## CAVAN WASTE DISPOSAL LTD.

# KILLYGARRY INDUSTRIAL PARK WASTE LICENCE W0207-01

# ANNUAL ENVIRONMENTAL REPORT (AER) 2011

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#### INTRODUCTION

Cavan Waste Disposal Ltd. Killygarry Industrial Park, Cavan, Co. Cavan, hold a Waste License (Reg. No. W0207-01), issued on the 28<sup>th</sup> June 2005, to operate a Waste Transfer Station. In accordance with the requirements of Condition 12.6 of the Waste License, an Annual Environmental Report (AER) for the facility must be submitted to the Environmental Protection Agency (EPA).

The facility is located at:-

Cavan Waste Disposal, Killygarry Industrial Park, Cavan, Co. Cavan.

Tel: (049) 4362 930 Fax: (049) 4362 151

#### 1. DESCRIPTION OF THE SITE

The facility is situated approximately 1km south-east of Cavan Town and lies on the periphery of the Killygarry Industrial estate. The site is bounded by the industrial estate to the east and south, with a wastewater treatment plant located to the north and agricultural pastoral lands to the west.

Waste handling activities at the site consist of accepting and bulk loading of Commercial & Industrial waste and C&D waste for transfer to other recycling depots. In addition, where possible, Recyclable Waste (cardboard, glass, plastic, timber and metal) is recovered from the waste streams and sent for further recycling.

The licensed waste activities, permitted under the Third and Fourth Schedule of the Waste Management Acts (1996 to 2003), in the Waste Licence (W0207-01) are as 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 metals or metal compounds.

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

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

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.

No hazardous wastes or liquid wastes are accepted at the facility. Waste that enters the facility is mostly unprocessed. On arrival the waste is checked and load details recorded at the weighbridge. Waste is then inspected and segregated into either recyclable or non-recyclable waste, and the materials for recycling are transported to at another waste licensed facility. Non-Recyclable waste material is sent for disposal.

#### **1.1 Process Operations**

There are a number of waste operations that are in place. Table 1 details the operations involved with each of the waste types received:

**Table 1 Waste Processing Operations** 

Waste Description	<b>Process Operation</b>
Commercial/Industrial Skip Waste	Waste is brought on site in either skip or roll on roll off type container. Loads consist of mixed waste types that require further processing or may be of a specific waste type. All loads are weighed in with the load details being recorded on the weighbridge system. On clearance from the weighbridge the loads are directed to either the waste transfer building or to specific bays located outside the waste transfer building. Waste entering the transfer building is tipped, inspected and segregated into recyclable waste requiring further processing. Residual waste is sent to landfill.
Construction and Demolition Waste (C&D)	Mixed C&D waste is tipped in the waste transfer building. The load is then inspected for unacceptable items such as plasterboard and styrofoam. The remaining waste is then stockpiled prior to being sent for further processing.
Wood Products	Wood is tipped in a timber bay. Wood is stockpiled and sent to Panda Waste or Enrich Environmental for further processing
Mixed Ferrous Metals and non Ferrous metals	Mixed metals are stored in a metal bay and sent predominantly to Clearway Recycling Ltd. Other outlets for segregated metals e.g. Steel/ Aluminium Packaging to Gormley Metals, Old Aluminium to Treanor Metals and Copper Wire to P.Carneys Ltd.
Glass	Glass is stored separately in bays on site and sent to either, Oxigen Environmental, Ballymount or Glassco Recycling Co. Kildare.
Cardboard & Paper	Cardboard and Papers are sent to Oxigen Environmental Ltd. Ballymount.

<b>Waste Description</b>	Process Operation
Plastic	Segregated plastic is sent to mainly Retech Processing Ltd., and Thorndale Recycling, with plastic bottles/container sent to Oxigen Environmental Ltd. Ballymount.
Household/Municipal Waste	Municipal waste was accepted on site as agreed by the EPA. The waste material is tipped in the processing shed, where it was loaded into open top ejector trailers and brought to a licensed facility/landfill, namely Scotch Corner Landfill, Co. Monaghan, Whiteriver landfill, Co. Louth, Derryclure Landfill, Co. Tullamore, Drehid Landfill, Co. Kildare and Indaver Ireland, Duleek, Co. Meath
Dry Recyclables	Cavan Waste Disposal collects Dry Recyclables from a large number of households/Commercial customers in the Cavan and the surrounding region. The dry recyclables is tipped in the processing shed, where it is inspected prior to being sent to Oxigen Environmental Ltd. Ballymount and Oxigen Environmental Ltd. Dundalk.
Gypsum	Gypsum material is sent to Envirogrind, Co. Donegal
Green Waste	Green waste material is mainly sent to Enrich Environmental Co. Meath, with some sent to Envirogrind, Co. Donegal.

