

# **PADRAIG THORNTON WASTE DISPOSAL LTD**

## **DUNBOYNE CIVIC AMENITY AND MATERIALS RECYCLING FACILITY** **Waste License W0206-01**



## **ANNUAL ENVIRONMENTAL REPORT 2011**

**Submitted March 2012**

*Prepared by Mercedes Kavanagh- Environmental Manager*

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## **1. Introduction**

Padraig Thornton Waste Disposal Limited (PTWDL) operates waste license (W0206-01) which was issued by the Environmental Protection Agency (EPA) on the 25<sup>th</sup> July 2005 to operate a Civic Amenity and Materials Recycling Facility. In accordance with the requirements of Condition 11.9 and Schedule D of the waste License, an Annual Environmental Report (AER) for the facility must be submitted to the EPA not later than March 31<sup>th</sup> of each year for the preceding calendar year.

This AER is for the period from the 1<sup>st</sup> January 2010 to 31<sup>st</sup> December 2011.

The facility is located at:-

Padraig Thornton Waste Disposal Ltd (PTWDL) T/A Thornton Recycling,  
Civic Amenity and Materials Recycling Facility,  
Dunboyne Industrial Estate,  
Dunboyne,  
Co. Meath.

The contact details for the facility are as follows:

Telephone: 01 8255666/01 6235133

Fax: 01 8013896

EPA Site Contact: Tommy Rogers/Mercedes Kavanagh

The national grid reference for the facility is 3011E, 2428N.

The address and contact details for the facility operator's headquarters are:

Thornton Recycling Head Office,  
Unit S3B Henry Road,  
Parkwest Business Park,  
Dublin 12.

Telephone: 01-6235133

Fax: 01-6235131

## **2. Description of the Site and Licensed Waste Activities**

The facility is located in the Dunboyne Industrial Estate, which is 600m north of Dunboyne village on the R157 road. The site occupies an area of approximately 1.6 hectares. Access to the facility is via the Dunboyne Business Park.

The surrounding land is predominately agricultural pastureland, with the remaining land consisting of light industrial processes within the Dunboyne Industrial Estate. The nearest residential area is Lutterell Hall, which is located approximately 200m southwest of the facility. In 2009 the new R157 was constructed north of the facility.

The licensed waste handling activities, permitted under the Third Schedule<sup>1</sup> and Fourth Schedule<sup>2</sup> of the waste Management Act 1996 to 2003 for the facility are detailed below:

*Third Schedule, Class 11:* Blending or mixture prior to submission to any activity referred to in a preceding paragraph of this Schedule.

*Third Schedule, Class 12:* Repackaging prior to submission to any activity referred to in a preceding paragraph of this schedule.

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

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

*Fourth Schedule, Class 3:* Recycling or reclamation of metal and metal compounds.

*Fourth Schedule, Class 4:* Recycling or reclamation of other inorganic materials.

*Fourth Schedule, Class 12:* Exchange of waste for submission to any activity referred to in a preceding paragraph of this schedule.

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

### **3. Waste Management Record**

Waste is checked and documented at the weighbridge in accordance with our waste license W0206-01 and waste acceptance procedure EP13 (Appendix 1). Waste is then tipped into the processing building where it is inspected and segregated both manually and then mechanically or bulked for further processing at the Killeen Road facility in Dublin, W0044-02. Segregated materials are stored in designated bays where they are bulked up before being reloaded into 40 foot trailers generally for transport to either licensed disposal facilities or to an approved recycling or recovery facility for further processing. Should any non-conforming waste come to the attention of our staff it is either rejected before collection by the driver or segregated and quarantined until a safe and environmental friendly disposal route is arranged by the environmental team. All non-conforming wastes are handled in accordance with the Waste Acceptance Procedure for Dunboyne facility EP 13.

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<sup>1</sup> Third Schedule- Waste Disposal Activities

<sup>2</sup> Fourth Schedule- Waste Recovery Activities

The weighbridges were verified by Precia Molen on the 28<sup>th</sup> June 2011 (In Bridge) and the 7<sup>th</sup> July 2011 (Out Bridge) and weighbridge verification test reports were issued. Copies of the reports for both weighbridges are contained within Appendix 2 of this report.

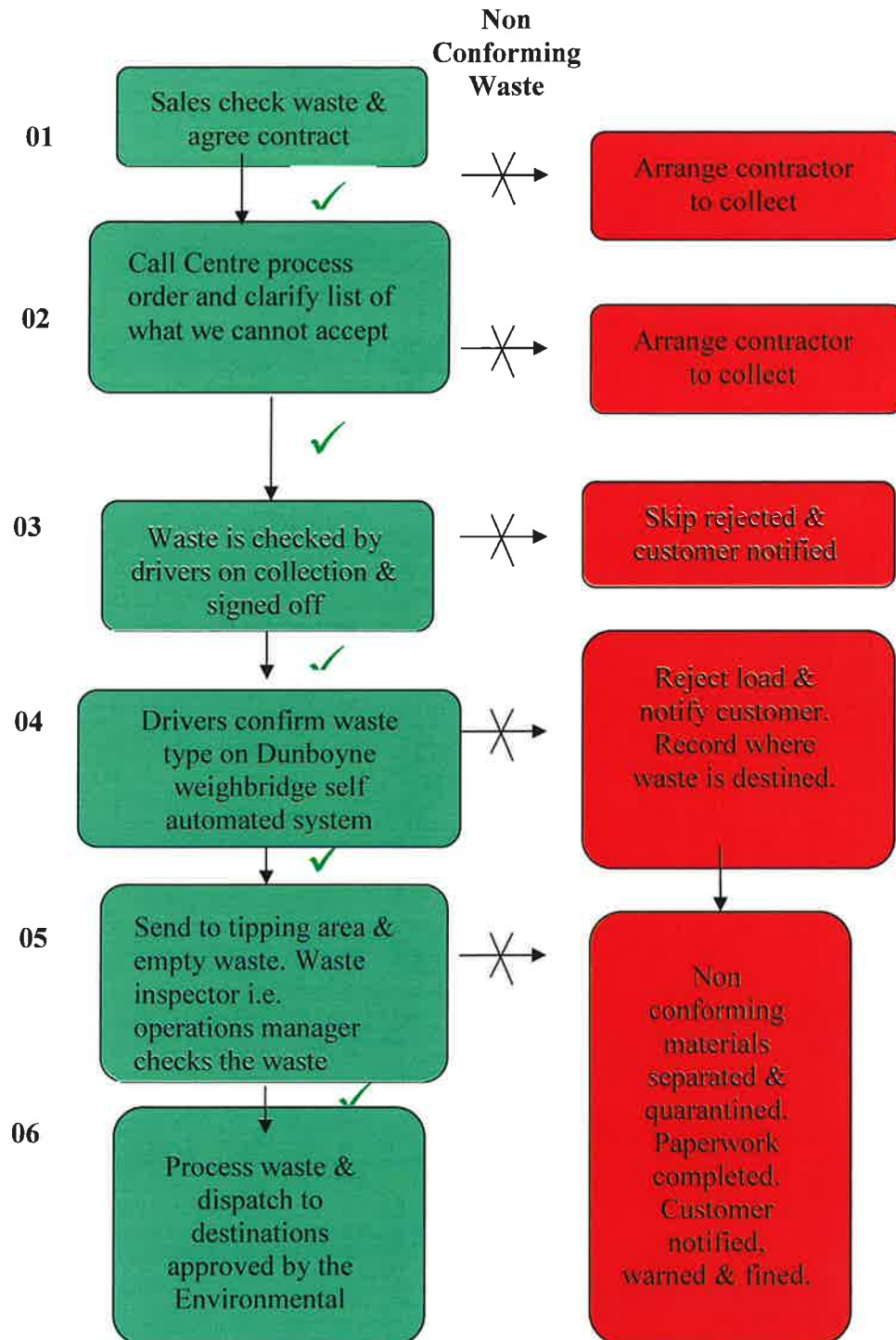
The facility also has a civic amenity site in which recyclates are accepted from members of the public. Weights of the material accepted are calculated from the weights of the bulked loads before they are consigned from the facility and not as they are delivered to the facility.

Thorntons Recycling maintained ISO certification for ISO 14001 Environmental, ISO 9001 Quality and OHSAS 18001 Health and Safety at the Dunboyne facility; a surveillance audit was carried out by Certification Europe on the 30<sup>th</sup> June 2011 which raised no major or minor non-conformances in relation to the system at the facility. Integrated management procedures are available for inspection at any of the company offices on a designated drive called the X Drive IMS drive.

### **3.1 Waste Acceptance**

Figure 1 is a simplified diagram explaining our waste acceptance procedures at Thorntons Recycling Dunboyne. The waste acceptance procedure of the facility is detailed in EP 13 (Copy enclosed in Appendix 1).

**Figure 1: Thorntons Recycling Waste Acceptance Diagram**



### 3.2 Waste Received 2011

A total of 14,437.64 tonnes of waste was received at the Materials Recovery Facility (MRF) between 1<sup>st</sup> January 2011 and 31<sup>st</sup> December 2011. A total of 214.41 tonnes of recyclable material was accepted at the civic amenity (CA) site during this year giving a total of 14,652.05 tonnes for the MRF and the CA site. A summary of the waste that was accepted during the year is detailed in Table 1 and also in Appendix 3 of this report.

**Table 1: Summary of Waste accepted at the MRF during 2011, by total tonnage and percentage of the total received**

EWC	Material Received	Tonnes	%
20 03 07	Bulky MMW/ Skip Waste	10430.80	72.75%
15 01 03	Wood Packaging	404.95	2.80
17 02 01	Wood C&D Waste Wood	48.04	0.33
19 12 07	Wood processed or chipped	19.74	0.14
03 01 05	Wood Waste from ,Manufacturing	17.30	0.12
17 03 03	Mixed Plastic Hard	4.81	0.03
20 03 01	Mixed Dry Recyclables	3.16	0.02
17 01 07	Clean Construction Rubble	84.46	0.58
17 05 04	Soil and Stone	422.76	2.93
17 09 04	Mixed C&D Waste	2880.16	19.95
19 12 02	Ferrous Metal Mixed Steel	111.84	0.77
16 01 18	Non - Ferrous Metal	9.62	0.07
	<b>Total Into MRF Site</b>	<b>14,437.64</b>	<b>100%</b>

The majority of the waste accepted at the site consists of Bulky/Skip Waste (Bulky MMW) and Mixed Construction and Demolition Waste (Mixed C&D).

### 3.3 Waste Consigned

A total of 15,085.29 tonnes of waste material was consigned from the facility during the reporting period of 2011. This tonnage includes tonnage which came in through the civic amenity site. A complete breakdown of the materials and waste removed is provided in Appendix 3 of this report.



**Table 2: Summary of Waste consigned from the site during 2011**

<b>EWC</b>	<b>Materials Consigned</b>	<b>Tonnes</b>
19 12 02	Mixed Metals	364.40
17 01 07	Clean Construction Rubble	1799.50
17 05 04	Soil and Stones	206.56
19 12 07	Wood Processed or Chipped	696.86
15 01 07	Glass Packaging	51.78
19 12 09	Trommel Fines	5222.54
20 03 01	Mixed Dry Recyclables	132.02
15 01 02	Plastic Bottles	5.46
15 01 04	Metallic Packaging Aluminum	2.02
20 03 07	Mixed Municipal Waste	5806.84
17 09 04	Mixed Construction and Demolition Waste	732.28
17 03 03	Mixed Hard Plastics	38.88
16 02 11	WEEE – Fridges and Freezers	7.40
20 01 35	WEEE – Mixed	18.76
<b>Total Consigned from MRF and CA Site</b>		<b>15,085.29</b>

Due to the downturn in the Construction and Demolition trade and commercial/ industrial and household skip waste the facility experienced a decrease in the amount of C & D and Bulky MMW for processing in 2011. In order to ensure that the facility was operated economically, processing on site was minimized and material was bulked and sent to the Killeen Road, waste license W0044-02, for further processing, some 40.72% of material which entered the Dunboyne facility was reprocessed at the Killeen Road in the high specification CID line. This processing line is currently producing Solid Recovered Fuel (SRF) for use in the cement manufacturing process in Ireland. Table 3 summarizes recycling and recovery rates, clearly showing that only 2.63% of the waste which entered the facility was sent to landfill in 2011. This would include bulky wastes such as mattresses, sofas etc. not suitable for re processing in the production of SRF at the Killeen Road facility.

**Table 3: Recycling and Recovery rates for 2011**

<b>Waste Statistics 2011</b>	<b>Tonnes</b>	<b>%</b>
Total Waste Out	15,085.29	100%
Total Waste to Landfill	396.28	2.63%
Total Waste Recovered	7,228.60	47.92%
Total Waste Recycled	1,317.57	8.73%
Waste to Killeen Road for reprocessing Waste License W0044-02	6,142.84	40.72%

#### 4. Dust and Particulate Matter Monitoring

Quarterly reports for dust and particulate matter PM10 were submitted to the Agency for 2011 in April (206-01/11/MK/04), July (206-01/11/MK/05), Oct (206 01/10/MK/09) and Jan 2011 (206-01/12/MK/01).

##### 4.1 Dust Monitoring

In compliance with Condition C.6 of waste license W0206-01 dust deposition and particulate matter (PM10) monitoring was carried out quarterly at the facility. The monitoring locations are shown in Appendix 4.

Dust deposition monitoring was carried out by an independent consultant, Fehily Timoney and Company during 2011.

