries	15 01 01	No				265.42	paper and cardboard packaging	R3	M		weighed	Abroad							
Within the Country	16 05 05	No				1.64	gases in pressure containers other than those mentioned in 16 05 04	R4	M		weighed	Offsite in Ireland	Calor Gas ..						
Within the Country	16 01 03	No				11.92	end-of-life tyres	R4	M		weighed	Onsite in Ireland	Crumb Rubber .,WFP-DC-08-1136						
Within the Country	16 06 01	Yes				1.3	lead batteries	R6	M		weighed	Offsite in Ireland	Enva,W0184-1						
Within the Country	20 01 40	No				12.58	metals	R4	M		weighed	Offsite in Ireland	Erin Recyclers Ltd.,WPSO-05-01						

Within the Country	16 10 02	No			aqueous liquid wastes other than those mentioned in 16 10 01	R3	M	weighed	Offsite in Ireland	Limerick City Council,D0013-01
Within the Country	17 02 01	No	3654.21		wood	R3	M	weighed	Offsite in Ireland	Medite Europe Ltd.,IPPC P0027-02
Within the Country	20 01 40	No	944.86		metals	R4	M	weighed	Offsite in Ireland	MSM Recycling Co. Ltd.,W0079-01
					other wastes (including mixtures of materials) from mechanical treatment of wastes other than those mentioned in 19 12 11					
Within the Country	19 12 12	No	4193.88	D1	(undersize)		M	weighed	Offsite in Ireland	Neiphin trading ltd.,,
Within the Country	20 01 39	No	119.98	R3	plastics		M	weighed	Offsite in Ireland	Mr. Binman Clearpoint,WFP-TS-08-0079-01
Within the Country	20 01 01	No	223.68	R3	paper and cardboard		M	weighed	Offsite in Ireland	Mr. Binman Clearpoint,WFP-TS-08-0079-01
Within the Country	20 03 01	No	12792.76	R3	mixed municipal waste		M	weighed	Offsite in Ireland	Mr. Binman Clearpoint,WFP-TS-08-0079-01
Within the Country	17 02 01	No	25.28	R3	wood		M	weighed	Offsite in Ireland	Mr. Binman Clearpoint,WFP-TS-08-0079-01