#### 2. ENVIRONMENTAL MONITORING AND EMISSIONS DATA

Environmental monitoring results for the reporting period are outlined in the following sections. An interpretation of the results and impacts on the environment are also presented. Copies of the original monitoring reports are submitted to the Agency once the report has been completed and received by Cavan Waste Disposal.

#### 2.1 Wastewater Emissions

Schedule D of Waste License W0207-01 requires that wastewater emissions be monitored bi-annually. The samples collected are analysed for pH, Biological Oxigen Demand, Chemical Oxigen Demand, Suspended Solids, Ammonia Nitrogen, Mineral Oil and Sulphate. All sampling and analysis was carried out by trained BHP personnel.

One wastewater sampling point is present on the site. This has been designated as FW1. Monitoring was undertaken in February and November as per requirements of Schedule D.5.1 Wastewater Emissions.

A summary of results for all samples taken from the 1<sup>st</sup> of January to 31<sup>st</sup> of December 2011 is given in Table 2 and illustrated in Figures 1 to 6.

**Table 2 Wastewater Emissions (FW1)** 

Month	pН	COD mg/L	BOD mg/L	Ammonia mg/L	Mineral Oil ug/L	Suspended Solids mg/L	Sulphate mg/L
February	7.13	645	243	0.36	< 0.1	45	74
November	6.93	1288	438	15.79	< 0.1	308	111

Schedule C of Waste License W0207-01 sets specific emission limit values. No Emission limits are stated for Wastewater Emissions.

Figure 1 Wastewater monitoring results (pH) pH

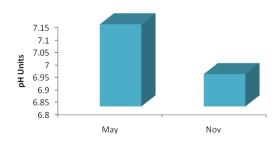


Figure 2 Wastewater monitoring results (BOD)

BOD mg/L

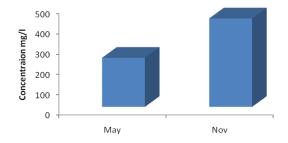


Figure 3 Wastewater monitoring results (COD)

COD mg/L

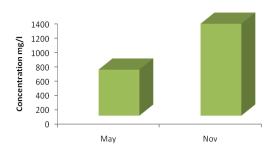


Figure 4 Wastewater monitoring results (Suspended Soilds)

## Suspended Solids mg/L

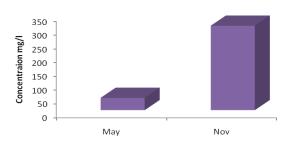


Figure 5 Wastewater monitoring results (Ammonia)

Ammonia mg/L

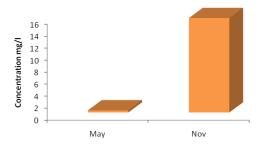
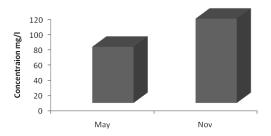


Figure 6 Wastewater monitoring results (Sulphate)
Sulphate mg/L



#### 2.2 Surface Water Monitoring

Schedule D: Monitoring of Waste Licence W0207-01 states surface water monitoring is to be undertaken quarterly. Monitoring was undertaken on the  $15^{th}$  of February, the  $28^{th}$  of April, the  $7^{th}$  of September and the  $16^{th}$  of November 2011.

Monitoring was undertaken for pH, COD, Ammonia Nitrogen, Chloride, Sulphate, Suspended Solids, Conductivity and Mineral Oils. Monitoring points SW-1 to SW-4 are presented in Tables 3 to 6 and illustrated in Figures 7 to 13. SW-5 is a nonexistent monitoring location on the site.