Dust deposition monitoring was carried out at four locations (D1-D4) using Bergerhoff type gauges placed at a height of at least 1.5 metres above the ground for a continuous period of 30 days. The results of the dust deposition are shown in Table 4 below.

**Table 4: Dust deposition results for each dust monitoring location per quarter during the year 2011**

Dust Monitoring Dunboyne					
Monitoring	Quarter 1	Quarter 2	Quarter 3	Quarter 4	ELV
Locations	mg/m <sup>2</sup> /day				
D1	50	196	<10	88	350
D2	331	669	275	75	350
D3	88	347	149	140	350
D4	<10	202	166	68	350

The dust deposition results above show that there was one exceedance in the emission limit value for dust deposition in 2011 at the facility. This was at monitoring location D2 and was reported to the EPA as an incident on the 11<sup>th</sup> July 2011 and a full detailed report submitted to the EPA. It was concluded by an independent dust report carried out that this elevation was related to the presence of overgrown vegetation and trees beside this monitoring location. During the sampling period it was noted that it was possible that dust was settling on the vegetation and trees and then during heavy rainfall during the monitoring period was washed into the dust pots.

As stated previously activity at the site was limited during 2011 and operations were carried out indoors. PTWDL understand the importance of maintaining dust deposition levels below the emission limit value of 350mg/m<sup>2</sup>/day and will continue to do so during 2012.

## 4.2 Particulate Matter Monitoring

Particulate matter monitoring was carried out by an independent consultant, Fehily Timoney & Co., at four locations (D1-D4) using PM10 filters for a period of 24 hours at each location. The results of the PM10 monitoring are shown in Table 5. All results were below the level of 50ug/m<sup>2</sup>/day as set down in Schedule B.5. of the waste license W9206-01.

**Table 5: Particulate Matter monitoring results for each quarter during 2011 at four locations on the site boundary**

PM10 Monitoring Dunboyne					
Monitoring	Quarter 1	Quarter 2	Quarter 3	Quarter 4	ELV
Locations					mg/m <sup>3</sup> /day
D1	13.1	8.2	*	4.7	50
D2	33.2	14.6	9.4	14.0	50
D3	15.9	23.1	13.9	31.0	50
D4	31.4	13.4	17.4	11.9	50
* Battery failure on sampling					

## 5 Noise Monitoring

In compliance with Schedule B.4 and C.5 of waste license W0206-01 noise monitoring was carried out bi-annually at the facility. Noise monitoring was carried out by trained staff of Thorntons' Environmental Department. As the facility only operates during the day, only daytime monitoring was carried out. The monitoring locations are contained within Appendix 5 of this report.

Daytime monitoring was carried out in:

- July 2011 (Reference report 12<sup>th</sup> July 2011, 206-01/11/MK/06)
- December 2011(Reference report 26<sup>th</sup> January 2011, 206-01/12/MK/02)

Monitoring was carried out at six sampling locations; four locations (NP1-NP4) are to determine the noise levels at the boundary during daytime operations and two locations (NP5 & NP6) are to determine the noise levels at the nearest noise sensitive receptors. The results are tabulated in Table 6 for 2011 and show the recorded noise levels during the respective noise monitoring periods.

The analysis of the results from the noise monitoring shows that the noise levels at the noise sensitive locations are not adversely impacted upon by the site activities in the reports submitted to the EPA in 2011.

**Table 6: Bi-annual noise monitoring results for the period of 2011 at 6 locations**

Monitoring Locations	Half 1 { 5th July 2011 }			Half 2 {13th and 14th December 2011 }			ELV (dB)
	LA, eq (dB)	LA 10 (dB)	LA90(dB)	LA, eq (dB)	LA 10 (dB)	LA90(dB)	
NP1	67.1	69.3	55.2	48.8	66.5	60.5	n/a
NP2	57.6	57.5	57.1	51.2	58.0	56.5	n/a
NP3	61	58.5	58.1	61.6	63.0	57.5	n/a
NP4	56.8	59.2	50.8	51.9	51.6	49.4	n/a
NP5	51.8	57.5	49.1	50.4	50.9	47.6	55
NP6	58.5	58.1	49.4	63.7	63.9	57.1	55

## 6. Emissions to Surface Water and Foul Water

In compliance with schedule B.3, C.2.3, C.3.1 and C.3.2 monitoring is carried out on the foul and surface water. The monitoring locations for the foul (FW1) and surface water (SW1, SW2, and SW3) are shown in Appendix 6.

### 6.1 Surface Water monitoring

The waste license W0206-01 requires that weekly monitoring be carried out at SW3 where the yard runoff is discharged to the local surface water drain after it passes through a silt trap and oil interceptor on site. As there are no emission limit levels contained within the license for surface water monitoring at SW3 additional monitoring points have historically been sampled upstream and downstream of the discharge point to identify any impact the site is having on the local surface water network.

Quarterly monitoring reports have been forwarded to the EPA in Quarter 1, 2, 3 and 4 of 2011 and detailed explanations of any elevated results have been given (Reference 12<sup>th</sup> April 2011 206-01/11/MK/04, 11<sup>th</sup> July 2011 206-01/11/MK/05, 19<sup>th</sup> October 2011 206-01/11/MK/09 and the 16<sup>th</sup> January 206-01/12/MK/01).

Monitoring point SW1 is located upstream, to the west of the site, at the point where the local drain enters the site boundary. Monitoring point SW2 is located downstream to the north of the site where the drain leaves the site boundary. A lot of construction works have been carried out adjacent to the site over the past few years and now a bypass road for Dunboyne village runs adjacent to the site and the surface water drain.

**Table 7: Surface water monitoring results per quarter of 2011 at monitoring location SW1**

<b>Surface Water 1 - Upstream Local Drain Enters the Site</b>					
<b>SW1</b>					
<b>Monitoring</b>	<b>Quarter 1</b>	<b>Quarter 2</b>	<b>Quarter 3</b>	<b>Quarter 4</b>	
<b>Parameters</b>	<b>22.03.11</b>	<b>17.06.11</b>	<b>23.09.11</b>	<b>29.11.11</b>	<b>Units</b>
BOD	2.74	7.36	9.54	2.7	mg/l
COD	9.93	50.7	37.6	28.4	mg/l
Suspended Solids	<2	15	15.5	7	mg/l
pH	8.06	8.59	7.44	7.67	Ph Unit
Orthophosphate (as P)	<0.03	<0.03	<0.03	<0.03	mg/l
Ammoniacal Nitrogen (as N)	<0.2	<0.2	<0.2	<0.2	mg/l
Copper	0.0163	*	*	*	mg/l
Zinc	*	*	*	*	mg/l

**Table 8: Surface water monitoring results per quarter of 2011 at monitoring location SW2**

<b>Surface Water 2 - Downstream Drain leaves the site</b>					
<b>SW2</b>					
<b>Monitoring</b>	<b>Quarter 1</b>	<b>Quarter 2</b>	<b>Quarter 3</b>	<b>Quarter 4</b>	
<b>Parameters</b>	<b>22.03.11</b>	<b>17.06.11</b>	<b>23.09.11</b>	<b>29.11.11</b>	<b>Units</b>
BOD	2.28	7.3	<2	<2	mg/l
COD	14.8	76.8	15	15.6	mg/l
Suspended Solids	5.5	90.7	2.5	2	mg/l
pH	8.21	8.04	7.39	7.65	Ph Unit
Orthophosphate (as P)	<0.03	0.0317	<0.03	<0.03	mg/l
Ammoniacal Nitrogen (as N)	<0.2	0.292	0.31	<0.2	mg/l
Copper	0.00993	*	*	*	mg/l
Zinc	*	*	*	*	mg/l

Monitoring point SW3 is the discharge point from the facility to the local drain. Due to SW3 being the discharge point a more detailed analysis of the water is carried out. The results for these are tabulated in Table 9.



**Table 9: Surface water monitoring results per quarter of 2011 at monitoring location SW3**

<b>Surface Water 3 - Discharge Pipe</b>				
<b>SW3</b>				
<b>Monitoring Parameters</b>	<b>Quarter 1 22.03.11</b>	<b>Quarter 2 17.06.11</b>	<b>Quarter 3 23.09.11</b>	<b>Quarter 4 29.11.11</b>
BOD	2.48	8.84	<2	2.05
COD	21.2	101	7.71	24.7
Suspended Solids	2.5	144	5	22
pH	8.06	7.96	7.92	none given
Orthophosphate (as P)	<0.03	0.0434	<0.03	<0.03
Nitrates (as NO3)	2.26	1.27	2.82	0.573
Ammoniacal Nitrogen (as N)	0.304	<0.2	0.329	<0.2
Copper	0.00262	0.00398	0.00158	0.00276
Zinc	0.00167	0.00687	0.00609	0.00306
Sulphates (as SO4)	136	26	95	21.4
Detergents MBAS	0.156	0.134	0.0538	<0.1
Phenols	<0.002	<0.002	<0.016	<0.002
Mineral Oils	0.00385	<1	<10	2.52
Chloride	15.7	3.6	18.7	4.9
Colour	5.96	5.91	2.66	4.7
Visual inspection	<b>Log maintained on site</b>			

The surface water is sampled weekly at S3 by an independent consultant. S3 is the point at which surface water discharges from the site to the drainage ditch. All results have been forwarded to the EPA in quarterly reports in 2011 and a full detailed weekly set of results for 2011 is contained within Appendix 6 of this report.

The EPA set trigger levels for this weekly sample in correspondence dated the 24<sup>th</sup> January 2011 (reference W0206-01/NC06NH). Samples taken on the 10<sup>th</sup> February 2011, 2<sup>nd</sup> March 2011 and 11<sup>th</sup> May 2011 were all reported as incidents to the EPA as they were above the new trigger levels set down by the EPA in 2011. Thorntons Recycling do not believe that these sample results are a true reflection of the discharge from the site as samples were taken from a holding tank which is operated under a trigger level switch. Only when the level of surface water in the tank gets to a certain amount will the switch be triggered to pump water into the drainage ditch. The EPA instructed that samples be taken from this location in their audit carried out in July 2010 even though historically since 2006 samples had always been taken directly from the discharge point at the drainage ditch.

Historically samples have been carried out quarterly at three locations even though the license only specifies one. These are carried out to ascertain if indeed the site is having any impact on the surface water drainage network. S1 sample was taken from the stream at the point of entry into the site (upstream). S2 sample was taken from the stream at the

point of exit from the site (downstream) and S3 sample was taken from the stream at the emission point from the site i.e. the outlet drainage pipe.

As may be noted the pH, COD and suspended solids are below trigger levels of pH 6-9, COD 30mg/l and Suspended Solids 25mg/l as set down by the EPA in correspondence dated the 24<sup>th</sup> January 2011 for the quarterly sample on S3 with the exception of quarter 2 which was elevated. Quarter 2's sample was taken on the 17<sup>th</sup> June 2011 and both the samples taken weekly on the week before i.e. the 15<sup>th</sup> of June and the week i.e. the 24<sup>th</sup> June were below trigger levels. It is possible that, as the sample was taken on the 17<sup>th</sup> June 2011 during heavy rainfall, the holding tank and the drainage ditch became agitated and as a result caused increased COD and SS in sampling results.

In conclusion based on weekly and quarterly results for 2011 the site was not having an adverse effect on the water quality of the drainage surface water network, in some cases the site actually positively influenced the outlet. For example in quarter 3 and 4 BOD, COD and Suspended solids are actually lower downstream than upstream after the discharge had entered from the site.

## 6.2 Foul Water Monitoring

In accordance with the waste license (W0206-01) under schedule B and C all emissions to sewer must be monitored. Emissions to sewer must be monitored on a quarterly basis.

Table 10 and Table

11 details foul water monitoring results for 2011.

**Table 10: Foul water monitoring results per quarter of 2011**

Foul Water Results Dunboyne 2011						
Monitoring Parameters	Quarter 1 22.03.11	Quarter 2 17.06.11	EPA Sample 06.05.11	Quarter 3 23.09.11	Quarter 4 29.11.11	ELV mg/l
BOD	145	2.98	19	11.1	6.05	1000
COD	326	9.88	21	310	48.3	3000
Suspended Solids	10	<4	130	7.5	18	1000
pH	8.06	8.69	8	7.40	7.36	6 - 10
Phosphorus (as P)	0.11	0.332	0.882	0.539	<0.03	20
Nitrates (as NO <sub>3</sub> )	0.712	8.53	1.2	4.87	1.65	100
Ammoniacal Nitrogen (as N)	3.5	7.68	9.37	3.62	0.36	10
Colour True	23.6	1.79	*	10.3	5.28	-
Mineral Oils	1.66	<1.0	*	*119	1.78	20
Sulphates (as SO <sub>4</sub> )	110	140	195	215	166	1000
Detergents MBAS	0.645	0.0693	*	0.0743	<0.1	20
Phenols	0.02	<0.002	*	<0.016	<0.002	0.1
Chloride	59.4	28.8	35.9	27.8	26.7	250
Heavy Metals	Below	Below	*	Below	Below	-
Organic Solvents	None	None	*	None	None	no visible film

**Table 11: Heavy Metal Results for Foul Water 2011**

<b>Foul Water Heavy Metal Results 2011</b>				
<b>Monitoring</b>	<b>Quarter 1</b>	<b>Quarter 2</b>	<b>Quarter 3</b>	<b>Quarter 4</b>
<b>Parameters</b>	<b>22.03.11</b>	<b>17.06.11</b>	<b>23.09.11</b>	<b>29.11.11</b>
Dissolved Zinc Low Level	2.55	15.9	32	29.5
Dissolved Mercury Low Level	<0.01	<0.01	<0.01	*
Dissolved Arsenic Low Level	1.35	1.55	2.84	1.67
Dissolved Boron Low Level	*	*	*	*
Dissolved Cadmium Low Level	<0.1	<0.1	<0.1	<0.1
Dissolved Chromium Low Level	9.48	5.95	8.27	5.23
Dissolved Copper Low Level	2.12	3.65	20.3	1.61
Dissolved Lead Low Level	0.093	0.085	0.142	0.192
Dissolved Nickel Low Level	5.09	2.89	3.17	3.79
Dissolved Selenium Low Level	6.52	12	17.5	4.18
<b>Units measured in ug/l</b>				

The discharge to the foul water for each quarter of 2011 was below the emission limit values set down by the waste license with the exception of mineral oils in quarter 3 of 2011. This sample was taken on the 23<sup>rd</sup> September and was the only parameter above emission limit values during this round of monitoring. Thorntons Recycling believed this result to be completely out of character with previous results and queried the result with the Laboratory who analyzed it. It was not reported to the EPA as an incident due to this query being raised and to the compilation of the quarterly report. We received an e-mail from the Laboratory confirming the result on the 18<sup>th</sup> October 2011 and Thorntons Recycling arranged for cleaning of the foul line and interceptors upon receiving this e-mail. Complete cleaning of the foul drain and interceptors was carried out on site on the 20<sup>th</sup> October 2011. Results for quarter 4 were all below emission limit values.