Table 3 Surface water monitoring results SW-1

SW1	pH (ph Units)	COD mg/L	Ammonia mg/L	Conductivity uScm-1	Chloride mg/L	Mineral Oil mg/L	Suspended Solids mg/L	Sulphate mg/L
Feb	7.33	275	0.57	352	18.1	< 0.01	184	52
April	6.4	308	0.62	1286	44.3	< 0.01	149	86.9
Sept	6.91	44	0.18	320	20.4	< 0.01	24	52.9
Nov	7.42	1276	4.2	628	15.5	< 0.01	1291	8.4

Table 4 Surface water monitoring results SW-2

SW2	pH (ph Units)	COD mg/L	Ammonia mg/L	Conductivity uScm-1	Chloride mg/L	Mineral Oil mg/L	Suspended Solids mg/L	Sulphate mg/L
Feb	7.36	97	0.15	345	11.6	<0.01	22	64
April	6.72	199	0.17	607	36.9	< 0.01	47	60.7
Sept	6.84	50	0.22	296	46.9	< 0.01	25.3	50.1
Nov	7.16	348	2.23	529	10.7	< 0.01	174	15.6

Table 5 Surface water monitoring results SW-3

SW3	pH (ph Units)	COD mg/L	Ammonia mg/L	Conductivity uScm-1	Chloride mg/L	Mineral Oil mg/L	Suspended Solids mg/L	Sulphate mg/L
Feb	7.02	113	0.23	255	29.1	< 0.01	5	59
April	7.02	8	0.14	223	16.8	< 0.01	30	22.4
Sept	6.94	49	0.15	412	42.1	< 0.01	24	51.3
Nov	7.2	58	1.33	804	16.8	< 0.01	26	13.3

Table 6 Surface water monitoring results SW-4

SW4	pH (ph Units)	COD mg/L	Ammonia mg/L	Conductivity uScm-1	Chloride mg/L	Mineral Oil mg/L	Suspended Solids mg/L	Sulphate mg/L
Feb	7.2	69	0.21	365	22.7	< 0.01	11	61
April	7.06	5	0.19	316	22.1	< 0.01	25	36.9
Sept	7.04	62	0.11	320	48.4	< 0.01	97	52.8
Nov	7.18	25	1.08	293	14	< 0.01	20	29.6

The only emission limit provided on the Waste Licence W0207-01 is for Mineral Oils, a limit of 5 mg/L applies.

In all quarterly samples, the Mineral Oil results for each monitoring point SW-1 to SW-4 were  $<\!0.01 mg/L$ 

Figure 7 Surfacewater monitoring results (pH)

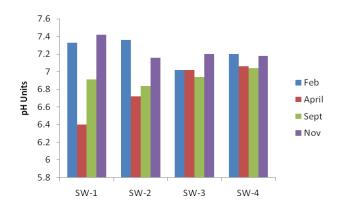
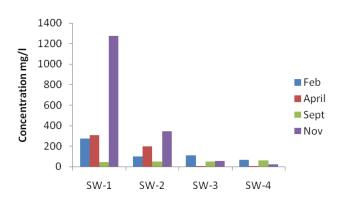


Figure 8 Surfacewater monitoring results (COD)



**Figure 9 Surfacewater monitoring results (Ammonia)** 

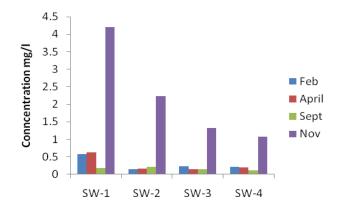


Figure 10 Surfacewater monitoring results (Conductivity)

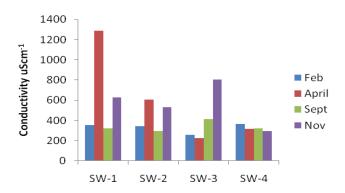


Figure 11 Surfacewater monitoring results (Chloride)

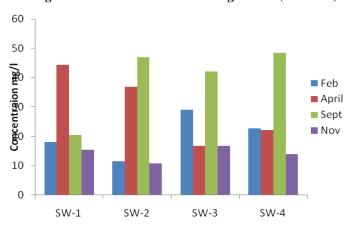


Figure 13 Surfacewater monitoring results (Sulphate)