The heavy metals in the foul water were also measured four times during the reporting period, which is in compliance with the bi-annual monitoring requirements as per condition C.3.2 of the waste license (Table 11).

## **7. Resource Consumption Summary**

This section details the resources used by the facility during the period of 1<sup>st</sup> January 2011 to the 31<sup>st</sup> December 2011. Resources that were monitored include fuels, water and ESB.

### **7.1 Water**

In 2011 3,926m<sup>3</sup> of foul water was discharged from the site at FW1, as measured from the continuous recording meter located at the discharge point. 5,505m<sup>3</sup> was discharged to



the surface water at SW3 as measured from the continuous recording meter located at the discharge point.

Water that is discharged via the foul water consists of water used in the toilets, showers, offices, truck wash, wheel wash and washing down the MRF floors. The decrease in foul water in 2011 from previous years can be linked to a reduction of activity on site during 2011. Water that is discharged into the surface water consists of water from the runoff from the roofs of the buildings and from the hard standing in the yard. Surface water runoff is not linked with the site activities and is linked with the quantity of rainfall and snow throughout the year, only rainwater that falls onto the hard standing and the roofs of the buildings is discharged at this point.

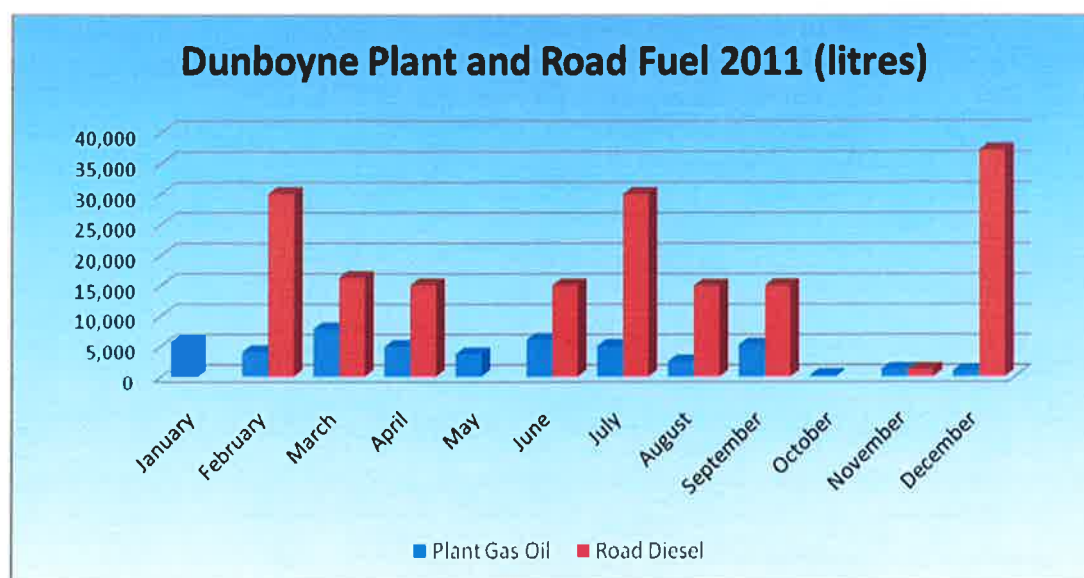
**Table 12: Foul and Surface Water discharges from 2005-2011**

	2005	2006	2007	2008	2009	2010	2011
Foul	3461	3080	3144	4691	4528	4622	3926
Surface	5665	6459	6636	8479	8728	7003	5505

## 7.2 Diesel

The main types of fuel used at the facility include road diesel, plant diesel (Gas Oil) for the machinery working on site and heating oil (Kerosene) for the offices. Figure 2 illustrates Plant Gas Oil and Road Diesel consumed at the facility in 2011.

**Figure 2 Monthly consumption of road diesel and plant gas oil at Dunboyne during 2011**



Road diesel usage has decreased over the last four years at the facility. This is largely due to less activity at the facility and less vehicles using the facility as a base for fuelling. In 2008 435,289 litres of diesel was purchased, 2009 304,116 litres, 2010 207,619 litres of road diesel and in 2011 174,901 litres was purchased for the facility fuelling tank.

A total of 47,900 litres of gas oil were used by the generator and plant machinery on site in 2011. This has reduced from 64,464 liters in 2010, this would be directly related to less activity and less tonnage at the facility.

It is hoped that through an efficient energy management programme at Thorntons Recycling that both road diesel and gas oil/ plant diesel consumption at the facility can be reduced further in 2012.

### 7.3 ESB

Thorntons Recycling has implemented an energy management programme on all its licensed sites, which will aim to reduce energy consumption on all company sites.

In 2011 the annual consumption of daytime kWh was 64,054 kWh and the nighttime usage was 17,320 kWh. As can be seen from Table 13 there was a reduction in electricity consumption from 2010. This may be attributed to a reduction in activity at the facility but also specific actions carried out as per the facilities energy management programme. It is hoped that electricity consumption at the site can be further reduced in 2012. Table 13 displays the annual usage of electricity in 2011.

**Table 13: Comparison of ESB energy usage between 2010 and 2011**

Year	Day k/Wh	Night k/Wh
2010	94559	23880
2011	64054	17320

## 8 Complaints Summary

There were no environmental complaints received at the facility during 2011.

Thorntons Recycling takes all complaints seriously and is committed to resolving any complaints if made in relation to the facility. If we receive a complaint we adhere to the company complaints procedure as per our ISO certified integrated management system.

## 9 Schedule of Environmental Objectives and Targets and Environmental Management Programme

Thorntons Recycling operates an Integrated Management System (IMS) which has been certified to ISO 14001 Environmental, OHSAS 18001 Health and Safety, ISO 9001 Quality. The complete content of the IMS is too large to contain within the body of this

report, however the EPA can access this for inspection on a specially designated drive (X Drive) at any of the company's site offices.

The schedule of Environmental Objectives and Targets and the Environmental Management Programme for 2012 will be maintained on the IMS/X Drive once a management review of the IMS is completed.

## 10 Tank and Pipeline Inspection Report

### 10.1 Tank Bunding

Thorntons Recycling commissioned Fehily, Timoney and Company in 2011 to carry out testing on the bunds at the Dunboyne facility as per condition 6.7 of the waste license. All three bunds were tested on the 17<sup>th</sup> and 18<sup>th</sup> of November 2011. The Main Diesel Bund passed and a copy of the bund certificate is enclosed in Appendix 7 of this report.

The other two bunds on site include the heating oil tank (which is double skinned) and the generator bund, both of which will be scheduled for works early 2012 and will be retested if they are going to be in used in 2012.

### 10.2 Pipeline Testing

The integrity and water tightness of all underground pipes and tanks and their resistance to penetration will be carried out once every 3 years as per Condition 6.7 of the waste license. Thorntons Tankering Service (TTS) completed a survey on all drains at the Dunboyne facility in June 2011. A full detailed copy of this report was forwarded to the EPA on the 24<sup>th</sup> August 2011 (Reference W0206-01/11/MK/07). In conclusion the report showed there were no structural defects detected in the foul or surface water drainage systems on site and that no works were required.

## 11 Reported Incidents Summary

Table 14 summarizes the incidents, which occurred in 2011. There were four incidents reported to the EPA by fax and followed up with a written report as per the EPA guidelines in 2011.

**Table 14: Incidents 2011**

<b>Date sent</b>	<b>Comments on Incident</b>
24.02.11	Incident in SW weekly sample, exceedance in SS and COD reported to the EPA on the 24.02.11 for results on the 10th Feb 2011
15.03.11	Incident in SW weekly sample, exceedance in SS and COD reported to the EPA on the 15.03.11 for results on the 2nd March 2011
11.05.11	Incident in SW weekly sample, exceedance in SS and COD reported to the EPA on the 20.05.11 for results on the 11th May 2011
11.07.11	Incident re D2 elevation, called Niall Horgan on the 11th July 2011 and fax sent in same day. Believed to be related to overgrown trees and vegetation on site holding dust etc

## **12 Odour Management Programme**

A copy of the odour management programme as submitted to the Agency on the 25<sup>th</sup> October 2005, our reference 206-01/05/TR/03. All waste handled at the facility is dry non-putrescible skip waste or construction and demolition waste and is all handled and processed indoors. There is a very low risk for odour emissions from the facility. This has been proven by the longstanding history of no complaints to the facility in relation to odour. The facility handled less than 25% of its capacity in 2011.

## **13 Energy Efficiency Audit Report Summary**

A resource use and energy efficiency audit was carried out by White Young and Green in July 2006 as per conditions of the license. The full audit report was forwarded to the EPA in previous AER's. Since this Thorntons Recycling have set up an energy management system for all its licensed sites. Energy and resource usage are monitored such as electricity, Kerosene, road diesel etc. and it is intended that consumption values will be maintained as low as possible whilst not impacting on the efficiency of operations at the facility. The system is available for viewing at any of the licensed facilities at Thorntons Recycling. It is hoped that with successful management that we will continue to make further reduction in energy resources.

## **14 Pest Control Programme Report**

Pest control is carried out at 8 scheduled visits per year. Complete Pest Control are contracted to carry out pest control at the facility. Overall pest activity is very low, this was maintained by keeping storage stocks of material to a minimum and emptying storage bays completely as often as possible. A copy of the Pest Control programme can be viewed on site.

## **15 Report on Progress made and Proposals being developed to Minimise Water Demand and the Volume of Trade Effluent Discharge**

### **15.1 Water Requirements**

Water is required on the site for the following activities;

- Toilet and Canteen facilities
- Washing down the MRF
- Truck wash
- Fire Suppression

With the exception of the fire suppression all of the above facilities discharge their effluents into the foul drainage system.

Water requirements have decreased in 2011 due to the decrease in tonnage handled and downsizing of staff at the facility due to the economic downturn. In 2011 there were only two members of staff on site one in operations and one in the office. Water is only used

for sanitary facilities and wash down on occasion when required. There was no fire at the site during 2011, thus no fire water was used.

In the event of a fire the water used to suppress it will be maintained on site for testing prior to discharge in the appropriate manner in consultation with the Agency and the appropriate local authorities. Thorntons Recycling have their own liquid waste/tankering division (TTS) who can be called upon in the event of an emergency.

### **15.2 Water supply and Storage**

Water is supplied to the site via Meath County Council water mains network. A 80m<sup>3</sup> water storage tank is located adjacent to the MRF. Water from this tank is used to wash down the MRF floor and for fire suppression if required. This tank is backed up with an auxiliary pump to increase the pressure in the event of requiring the stored water for fire suppression. Thorntons Recycling contracted Indepth, T/A McBreen Environmental, to carry out an investigation in 2010 on water usage and to ensure there was no water leaks on site, full detailed reports were forwarded to Meath County Council.

### **15.3 Foul water discharge**

The license permits a maximum of 30m<sup>3</sup>/day to be discharge into the foul water. This equated to a total of 9360m<sup>3</sup> per year based on a six day working week. The meter reading on the foul water discharge shows that approximately 3,926m<sup>3</sup> was discharged during 2011.

### **15.4 Progress on Minimisation of Water Usage**

The water usage is now very low on the site due to a decrease in tonnage over the last few years and also a reduction in staff numbers. There were only two full time members of staff on site during the day time in 2011, one in operations and one based in the office. The main demands on water are related to washing of trucks and bins. Thorntons Recycling road sweeper cleans the yard and the hard standing when required avoiding the excessive use of water in the cleaning process on site.

## **16 Reports on Financial Provision made under this License, Site Management structure of the facility and a Programme for Public Information**

### **16.1 Financial Provision**

Padraig Thornton Waste Disposal Ltd, is insured by FBD Brokers (Appendix 8). PTWDL is insured for Employers Liability, Public/Products Liability and Motor Insurance.

Thorntons Recycling is insured under public liability for €12.5 million for sudden and accidental pollution incidents. Thorntons Recycling is a financially secure company, which is evident from the director's report and consolidated financial statements for the year ending 31<sup>st</sup> December 2010. The company has in place an integrated management system (IMS) which is certified to ISO14001 (Environmental), ISO9001 (Quality) and

OHSAS18001 (Health and Safety) Management Standards. The Dunboyne facility was audited by Certification Europe in June 2011 and it received re certification in all three standards. Detailed risk assessments and environmental aspects are in place for the facility where appropriate levels of controls have been identified and assessed to ensure that standards are maintained and environmental risks are minimized at the facility.

A report in relation to the financial provision is required under condition 12.3 and was forwarded to the EPA previously. This report details the financial status of the company, financial commitments to cover environmental issues, decommissioning, aftercare management, environmental pollution and contingency arrangements in place at the facility. At this time detailed risk assessments were carried out and in conclusion the assessment states that no scenarios were identified which would exceed the insurance cover where the potential remediation costs would threaten the financial solvency of the company.

## 16.2 Site Management Structure

Paul Thornton  
Director

Gary Brady  
Managing Director

Ciaran Dowling  
Operations Facility Manager

Tommy Rogers  
EHS Manager

Mercedes Kavanagh  
Group Environmental Manager

Tommy Rogers/Mercedes Kavanagh can be contacted regarding any queries that the Environmental Protection Agency may have. Tommy's contact details are as follows: 086-3811122 and [tommyr@thorntons-recycling.ie](mailto:tommyr@thorntons-recycling.ie) and Mercedes' are Mobile 086-8241034 and [mercedes@thorntons-recycling.ie](mailto:mercedes@thorntons-recycling.ie). Both Tommy and Mercedes have completed the necessary FAS/FETAC Waste Management Training courses and are competent waste managers.

## 16.3 Program of Public Information

Thorntons Recycling operates an open door policy. All information relating to activities carried out at Thorntons Civic Amenity and Materials Recycling Facility is maintained in site. Public information is accessible at the site by appointment with the Environmental Department, Thorntons Recycling Head Office or at the Office of Environmental Enforcement.

All new and existing clients are brought through our waste acceptance procedures on a and are supplied with information by sales representatives or customer service agents in relation to what waste types we can accept at the facility.

Thorntons Recycling Centre has also upgraded its website so customers can access key environmental information such as waste collection permit numbers and waste licenses etc.

As discussed previously Thorntons Recycling Dunboyne has certification in ISO14001, ISO9001 and OHSAS18001 and has a detailed communication procedure which is available from the public on request.

## **17 Environmental Liabilities**

Thorntons Recycling is committed to achieving the highest possible level of environmental performance and to the prevention of environmental damage. All facilities operated by the company are certified to international standards for Environmental, Health and Safety and Quality. All sites are subject to surveillance audits twice a year which are carried out by Certification Europe, Dunboyne was audited in June 2011.

Environmental liabilities and aspects are elements of our integrated management system (Procedure PM01 – Environmental Aspects Procedure and associated aspects register) which are regularly maintained and updated and are audited in detail during surveillance audits and internal audits carried out by trained auditors within the company. The Environmental Aspects Register (PM01-F02) for Thorntons Recycling Dunboyne facility is available for inspection on site. The company also has employed environmental management staff to ensure best practice guidelines and compliance with waste license W0206-01. A comprehensive emergency plan exists for all facilities operated by the company.

# Appendix 1



<b>Environmental Procedures Manual</b>		Reference	EP13
Title: Waste Acceptance procedure Dunboyne		Date issued	30/10/2009
		Revision	02

Relevant to:-	Killeen Road	Kilmainham Wood	Dunboyne	PDM	ELV	HQ	Tankering
			√				

## Purpose and Scope

The purpose of this procedure is to detail the waste acceptance procedure for Thorntons Recycling Dunboyne Civic Amenity and Materials Recycling Facility and also the procedure to be followed in the event of the accidental discovery of unacceptable wastes at the facility.

Unacceptable Waste – a waste type that is not permitted to be handled at the facility and is listed in the “Materials we DON’T Accept”

### Material We DO accept

(MRF only)

Construction waste  
Demolition waste  
Timber  
Topsoil  
Brickwork  
Concrete  
Mixed Metals  
Clay and natural stone  
Dry non-hazardous commercial  
and industrial waste  
Mixed Municipal Waste

(Civic amenity ONLY)

Cardboard,  
Paper  
Plastic Packaging  
Aluminium cans  
Metal cans  
Tetra pak  
Clothes  
Glass Bottles  
Metal  
Batteries  
Electrical Goods  
Light bulbs

### Material we DON'T accept

(MRF and C.A)

Animal remains or carcasses  
Asbestos  
Chemical Waste  
Contaminated soil & Stone  
End of Life Vehicles  
Hazardous hospital waste  
(Including sharps containers etc)  
Liquid Waste  
Materials contaminated with oil,  
e.g oil filters or rags  
Oil/Water mixtures  
Paints  
Tyres  
Pharmaceutical waste  
Photographic waste  
Pressurised vessels, e.g fire  
extinguishers  
Road sweepings  
Sludge  
Food Waste  
Saw Dust  
Any hazardous material  
Green waste

<b>Environmental Procedures Manual</b>		Reference	EP13
Title: Waste Acceptance procedure Dunboyne		Date issued	30/10/2009
		Revision	02

Relevant to:-	Killeen Road	Kilmainham Wood	Dunboyne	PDM	ELV	HQ	Tankering
			√				

## Responsibility

The sales Team are responsible for highlighting non-acceptable wastes types to customers.

Drivers are responsible for checking all loads for unacceptable wastes prior to collecting the load.

The Operations manager on site is responsible for identifying and highlighting non conforming waste and checking all loads of waste brought into the facility. The Dunboyne weighbridge is self automated therefore a waste check by a weighbridge operator is not carried out as with other sites owned by Thorntons Recycling

The Operations manager is responsible for inspecting, assisting in documenting and informing the Environmental manager and the Dunboyne transport department of any Non- Conforming waste which enters the facility.

The Environmental Manager is responsible for organising the safe removal of any non-conforming waste. The Environmental manager is responsible for tracing the non-conforming waste and informing the sales team.

## Associated Documents

[EP04-F01A, Non- Conforming Waste form](#)

## Procedure

The following process must be followed when handling all wastes;

1. The Sales Department provide all our account customers with a list of what we can and cannot accept at the facility. If in doubt about any waste type they contact the Environmental Department
2. The Customer care centre processes the order and selects the waste description with the appropriate EWC Code and enters onto the WIMS. If in doubt about any code or a waste type contact the Environmental Department
3. Drivers check the contents of the skip, bin or container on collection and report to the transport department if there is non-conforming waste. Transport in turn liaise with the Environmental Dept and will advise you on how to proceed (If necessary Thorntons can arrange for an alternative collector)

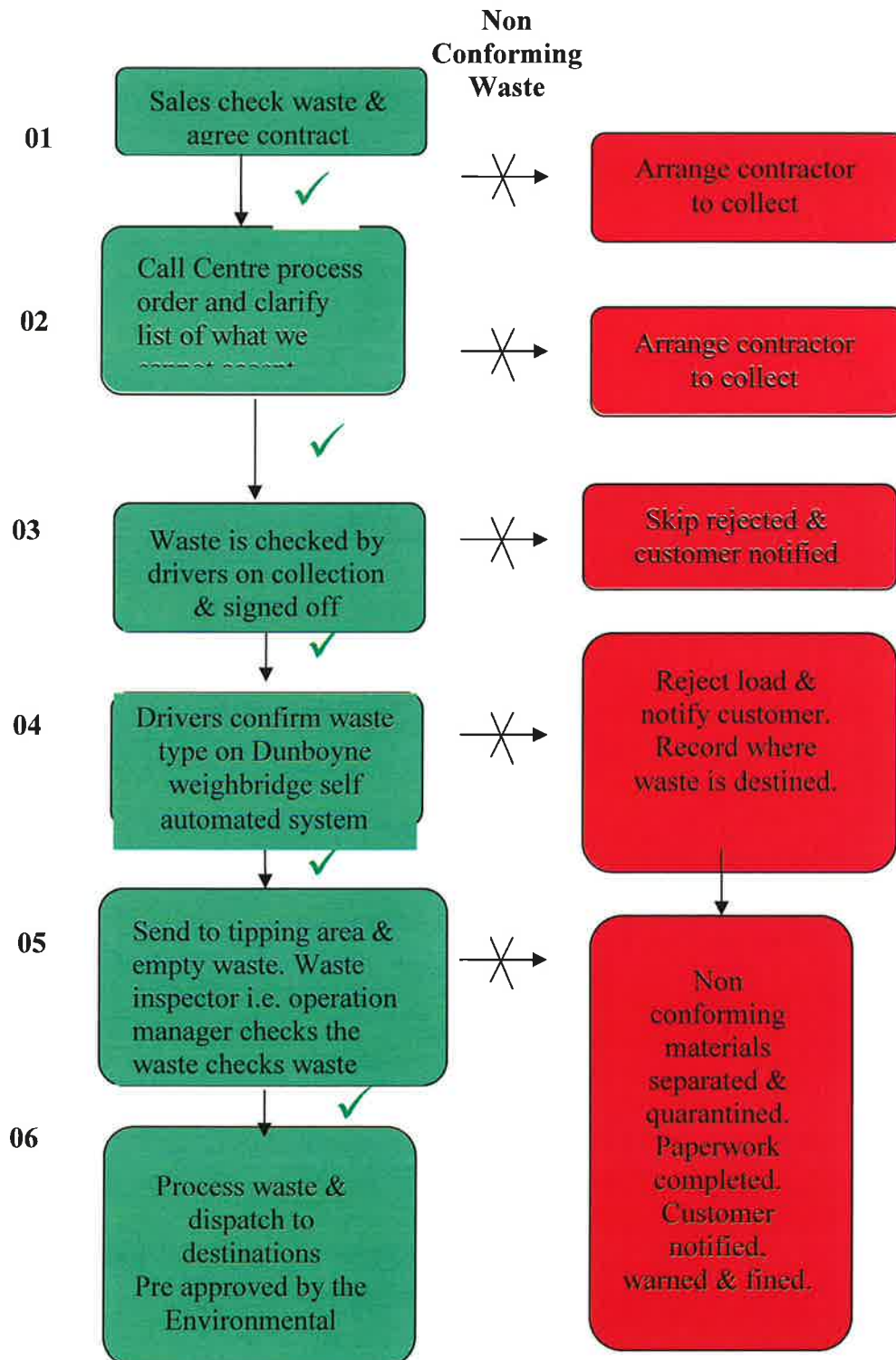
<b>Environmental Procedures Manual</b>		Reference	EP13
Title: Waste Acceptance procedure Dunboyne		Date issued	30/10/2009
		Revision	02

Relevant to:-	Killeen Road	Kilmainham Wood	Dunboyne	PDM	ELV	HQ	Tankering
			√				

4. As the weighbridge at Dunboyne is self automated, drivers must confirm waste type on entrance to the facility. Should the driver need to change the waste type he can amend the waste type on the self automated bridge which in turn will update WIMS. The system has been set up to only allow the driver to weigh in acceptable wastes on sites.
5. When non conforming waste is tipped the operations manager must complete the necessary non-conforming waste form and attach photos if required. He must move waste to the quarantine area if required. He must pass the non-conforming form is form to the environmental manager.
6. The environmental manager will contact the sales rep for the account. The appropriate sales rep is to be contacted so that they can in turn advise the customer of a fine, recharging, rejection of waste etc. Should the waste type description need to be changed on WIMS the weighbridge dept are informed and the sales rep who in turn advises the customer of this change and necessary changes in charges of applicable.
7. Paperwork is filed in the Environmental Department at Dunboyne

<b>Environmental Procedures Manual</b>		Reference	EP13
Title: Waste Acceptance procedure Dunboyne		Date issued	30/10/2009
		Revision	02

Relevant to:-	Killeen Road	Kilmainham Wood	Dunboyne	PDM	ELV	HQ	Tankering
			√				



# Appendix 2

**WEIGHBRIDGE CALIBRATION TEST REPORT NO : SO7497-C2**

**CUSTOMER:** Thortons Recycling  
**SITE ADDRESS:** Dunboyne  
Co Meath  
**SERVICE REPORT NO:**  
**MANUFACTURER:** Precia Molen  
**TYPE:** Overground  
**SIZE:** 18M  
**LOCATION:** Entrance

**TYPE APPROVAL CERT NO:** F-01-A-005  
**INDICATOR TYPE:** I300 (X222)  
**DATA PLATE:** Yes  
**INDICATOR SERIAL NO:** 04F746602  
**MINIMUM CAPACITY (kg):** 400  
**MAXIMUM CAPACITY (kg):** 50000  
**DIVISION (e) (kg):** 20  
**PRINTER SERIAL NO:** N/A  
**TARE FACILITY:** Disabled

**Accuracy of Zero, Linearity/Hysteresis, Discrimination & Comparison Tests = \***

Approximate Test Interval (e)	MPE (e)	Actual Load (kg)	Indicator Up	Display Error (e)	True Error (e)	Indicator Down	Display Error (e)	True Error (e)	SL
0	0.50	0	0	0.00		0	0.00		
40	0.50	40	40	0.00	0.00	44	0.20	0.20	
20	0.50	440	436	-0.20	-0.20	434	-0.30	-0.30	
500	1.0	10040	10034	-0.30	-0.30	10030	-0.50	-0.50	
1000	2.0	20040	20022	-0.90	-0.90	20020	-1.00	-1.00	SL1
1250	2.0	25040	25018	-1.10	-1.10	25016	-1.20	-1.20	
2000	2.0	40040	40016	-1.20	-1.20	40016	-1.20	-1.20	SL2
2170	3.0	43440	43410	-1.50	-1.50	43408	-1.60	-1.60	
SL1		20040							
SL2									
<b>PASSED</b>	<b>Yes</b>								