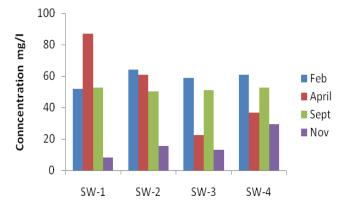
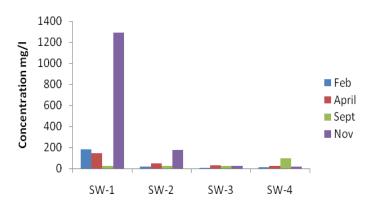


Figure 12 Surfacewater monitoring results (Suspended Solids)



#### 2.3 Noise Monitoring

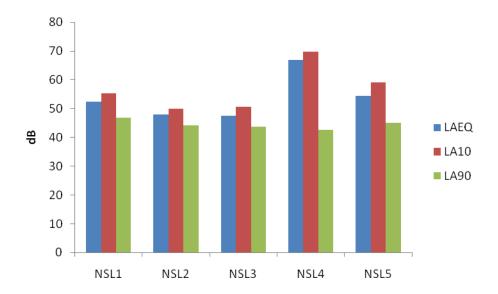
As required in Schedule C.1 of Waste License W0207-01, noise monitoring is required on an annual basis at 5 locations on the site. The noise monitoring survey was undertaken on the 15<sup>th</sup> of February 2011.

Ambient monitoring results are presented in Table 7 and Figure 14. Octave band analysis was also carried out to determine whether tonal or impulsive noise components existed as a result of the on-site activities.

**Table 7 Daytime Noise Monitoring Results (dB)** 

February	NSL1	NSL2	NSL3	NSL4	NSL5
$L_{AEQ}$	52.4	47.9	47.6	66.8	54.4
$L_{A10}$	55.3	49.9	50.6	69.7	59
$L_{A90}$	46.9	44.2	43.8	42.7	45

Figure 14 Daytime Noise Monitoring Results Summary (February 2011)



The locations chosen for the survey were at points along the boundary walls of the site locations N1, N2, N3, N5 and NSL5. The purpose of selecting the boundary locations was to evaluate the noise being generated during normal daytime working conditions at the site. Noise Location N4 is located to the east of the site centre. NSL 1 was chosen as a Noise Sensitive location as a dwelling house located North-West of the site.

Cavan Waste Disposal is located at the back of an industrial park, with agricultural lands surrounding the site. The main contributory offsite noise sources are birdsong and intermittent animal noises and distant traffic noise. Site noise sources include general noise of machinery movement to, from and around the site, including revving and reverse warning signals, also activities in the Processing shed.

The Emission Limit Values specified in Waste License W0207-01, Schedule C.1 were 55 dB(A) for daytime and 45 dB(A) for night-time activities.

All day time Noise Levels at monitoring locations were below the recommended daytime noise limit value of 55dB (A). There was no evidence of a tonal or impulsive component to the noise attributable to the site operation.

#### 2.4 Air Quality/Dust Monitoring

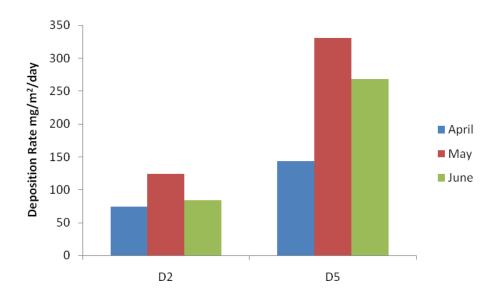
Three dust monitoring surveys were carried out during 2011, April, May and June at two locations D2 and D5, in compliance with Schedule D.2 of Waste License W0207-01, to determine the impact of site operations on the surrounding environment.

The locations of the dust gauges are shown on the attached monitoring location map. Results of monitoring are presented in Table 8 and Figure 15.

Table	8	Dust	Mo	onitor	ing	Resu	lts
-------	---	------	----	--------	-----	------	-----

Location	April	May	June	ELV(mg/m²/day)
D2	74.7	124.4	84.3	350
D5	143.3	330.5	268.6	350

Figure 15 Dust Deposition Rates (mg/m2/day)



The Emission Limit Values specified in Waste License W0207-01, Schedule C.2 stipulates a dust deposition limit of 350 (mg/m²/day).