SL - Substitute Load

NOT TESTED AT MAX CAPACITY, BALLAST NOT PROVIDED

**REPEATABILITY TEST (Zero Track On)**

50%-MPE(e) 2.0  
>75%-MPE(e) 3.00

	Indicator	Indicator	Indicator
50%	25016	25018	25022
>75%	43408	43406	43412
<b>PASSED</b>	<b>Yes</b>		

**ECCENTRIC LOAD TEST - MPE (e):** 1.0

Position	1	2	3	4	5	6	7	8	9	10
Test Load	8040	8040	8040	8040	8040	8040				
Indicator	8036	8032	8030	8034	8032	8034				
Error (e)	-0.20	-0.40	-0.50	-0.30	-0.40	-0.30				
<b>PASSED</b>	<b>Yes</b>									

**LOADCELL DATA**

Number	6
Make	Vishay/Revere
Type	
Divisions	#N/A
Test cert	#N/A
Conformity	Yes
<b>PASSED</b>	<b>Yes</b>

**COMPARISON TEST**

Printer	N/A
Remote	Yes
PC	Yes
Other	N/A
<b>PASSED</b>	<b>Yes</b>

**CUSTOMER CONTACT:** Ted

email:

**PHYSICAL CONDITION:** Good  
**TEST WEIGHTS USED:** PM1-28  
DT1-17

**AUTHORISED PERSON :** 10000043 - Alan Byrne  
**CERTIFICATE NO :** T2211455  
02830

**CALIBRATION DATE :** 28 June 2011

**NEXT CALIBRATION DATE:** 27 June 2012

**SIGNATURE:** *D. Campbell*

**DATE :** 01/07/2011



**WEIGHBRIDGE VERIFICATION TEST REPORT NO : SO7497**

<b>CUSTOMER:</b>	<b>Thortons Recycling</b>	<b>TYPE APPROVAL CERT NO:</b>	F-01-A-005
<b>SITE ADDRESS:</b>	Dunboyne	<b>INDICATOR TYPE:</b>	I300 (X222) 10000399
	Co Meath	<b>DATA PLATE:</b>	Yes
<b>SERVICE REPORT NO:</b>	11636	<b>INDICATOR SERIAL NO:</b>	02F742651
<b>MANUFACTURER:</b>	Precia Molen	<b>MINIMUM CAPACITY (kg):</b>	400
<b>TYPE:</b>	Weighbridge	<b>MAXIMUM CAPACITY (kg):</b>	50000
<b>SIZE:</b>	18m	<b>DIVISION (e) (kg):</b>	20
<b>LOCATION:</b>	Out Bridge	<b>PRINTER SERIAL NO:</b>	N/A
		<b>TARE FACILITY:</b>	Disabled

**Accuracy of Zero, Linearity/Hysteresis, Discrimination & Comparison Tests = \***

Approximate Test Interval (e)	MPE (e)	Actual Load (kg)	Indicator Up	Display Error (e)	True Error (e)	Indicator Down	Display Error (e)	True Error (e)	SL	Discrimination	Comparison
RO	0.25	0	0	0.00		0	0.00				
2	0.25	40	40	0.00	0.00	41	0.05	0.05			
20	0.25	440	442	0.10	0.10	444	0.20	0.20		Yes	N/A
500	0.50	10040	10034	-0.30	-0.30	10036	-0.20	-0.20			
1000	1.0	20040	20042	0.10	0.10	20044	0.20	0.20			
1250	1.0	25040	25046	0.30	0.30	25046	0.30	0.30	SL1	Yes	Yes
2000	1.0	40040	40048	0.40	0.40	40048	0.40	0.40			
2200	1.5	44040	44052	0.60	0.60	44052	0.60	0.60	SL2	Yes	Yes
SL1		20040									
SL2		40040									
<b>PASSED</b>		<b>Yes</b>									

SL - Substitute Load

NOT TESTED AT MAX CAPACITY, BALLAST NOT PROVIDED

**REPEATABILITY TEST (Zero Track On)**

50%-MPE(e) 0.30  
>90%-MPE(e) 1.50

**ROLLING LOAD TEST**

MPE(e) 1.50  
Max Load 40000

	Indicator	Indicator	Indicator
50%	25042	25048	25046
>90%	45200	45206	45212
<b>PASSED</b>	<b>Yes</b>		

	Indicator	Indicator	Indicator
→	32100	32106	32108
←	32110	32108	32104
<b>PASSED</b>	<b>Yes</b>		

**ECCENTRIC LOAD TEST - MPE (e): 0.5**

Position	1	2	3	4	5	6	7	8	9	10
Test Load	8040	8040	8040	8040	8040	8040				
Indicator	8046	8044	8046	8034	8034	8040				
Error (e)	0.30	0.20	0.30	-0.30	-0.30	0.00				
<b>PASSED</b>	<b>Yes</b>									

**LOADCELL DATA**

Number	6
Make	Zemic
Type	BM14G 30-50t
Test cert	D09-05.21
Divisions	3000
Conformity	Yes
<b>PASSED</b>	<b>Yes</b>

**COMPARISON TEST**

Printer	N/A
Remote	Yes
PC	Yes
Other	N/A
<b>PASSED</b>	<b>Yes</b>

**MARKINGS**

CE	Yes
SEALING	Yes
CLASS	Yes
GREEN M	Yes
<b>PASSED</b>	<b>Yes</b>

**OTHER TESTS**

Leveling	N/A
High Res	Yes
Max +9e	N/A
Zero 4%	N/A
<b>PASSED</b>	<b>N/A</b>

**PHYSICAL CONDITION:** Good  
**TEST WEIGHTS USED :** PM1-28  
DT1-17  
**VERIFICATION DATE :** 07 July 2011

**AUTHORISED PERSON :** 10000043-Alan Byrne  
**CERTIFICATE NO :** T234278  
2830  
**NEXT CALIBRATION DATE:** 07 July 2012

**SIGNATURE :** *D. Campbell*

**DATE :** 15/07/2011

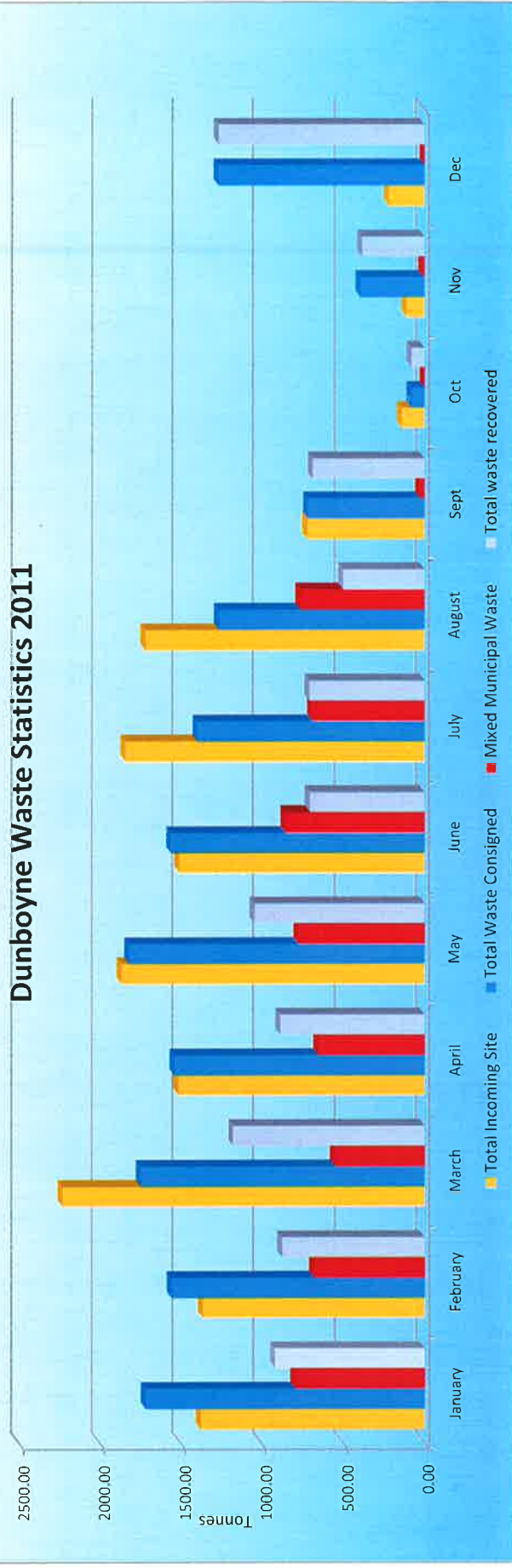
# Appendix 3



## Dunboyne Statistics Summary 2011

	January	February	March	April	May	June	July	August	Sept	Oct	Nov	Dec	Sum	Annual %
Incoming into MRF	1362.23	1339.87	2227.90	1504.25	1843.01	1492.99	1833.85	1693.60	712.56	133.38	90.67	203.33	14437.64	
Incoming into CA	19.79	29.92	10.13	14.73	26.54	19.66	11.52	28.88	10.10	6.26	20.26	16.62	214.41	
<b>Total Incoming Site</b>	<b>1382.02</b>	<b>1369.79</b>	<b>2238.03</b>	<b>1518.98</b>	<b>1869.55</b>	<b>1512.65</b>	<b>1845.37</b>	<b>1722.48</b>	<b>722.66</b>	<b>139.64</b>	<b>110.93</b>	<b>219.95</b>	<b>14652.05</b>	<b>100.00</b>
<b>Total Waste Consigned</b>	<b>1720.3</b>	<b>1560.04</b>	<b>1748.98</b>	<b>1543.06</b>	<b>1821</b>	<b>1560.6</b>	<b>1400.82</b>	<b>1267.82</b>	<b>717.333</b>	<b>81.46</b>	<b>393.76</b>	<b>1270.12</b>	<b>15085.29</b>	
Metals	29.46	37.92	33.14	59	27.6	26.64	46.5	10.96	9.82	53.56	31.82	0	366.42	
Rubble	277.04	240.4	201.76	256.1	210.3	72.46	159.4	45.14	91.08	0	0	245.82	1799.50	
Wood	87.04	61.54	55.64	57.72	80.58	105.06	97.16	113.8	30.66	0	7.66	0	696.86	
Glass Bottles	0	15.94	0	0	13.02	0	0	15.52	0	0	7.3	0	51.78	
Trommel Fines	453.78	509.42	780.38	506.88	646.84	469.64	386.52	304.32	259.92	0	0	904.84	5222.54	
Mixed Dry Recyclables	24.04	10.74	9.78	0.88	17.46	10.92	11.56	12.4	10.44	4.98	12.68	11.6	137.48	
Mixed Municipal Waste	797.58	681.98	553.36	654.94	774.94	853.12	690.64	764.36	27.4	0	8.52	0	5806.84	
Mixed Hard Plastics	0	0	14.54	6.12	0	0	7.88	0	0	0	0	10.34	38.88	
Mixed C & D Waste / Soil and Stones	50.86	0	98.94	0	47.08	16.66	0	0	286.16	22.92	324.5	91.72	938.84	
Gas Cylinders	0	0	0	0	0	0	0	0	0	0	0	0	0.00	
Batteries	0	0	0	0	0	0	0	0	0	0	0	0	0.00	
WEEE	0.5	2.1	1.44	1.42	3.18	6.1	1.16	1.32	1.853	0	1.28	5.8	26.15	
Tyres	0	0	0	0	0	0	0	0	0	0	0	0	0.00	
<b>Total waste recovered</b>	<b>922.72</b>	<b>878.06</b>	<b>1181.08</b>	<b>888.12</b>	<b>1046.06</b>	<b>707.48</b>	<b>710.18</b>	<b>503.46</b>	<b>689.933</b>	<b>81.46</b>	<b>385.24</b>	<b>1270.12</b>	<b>9263.91</b>	
<b>Monthly Recycling rate of total waste (%)</b>	<b>53.64</b>	<b>56.28</b>	<b>67.53</b>	<b>57.56</b>	<b>57.44</b>	<b>45.33</b>	<b>50.70</b>	<b>39.71</b>	<b>96.18</b>	<b>100.00</b>	<b>97.84</b>	<b>100.00</b>	<b>100.00</b>	
<b>Total Waste Landfilled</b>	<b>797.58</b>	<b>681.98</b>	<b>567.90</b>	<b>654.94</b>	<b>774.94</b>	<b>853.12</b>	<b>690.64</b>	<b>764.36</b>	<b>27.40</b>	<b>0.00</b>	<b>8.52</b>	<b>0.00</b>	<b>5821.38</b>	<b>15085.29</b>
<b>Monthly Landfilled (%)</b>	<b>4.59</b>	<b>1.91</b>	<b>1.23</b>	<b>5.43</b>	<b>2.58</b>	<b>1.94</b>	<b>4.04</b>	<b>0.98</b>	<b>3.82</b>	<b>0.00</b>	<b>2.16</b>	<b>0.00</b>	<b>0.00</b>	
<b>Monthly to Killeen Road (%)</b>	<b>44.73</b>	<b>41.81</b>	<b>30.41</b>	<b>37.02</b>	<b>39.97</b>	<b>52.72</b>	<b>45.26</b>	<b>59.31</b>	<b>39.89</b>	<b>28.14</b>	<b>78.05</b>	<b>5.12</b>		

## Dunboyne Waste Statistics 2011



## Dunboyme Waste Statistics 2011

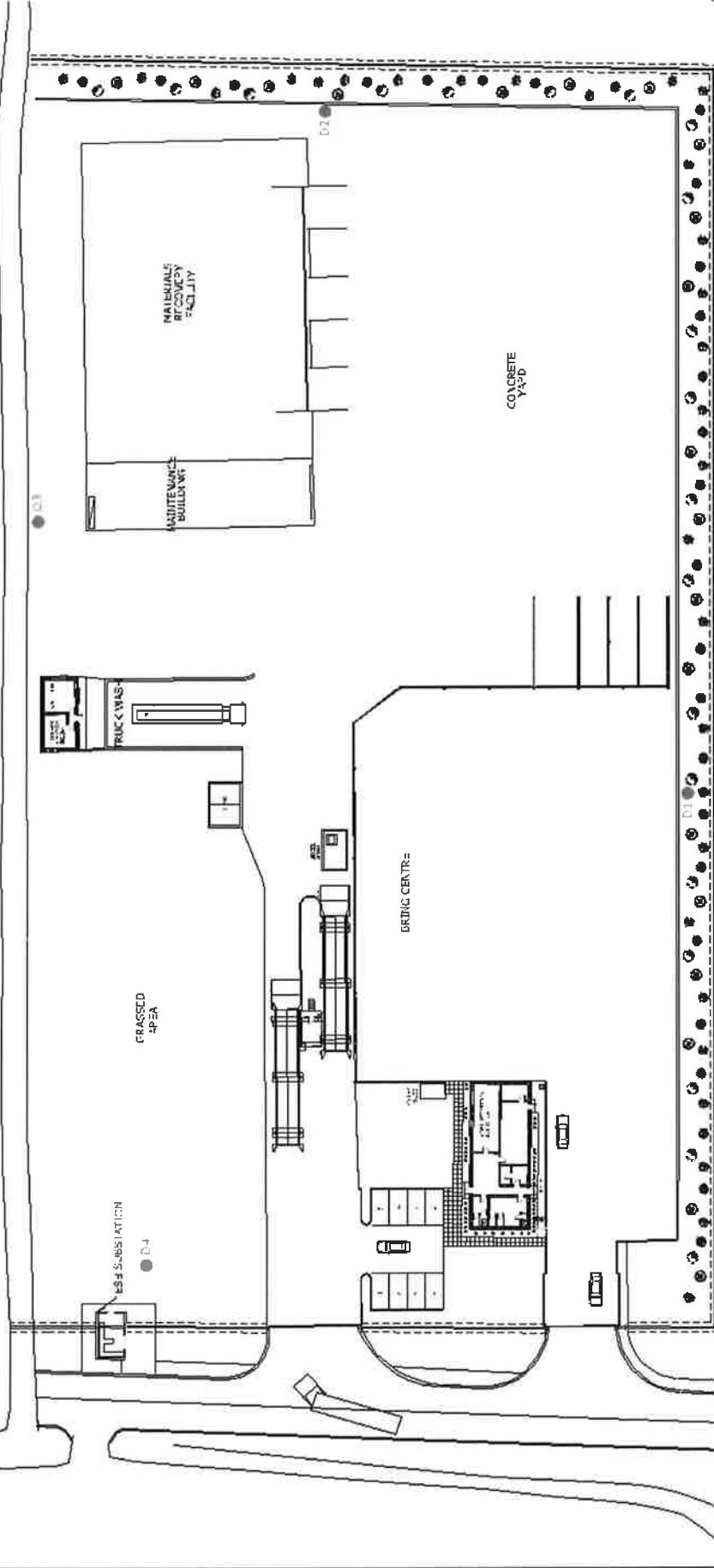
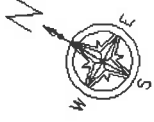
EWC	Material Received	January	February	March	April	May	June	July	August	Sept	Oct	Nov	Dec	Sum	%
20 03 07	MMW Bulky	1157.95	1083.03	1027.93	1218.50	1278.12	1117.75	1398.46	1329.02	578.86	119.81	71.65	49.72	10430.80	72.25
15 01 03	Wood Packaging	25.68	27.86	7.75	22.00	72.58	55.09	81.79	75.86	18.16	1.10	17.08		404.95	2.80
17 02 01	Wood C&D Waste Wood	4.48	7.38	1.02	2.44		6.26		25.26	1.20				48.04	0.33
19 12 07	Wood processed or chipped		5.70			7.80		4.96		1.28				19.74	0.14
03 01 05	Wood Waste Manufacturing		6.76		2.28		1.68	0.76	5.82					17.30	0.12
17 02 03	Mixed Plastic Hard	1.78	0.23				2.80							4.81	0.03
20 03 01	Mixed Dry Recyclables				2.32			0.54	0.30					3.16	0.02
17 01 07	Clean Construction Rubble		1.34			83.12								84.46	0.58
17 05 04	Soil and Stone	55.62	32.68	6.96	32.66	130.92	44.22	87.04	5.52	21.64	5.30			422.76	2.93
17 09 04	Mixed C&D Waste	105.16	170.55	1173.52	197.71	246.62	250.35	244.02	240.03	89.48	7.17	1.94	153.61	2880.16	19.95
19 12 02	Ferrous Metal Mixed Steel	7.20	4.34	9.78	26.14	20.35	14.84	15.46	11.79	1.94				111.84	0.77
16 01 18	Non - Ferrous Metal	4.36		0.94		3.50		0.82						9.62	0.07
	<b>Total Into MRF Site</b>	<b>1362.23</b>	<b>1339.87</b>	<b>2227.90</b>	<b>1504.25</b>	<b>1843.01</b>	<b>1492.99</b>	<b>1833.85</b>	<b>1693.60</b>	<b>712.56</b>	<b>133.38</b>	<b>90.67</b>	<b>203.33</b>	<b>14437.64</b>	<b>100.00</b>
15 01 02	Mixed Plastic Bottles C.A	0.34	0.52	0.36	0.88	0.68	0.32	0.52	0.28	0.34	0.40	0.52	0.30	5.46	2.55
15 01 04	Aluminium C.A			0.52				1.00						2.02	0.94
15 01 05	Tetra- Pak C.A	0.12	0.44	0.22	0.16	0.06	0.54	0.14	0.18	0.48	0.28	0.52	0.20	3.34	1.56
20 01 01	Cardboard C.A	8.10	3.48	2.24	3.08	3.04	2.50	2.86	3.08	2.28	1.20	3.26	3.92	39.04	18.21
20 01 39	Mixed Plastic Film C.A	2.84	2.44	1.62	3.16	2.54	4.66	2.34	4.20	1.64	1.00	2.28	1.72	30.44	14.20
20 01 01	Mixed paper C.A	6.52	4.16	2.82	4.04	3.34	4.74	2.92	3.44	3.04	2.30	4.26	4.12	45.70	21.31
20 01 10	Clothes	1.37	0.84	0.91	1.28	0.68	0.80	0.58	0.86	0.47	0.58	0.84	0.56	9.77	4.56
16 06 01*	Batteries													0.00	0.00
15 01 07	Glass Packaging (Bottles)		15.94						15.52			7.30		51.78	24.15
16 02 11	WEEE Fridges and Freezers				1.12		1.68	1.16	1.32	0.618			1.50	7.40	3.45
16 02 14	Mixed WEEE	0.50	2.1	1.44	1.01	3.18	4.42			1.235		1.28	4.30	19.47	9.08
	<b>Total into CA Site</b>	<b>19.79</b>	<b>29.92</b>	<b>10.13</b>	<b>14.73</b>	<b>26.54</b>	<b>19.66</b>	<b>11.52</b>	<b>28.88</b>	<b>10.10</b>	<b>6.26</b>	<b>20.26</b>	<b>16.62</b>	<b>214.41</b>	<b>100.00</b>
	<b>Total For Site MRF and CA</b>	<b>1382.02</b>	<b>1369.79</b>	<b>2238.03</b>	<b>1518.98</b>	<b>1869.55</b>	<b>1512.65</b>	<b>1845.37</b>	<b>1722.48</b>	<b>722.66</b>	<b>139.64</b>	<b>110.93</b>	<b>219.95</b>	<b>14652.05</b>	



# Appendix 4



NOTES:



- LEGEND**
- D1 - 301141.64, 243008.56
  - D2 - 301201.01, 243096.33
  - D3 - 301133.72, 243105.75
  - D4 - 301055.76, 243044.73

NO.	DESCRIPTION	DATE	BY
1	AS BUILT		

**THORNTON'S RECYCLING**  
 KILLEN ROAD, DUBLIN 10  
 TEL: - 6235133 FAX: - 6235131  
 WWW: thornions-recycling.ie

AS BUILT  
 SITE LAYOUT  
 DUMNEY RECYCLING CENTER  
 SHOWING DUST MONITORING POINT LOCATIONS

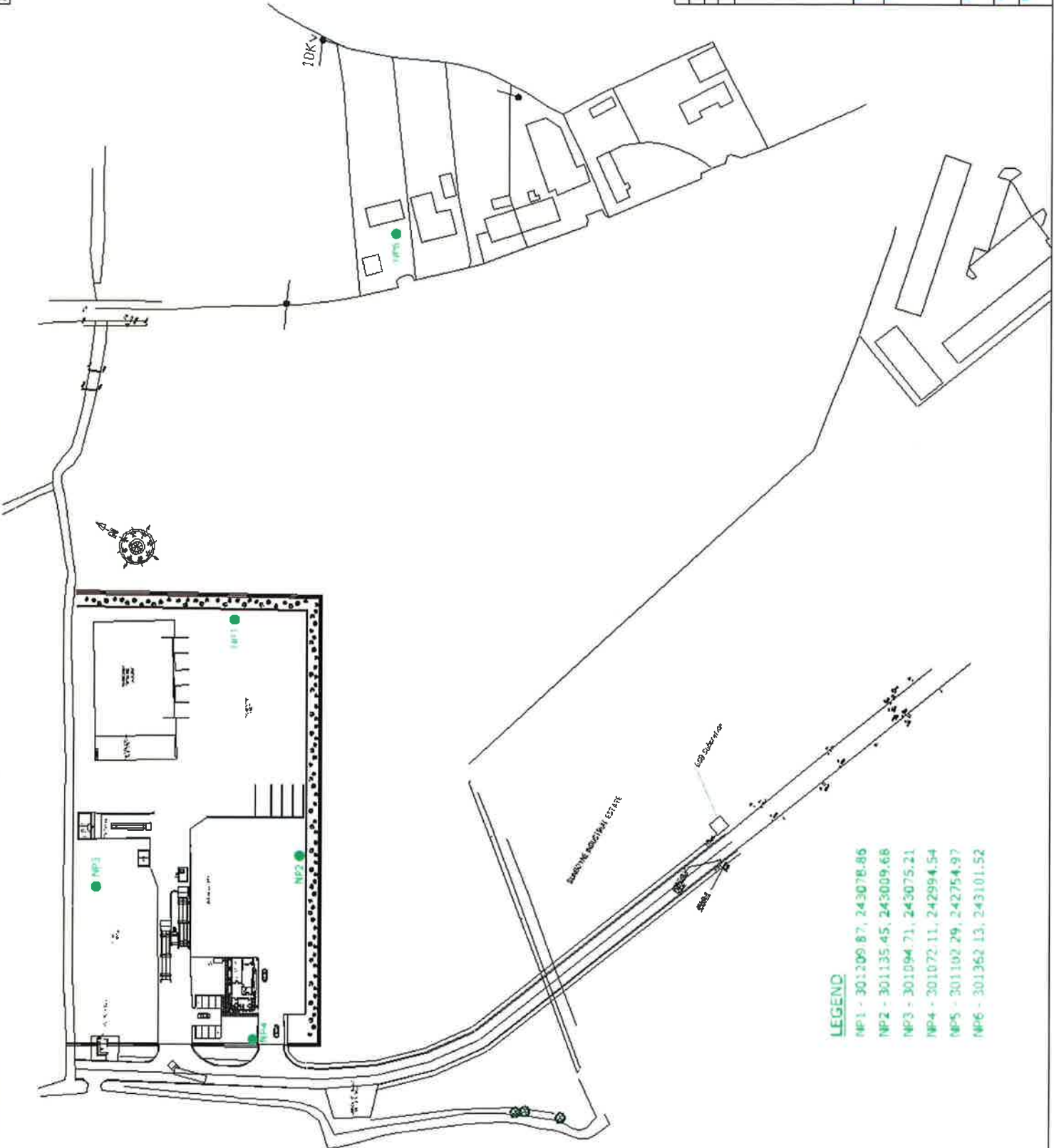
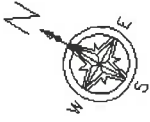
AS SHOWN	DATE	BY
D3	05/10/05	AI
D3	07	PHC

Drawing Number: 01-7-22

SCALE 1:300@A1

# Appendix 5

NOTES:



**LEGEND**

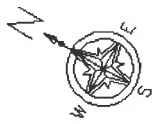
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- NPS2 - 301135.45, 243009.68
- NPS3 - 301094.71, 243075.21
- NPS4 - 301072.11, 242994.54
- NPS5 - 301102.29, 242754.97
- NPS6 - 301362.13, 243101.52



DATE	10/10/08	BY	...
PROJECT	...	...	...
SCALE	...	...	...
KILLEN ROAD, DUBLIN 10 TEL: - 6235133 FAX: - 6235131 www.hornations-recycling.ie			
DATE	AS BUILT	...	...
SITE LAYOUT DUBLIN RECYCLING CENTER SHOWING NOISE MONITORING POINT LOCATIONS			
DATE	05/10/05	BY	AI
DATE	03	BY	?
DATE	01-7-24	BY	PHC
DATE	2	BY	...

# Appendix 6



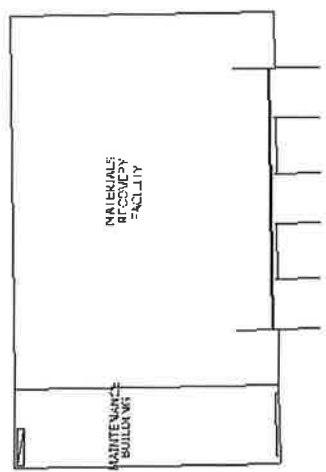


NOTES:

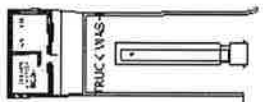
S2

S3

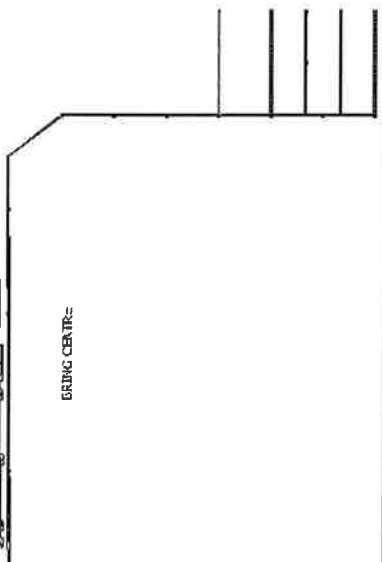
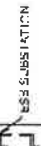
S1



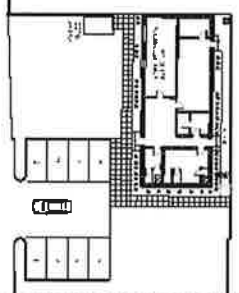
CONCRETE YARD



GRASSED AREA



BALING CENTRE



FW1

ELEVATOR TRUCK  
TURNING AREA

NO. OF BUILDINGS	1
NO. OF TRUCKS	1
NO. OF BAYS	1
NO. OF STOPS	1



**THORNTON'S  
RECYCLING**  
KILLEEN ROAD, DUBLIN 10  
TEL: - 6235133 FAX: - 6235131  
www.thorntons-recycling.ie

AS BUILT

**SITE LAYOUT**  
DUMNEY RECYCLING CENTER  
SHOWING DUST MONITORING POINT  
LOCATIONS

AS SHOWN	05/10/15	NI
03	7	PHC
01-7-22		

**Legend**

- FW1 Foul water discharge sampling point
- S3 Surface water discharge sampling point
- S1 Sampling Point
- S2 Sampling Point

SCALE 1:300@A1



## Weekly Surface Water at S3 2011

### Quarter 1

Date	COD	pH	Suspended Solids
	mg/l		mg/l
EPA Trigger Levels	30mg/l	06-09	25mg/l
24.01.11			
05.01.11	12	8.9	<10
13.01.11	17	8.4	72
19.01.11	<10	9.1	25
26.01.11	29	8.8	43
02.02.11	11	9	14
10.02.11	67	8.8	102
16.02.11	13	9.3	41
23.02.11	20	9.5	11
02.03.11	33	9	34
16.03.11	12	7.6	10
22.03.11	21	8.06	2.5
30.03.11	62	8.2	62

### Quarter 2

Date	COD	pH	Suspended Solids
	mg/l		mg/l
EPA Trigger Levels	30mg/l	06-09	25mg/l
06.04.11	30	7.5	40
15.04.11	18	7.3	<10
20.04.11	19	7.3	<10
27.04.11	10	7.4	21
04.05.11	<10	7.2	<10
11.05.11	34	7.4	78
18.05.11	<10	7.1	<20
27.05.11	10	7.4	<20
01.06.11	<10	7.1	<20
09.06.11	18	7.8	26
15.06.11	<10	7.2	<10
24.06.11	<10	7.4	25
29.06.11	17	7.1	<20

### Quarter 3

Date	COD	pH	Suspended Solids
	mg/l		mg/l
EPA Trigger Levels	30mg/l	06-09	25mg/l
06.07.11	<10	7.2	<10
15.07.11	<10	7.2	<10
20.07.11	<10	7.5	<10
29.07.11	34	7.8	<10
03.08.11	17	7.3	<10
12.08.11	18	7.3	<20
19.08.11	24	7.3	<10
24.08.11	14	7.2	<10
05.09.11	11	7.1	<10
14.09.11	<10	7.2	<20
23.09.11	<10	7.1	<20
28.09.11	<10	7.3	<10

### Quarter 4

Date	COD	pH	Suspended Solids
	mg/l		mg/l
07.10.11	<10	7.3	<20
14.10.11	<10	7	<10
17.10.11	<10	7.1	13
28.10.11	<10	7.4	<10
04.11.11	<10	7.5	<10
12.11.11	19	7.4	<20
18.11.11	<10	7.1	<10
21.11.11	<10	7.2	<10
28.11.11	<10	7.6	<10
05.12.11	<10	7.7	<10
13.12.11	<10	7.6	<10
19.12.11	<10	7.6	<20
Lab Off			

# Appendix 7



CONSULTANTS IN ENGINEERING & ENVIRONMENTAL SCIENCES

**CORK DUBLIN**

### Record Sheet for Bund Test

Company: Thorntons Recycling Ltd.		IPC Reference No:	
Site: Dunboyne industrial estate Dunboyne, Co Meath		IPC Category -----	
Bund Ref. No: Large diesel tank bund		Bund Type – Local, Remote, Combined: Local	
Bund Location: The bund is located beside main office		Bund Risk Classification 1,2, or 3: -----	
Bund Dimensions: 2.772m deep x 5.495m long x 3.970m wide		Primary Vessel(s) – Materials of Construction: 30m <sup>3</sup> plastic heating oil Tank	
Bund Materials of Construction: The bund is constructed of pored insitu concrete		Primary Vessel(s) – Total Storage Volume: 30 m <sup>3</sup> max	
Bund Lining Material: Bund has previously been coated with sealant		Primary Vessel(s) – 110% of Volume of Largest Vessel: 33 m <sup>3</sup>	
Bund Retention Volume (local/Remote): Local = 32.98 m <sup>3</sup>		Primary Vessel(s) – 25% of Total Storage Volume 0.34 m <sup>3</sup>	
Deemed practicable/safe to conduct hydrostatic test? Yes/No  YES (see note below)			
If no, give reasons:			
Description and Results of Hydrostatic Test:		Date of Hydrostatic test: Start on 17 November 2011	
<b>TEST RESULT = PASS</b>			
Details: <ul style="list-style-type: none"> <li>- On 16/11/11 The bund was filled to approx 1500mm to allow the hydration of the concrete.</li> <li>- On 17/11/11 Bund Filled to approx 1.512mm with water (approx 32.98m<sup>3</sup> of test water)</li> <li>- Drop in level of water of 3mm (0.1%) after 1 day (18/11/11).</li> <li>- Taking into account size of surface area and evaporation, bund is deemed acceptable to pass</li> </ul>			
Description and Results of Visual Inspection:		Date of Visual Inspection: 17 & 18 November 2011	
Upon visual inspection slight seepage was noted on the external faces of the bund. This was however when hydration was taking place and did not affect the overall result of the bund test.			
Recommendations:			
Signed:  Sean Meyler For and on behalf of Fehily Timoney & Co.		Title/Position: BE, CEng, Senior Engineer	Date: 1 December 2011

# Appendix 8

6 July, 2011

**Re: Padraig Thornton Waste Disposal Ltd and Thornton Recycling Centre Ltd****To Whom It May Concern:**

This is to confirm that we act as Insurance Brokers for the above client and that we currently hold the following covers in place on their behalf:-

**Employers Liability:**

Covering the legal liability of the Insured to employees for death or bodily injury or disease arising out of and in the course of their employment by the Insured in the business as described (**Waste Collection, Recycling and Disposal and Property Owners**) during the period of Insurance.

**Insurers:** FBD plc  
**Policy No.:** 00433053/04/01  
**Renewal Date:** 1<sup>st</sup> July 2012

**Limit of Indemnity:**  
€13,000,000 any one occurrence inclusive of all costs and expenses.

**Public / Products Liability:**

Covering the legal liability of the Insured for accidental bodily injury to third party persons or accidental damage to third party material property arising in connection with the business and subject to the limit of indemnity specified. Including legal liability arising out of goods sold or supplied.

**Insurers:** FBD plc  
**Policy No.:** 00433053/04/01  
**Renewal Date:** 1<sup>st</sup> July 2012

**Limit of Indemnity:**  
Public Liability €2,600,000 any one accident  
Products Liability €2,600,000 any one period

**Motor Insurance**

Covers the Insured's Liability to Third Parties for vehicles being used in connection with the insured's business. Personal Injury cover is unlimited and Third Party Property Damage limit is €1,300,000 and €30,000,000 for private cars.

**Insurers:** FBD Insurance Plc  
**Policy No.:** 00433053/22/01  
**Renewal Date:** 1<sup>st</sup> July 2012

**Excess Public/Products Liability, Motor TPPD and Employer's Liability**

**Insurers:** QBE  
**Policy No.:** TBA  
**Renewal Date:** 1<sup>st</sup> July 2012

**Limit of Indemnity:**  
Increases the underlying limits up to a maximum of €12.5m, €6.5m and €20m respectively.  
Cover follows the underlying policy and is subject to Insurers policy terms and conditions.  
All policies include Indemnity to Principals Clause applies to all policies.

We trust that this is in order but if you require further details, please do not hesitate to contact the undersigned.

Yours sincerely

  
Fergal Britton  
Service Executive  
FBD Brokers



## **Appendix 9**



| PRTR# W0206 | Facility Name Padraig Thornton Waste Disposal Ltd | Filename W0206\_2011\_Dunboyne.xls | Return Year 2011 |

23/03/2012 10:08

**Guidance to completing the PRTR workbook**

# AER Returns Workbook

Version 1.1.13

<b>REFERENCE YEAR</b>	2011
-----------------------	------

**1. FACILITY IDENTIFICATION**

<b>Parent Company Name</b>	Padraig Thornton Waste Disposal Limited
<b>Facility Name</b>	Padraig Thornton Waste Disposal Ltd
<b>PRTR Identification Number</b>	W0206
<b>Licence Number</b>	W0206-01

**Waste or IPPC Classes of Activity**

No.	class_name
4.13	Storage of waste intended for submission to any activity referred to in a preceding paragraph of this Schedule, other than temporary storage, pending collection, on the premises where such waste is produced.
3.11	Blending or mixture prior to submission to any activity referred to in a preceding paragraph of this Schedule.
3.12	Repackaging prior to submission to any activity referred to in a preceding paragraph of this Schedule.
3.13	Storage prior to submission to any activity referred to in a preceding paragraph of this Schedule, other than temporary storage, pending collection, on the premises where the waste concerned is produced.
4.12	Exchange of waste for submission to any activity referred to in a preceding paragraph of this Schedule.
4.2	Recycling or reclamation of organic substances which are not used as solvents (including composting and other biological transformation processes).
4.3	Recycling or reclamation of metals and metal compounds.
4.4	Recycling or reclamation of other inorganic materials.
Address 1	Dunboyne Industrial Estate
Address 2	Dunboyne
Address 3	Co Meath
Address 4	
	Meath
Country	Ireland
Coordinates of Location	-6.47927 53.4281
River Basin District	IEEA
NACE Code	3832
Main Economic Activity	Recovery of sorted materials
<b>AER Returns Contact Name</b>	David Duff
<b>AER Returns Contact Email Address</b>	dduff@thorntons-recycling.ie
<b>AER Returns Contact Position</b>	Environmental Manager
<b>AER Returns Contact Telephone Number</b>	01 6235133
<b>AER Returns Contact Mobile Phone Number</b>	086 8371959
<b>AER Returns Contact Fax Number</b>	01 6235151
<b>Production Volume</b>	50000.0
<b>Production Volume Units</b>	Tonnes
<b>Number of Installations</b>	1
<b>Number of Operating Hours in Year</b>	2496
<b>Number of Employees</b>	2
<b>User Feedback/Comments</b>	Treatment and transfers tab is largely a duplication of the WTS report submitted to the EPA
<b>Web Address</b>	www.thorntons-recycling.ie

**2. PRTR CLASS ACTIVITIES**

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

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

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

**SECTION A : SECTOR SPECIFIC PRTR POLLUTANTS**

RELEASERS TO AIR

POLLUTANT	METHOD		QUANTITY						
	M/C/E	Method Code	D1	D2	D3	D4	T (Total)	A (Accidental)	F (Fugitive)
86	M	OTH	0.0000002	0.0000065	0.0000077	0.0000068	0.0000242	0.0	0.0

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

**SECTION B : REMAINING PRTR POLLUTANTS**

RELEASERS TO AIR

POLLUTANT	METHOD		QUANTITY						
	M/C/E	Method Code	D1	D2	D3	D4	T (Total)	A (Accidental)	F (Fugitive)
87	M	OTH	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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

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

RELEASERS TO AIR

POLLUTANT	METHOD		QUANTITY						
	M/C/E	Method Code	D1	D2	D3	D4	T (Total)	A (Accidental)	F (Fugitive)
210	M	OTH	0.031	0.123	0.086	0.04	0.26	0.0	0.0

Select a row by double-clicking on the Pollutant Name (Column B) then click 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 (CH<sub>4</sub>) emission to the environment under 'Total Net CH<sub>4</sub>' for Sector A. Sector specific PRTR pollutants above. Please complete the table below:

Landfill: **Padrissa Thornton Waste Disposal Ltd**

Methane flared and / or utilised	Method Used		Designation or Description	Facility Total Capacity m <sup>3</sup> per hour
	M/C/E	Method Code		
Total estimated methane generation (as per site model)	0.0			N/A
Methane flared	0.0			0.0 (Total Flaring Capacity)
Methane utilised in emissions	0.0			0.0 (Total Utilising Capacity)
Net methane emission (as reported in table above)	0.0			N/A

4.2 RELEASES TO WATERS

[Link to previous years emissions data](#)

PRTR REP: W02056 | Facility Name: Peabog, Troncon Water Disposal Ltd | File Name: W02005\_2011\_Dunaym.xls | Report Year: 2011 |

33/03/2012 10:38

Data on ambient monitoring of stormwater or groundwater, conducted as part of your licence requirements, should NOT be submitted under AER / PRTR Reporting as this only concerns Releases from your facility. Please enter all quantities in this section in KGs

SECTION A : SECTOR SPECIFIC PRTR POLLUTANTS		RELEASES TO WATERS		QUANTITY		
POLLUTANT	Name	M/C/E	Method Used Designation or Description	T (Total) KG/Year	A (Accidental) KG/Year	F (Fugitive) KG/Year
No. Ambient II				0.0	0.0	0.0

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

SECTION B : REMAINING PRTR POLLUTANTS		RELEASES TO WATERS		QUANTITY		
POLLUTANT	Name	M/C/E	Method Used Designation or Description	T (Total) KG/Year	A (Accidental) KG/Year	F (Fugitive) KG/Year
No. Ambient II				0.0	0.0	0.0

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

SECTION C : REMAINING POLLUTANT EMISSIONS (as required in your Licence)		RELEASES TO WATERS		QUANTITY		
POLLUTANT	Name	M/C/E	Method Used Designation or Description	T (Total) KG/Year	A (Accidental) KG/Year	F (Fugitive) KG/Year
Pollutant No				0.0	0.0	0.0

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

4.3 RELEASES TO WASTEWATER OR SEWER

Link to previous years emissions data

Facility Name: Pollock Thornton Waste Chemical Ltd | Programme: W0209 2011 | 0

30/02/2019 10:08

**SECTION A : PRETR POLLUTANTS**

**OFFSITE TRANSFER OF POLLUTANTS DESTINED FOR WASTE-WATER TREATMENT OR SEWER**

Please enter all quantities in this section in KGs

No. Annex II	POLLUTANT	MUCIE	METHOD		QUANTITY			
			Method Code	Method Used / Description or Description	FW1 Emission Point 1	T (Total) KG/Year	A (Accidental) KG/Year	F (Fugitive) KG/Year
70	Chlorides (as Cl)	M	PER	Standard method	133.08	133.08	0.0	0.0
13	Total phosphorus	M	PER	Standard method	1.7	1.7	0.0	0.0
71	Phosphates (as total P)	M	PER	Standard method	0.039	0.039	0.0	0.0
76	Total organic carbon (TOC) (as total C, or COD)	M	PER	Standard method	150.13	150.13	0.0	0.0

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

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

**OFFSITE TRANSFER OF POLLUTANTS DESTINED FOR WASTE-WATER TREATMENT OR SEWER**

Please enter all quantities in this section in KGs

Pollutant No	POLLUTANT	MUCIE	METHOD		QUANTITY			
			Method Code	Method Used / Description or Description	FW1 Emission Point 1	T (Total) KG/Year	A (Accidental) KG/Year	F (Fugitive) KG/Year
238	Ammonia (as N)	M	PER	Standard method	19.26	19.26	0.0	0.0
303	BOD	M	PER	Standard method	125.01	125.01	0.0	0.0
306	COD	M	PER	Standard method	480.39	480.39	0.0	0.0
308	Detergents (as MDS)	M	PER	Standard method	0.872	0.872	0.0	0.0
314	Fats, Oils and Greases	M	PER	Standard method	5.81	5.81	0.0	0.0
327	Nitrate (as N)	M	PER	Standard method	2.39	2.39	0.0	0.0
343	Sulphate	M	PER	Standard method	667.6	667.6	0.0	0.0
347	Total heavy metals	M	PER	Atomic Absorption/CP	0.196	0.196	0.0	0.0
240	Suspended Solids	M	PER	Gravimetric	117.45	117.45	0.0	0.0

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

**4.4 RELEASES TO LAND**

[Link to previous years emissions data](#)

| PRTR# WC206 | Facility Name Padraig Thornton Waste Disposal Ltd | Filename WC206\_2011\_Dunbooyne.xls | Return Year 2011 |

23/03/2012 10:08

**SECTION A : PRTR POLLUTANTS**

POLLUTANT		METHOD		Please enter all quantities in this section in KGs			
No. Annex II	Name	M/C/E	Method Code	Method Used Designation or Description	Emission Point 1	T (Total) KG/Year	A (Accidental) KG/Year
						0.0	0.0

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

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

POLLUTANT		METHOD		Please enter all quantities in this section in KGs			
Pollutant No.	Name	M/C/E	Method Code	Method Used Designation or Description	Emission Point 1	T (Total) KG/Year	A (Accidental) KG/Year
						0.0	0.0

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



**5. ONSITE TREATMENT & OFFSITE TRANSFERS OF WASTE**

PR174\_W0206 Facility Name: Padraig Thornton Waste Disposal Ltd | File Name: W0206\_2011\_Dunboyme.xls | Return Year: 2011

23/03/2017 10:08

Please enter all quantities on this sheet in Tonnes

Transfer Destination	European Waste Code	Hazardous	Quantity (Tonnes per Year)	Description of Waste	Waste Treatment Operation	Method Used		Location of Treatment	Haz Waste Description, Permit No. of Next Receiver/Disposer	Haz Waste Name and Address of Next Receiver/Disposer	Name and License / Permit No. and Address of Next Receiver/Disposer (HAZARDOUS WASTE ONLY)	Actual Address of Final Destination (i.e. Final Receiver / Disposal Site) (HAZARDOUS WASTE ONLY)
						M/C/E	Method Used					
Within the Country	19 12 02	No	316.44	ferrous metal	R4	M	Weighed	Offsite in Ireland	Hammond Lane, WFP96107 PTWDL T/A Thorntons Recycling, Killeen Road, W0044-02	Pigeon House Roa., Dublin., Ireland Killeen Road Ballyfermot, Dublin, 10, Ireland		
Within the Country	19 12 02	No	27.38	ferrous metal	R4	M	Weighed	Offsite in Ireland				
Within the Country	19 12 02	No	20.59	ferrous metal	R4	M	Weighed	Offsite in Ireland	Multimetals Recycling, WFP- WWW-09-0014-01 PTWDL T/A Thorntons Recycling, Killeen Road, W0044-02	Blessington., Co Wicklow., Ireland Road Ballyfermot, Dublin, 10, Ireland		
Within the Country	15 01 04	No	0.52	metallic packaging	R4	M	Weighed	Offsite in Ireland	PTWDL T/A Thorntons Recycling MDR, WFP-DC- 10-0021-01	Unit 51 Henry Road, Parkwest, Business Park, Dublin, 12, Ireland		
Within the Country	15 01 04	No	1.5	metallic packaging	R4	M	Weighed	Offsite in Ireland				
Within the Country	17 01 07	No	25.86	mixture of concrete, bricks, tiles and ceramics other than those mentioned in 17 01 06	R5	M	Weighed	Offsite in Ireland	Bord na Mona Drehid Landfill, W0201-03	Drehid., Co. Kildare., Ireland		
Within the Country	17 01 07	No	1773.64	mixture of concrete, bricks, tiles and ceramics other than those mentioned in 17 01 06	R5	M	Weighed	Offsite in Ireland	Various farmers, PTWDL T/A Thorntons Recycling, PDM Woodchipping, WFP-KE-10-0061-01	Oldmilltown, Kill, Co Kildare., Ireland Osberstown Industrial Estate, Naas, Co Kildare., Ireland		
Within the Country	19 12 07	No	696.86	wood other than that mentioned in 19 12 06	R3	M	Weighed	Offsite in Ireland	Rehab Glasco Ltd, WFP-KE-08-0357-01	Bord na Mona Drehid Landfill, W0201-03		
Within the Country	19 12 05	No	51.78	glass	R13	M	Weighed	Offsite in Ireland				
Within the Country	19 12 09	No	2565.6	minerals (for example sand, stones)	R5	M	Weighed	Offsite in Ireland	PTWDL T/A Thorntons Recycling, Killeen Road, W0044-02	Drehid., Co. Kildare., Ireland Killeen Road Ballyfermot, Dublin, 10, Ireland		
Within the Country	19 12 09	No	368.24	minerals (for example sand, stones)	R13	M	Weighed	Offsite in Ireland	Arthurstown Landfill, W0004-03	Kill., Co. Kildare., Ireland Brownstown & Camalway, Kircullen, Co. Kildare., Ireland		
Within the Country	19 12 09	No	79.04	minerals (for example sand, stones)	R5	M	Weighed	Offsite in Ireland	KTK Landfill Ltd, W0081-02	Drehyure, Tulamore, Co. Offaly., Ireland		
Within the Country	19 12 09	No	110.5	minerals (for example sand, stones)	R5	M	Weighed	Offsite in Ireland	Knockharley Landfill, W0146-02	Meath., Ireland Killeen Road Ballyfermot, Dublin, 10, Ireland		
Within the Country	19 12 09	No	1840.5	minerals (for example sand, stones)	R5	M	Weighed	Offsite in Ireland				
Within the Country	20 01 99	No	23.88	other fractions not otherwise specified	R13	M	Weighed	Offsite in Ireland	PTWDL T/A Thorntons Recycling, Killeen Road, W0044-02			
Within the Country	20 01 99	No	37.36	other fractions not otherwise specified	R13	M	Weighed	Offsite in Ireland	Greyhound Waste Recycling, W0205-01 PTWDL T/A Thorntons Recycling, MDR, WFP-DC- 10-0021-01	Unit 51 Henry Road, Parkwest Business Park, Dublin, 12, Ireland Clonmaggan Proudstown, Navan, Co Meath., Ireland		
Within the Country	20 01 99	No	61.3	other fractions not otherwise specified	R13	M	Weighed	Offsite in Ireland				
Within the Country	20 01 99	No	9.48	other fractions not otherwise specified	R13	M	Weighed	Offsite in Ireland	Midland Waste Disposal, W0131-02			



Within the Country	20 01 39	No	3.1 plastics	R13	M	Weighted	Offsite in Ireland	PTWDL T/A Thomtons Recycling Killeen Road,W0044-02	Killeen Road Ballyfermot,Dublin,10,Ireland
Within the Country	20 01 39	No	2.36 plastics	R13	M	Weighted	Offsite in Ireland	PTWDL T/A Thomtons Recycling MDR,WFP-DC-10-0021-01	Unit 51 Henry Road Parkwest Business Park,Dublin,12,Ireland
Within the Country	20 03 01	No	356.28 mixed municipal waste	R13	M	Weighted	Offsite in Ireland	Bord na Mona Drehid Landfill,W0201-03	Drehid,Co. Kildare,,Ireland
Within the Country	20 03 01	No	5410.56 mixed municipal waste mixed construction and demolition wastes other than those mentioned in 17 09 01, 17 09 02 and 17 09 03	R13	M	Weighted	Offsite in Ireland	PTWDL T/A Thomtons Recycling Killeen Road,W0044-02	Killeen Road,Ballyfermot,Dublin,10,Ireland
Within the Country	17 09 04	No	732.28 09 02 and 17 09 03	R13	M	Weighted	Offsite in Ireland	PTWDL T/A Thomtons Recycling Killeen Road,W0044-02	Killeen Road,Ballyfermot,Dublin,10,Ireland
Within the Country	17 02 03	No	14.54 plastic	D5	M	Weighted	Offsite in Ireland	KTK Landfill Ltd,W0081-02	Brownstown & Camalway,Kilcullen,Co. Kildare,,Ireland
Within the Country	17 02 03	No	6.12 plastic	R3	M	Weighted	Offsite in Ireland	Panda,W0140-02	Beaupark Business Park,Navan,Co Meath,,Ireland
Within the Country	17 02 03	No	18.22 plastic	R3	M	Weighted	Offsite in Ireland	Polymer Recover,WFP-LS-09-0007-01	Portarlington Ind Estate,East Canal Road,Co. Laois,,Ireland
Within the Country	16 02 11	Yes	7.4 chlorofluorocarbons, HCFC, HFC discarded electrical and electronic equipment other than those mentioned in 20 01 21, 20 01 23 and 20 01 35	R13	M	Weighted	Offsite in Ireland	ERP Contract,ERP Contract	ERP Contract,,,,,Ireland
Within the Country	20 01 36	No	18.76 20 01 21, 20 01 23 and 20 01 35	R13	M	Weighted	Offsite in Ireland	ERP Contract,ERP Contract	ERP Contract,,,,,Ireland

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

[Link to previous years waste data](#)

[Link to previous years waste summary data & percentage change](#)