The results show dust monitoring at D2 and D5 were both compliant.

## 2.5 Complaints handling

There were no complaints received at the Cavan Waste Disposal facility in 2011.

## 3. SITE DEVELOPMENT WORKS

The site development works carried out during the reporting period are summarized in Table 9 below:

Table 9 Site Development Works during the Reporting Year 2011

Development	Date
Upgrade of vehicle parking area	April
Strengthened wash bay	April
Repair of damaged concrete surface areas	June

#### 4. WASTE RECEIVED AND CONSIGNED BY THE FACILITY

#### 4.1 Waste Received

Waste accepted at the waste transfer and recycling facility is comprised of Commercial and Industrial Waste, C&D Waste and Dry Recyclables from the "green bin" collection service. The waste received at the facility during the reporting period amounted to 24,768 tonnes which is under the limit of 24,990 tonnes per annum set in Waste License W0207-01.

Table 10 gives the total quantities of waste accepted into the facility and the total quantities of materials specified to be accepted as per waste Licence W0207-01.

**Table 10 Waste Transferred Waste Transfer Facility (Metric Tonnes)** 

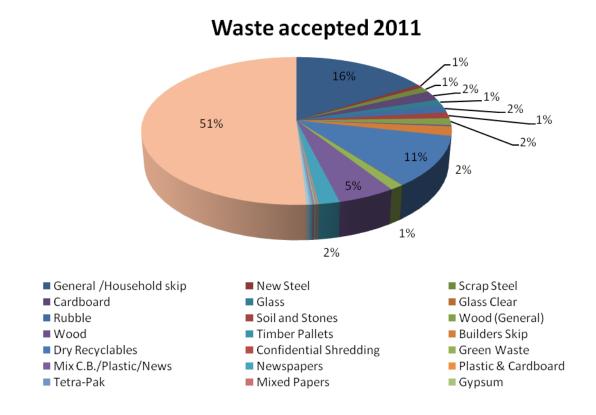
Waste Type	Max(Tonnes per annum) as per Waste Licence W0207-01	Tonnes accepted into the facility 2011
Total	24,990	24,768

The relative quantities of waste accepted into the facility during the reporting period are summarised in Table 11 and a graphical representation of the waste types can be seen in Figure 16.

Table 11 Breakdown of Waste coming into Facility on a month by month basis (Metric Tonnes)

Table 11 Breakdown of	able 11 Breakdown of Waste coming into Facility on a month by month basis (Metric Tonnes)													
Waste Type	EWC Codes	January	February	March	April	May	June	July	August	September	October	November	December	Total
General /Household skip	20 03 01	331.14	302.06	377.82	283.18	281.2	338.3	362.82	426.78	318.29	370.76	343.04	285.55	4020.94
New Steel	20 01 40/15 01 04	10.04	12.5	15.24	18.02	12.66	15.06	13.6	9.4	17.74	13.8	18.14	12.3	168.5
Scrap Steel	20 01 40	25.3	34.9	38.2	41.78	19.74	27.8	22.7	21.02	16.73	13.68	13.44	11.04	286.33
Cardboard	15 01 01	81.22	63.46	75.88	63.92	39.68	38.92	25.56	28.08	28.8	25.4	28.4	27.16	526.48
Glass	15 01 07	37.4	36.34	38.32	32.38	22.62	25.96	15.76	41.72	19.38	21.94	21.18	19.56	332.56
Glass Clear	15 01 07	0	0.78	0	0	0	0	0	0.94	0	0	0	0	1.72
Rubble	17 01 07	24.72	37.86	55.26	52.34	25.26	37.36	43.28	21.3	35.16	49.74	30.22	6.1	418.6
Soil and Stones	17 05 04	17.52	0	5.94	0	217.4	58.8	17.52	0	0	0	0	0	317.18
Wood (General)	20 01 38	36.28	50.6	67.34	52.26	37.16	36.3	22.92	14.1	17.6	10.84	16.06	11.72	373.18
Wood	17 02 01	0	0	0	0	0	0	0	15.66	14.04	16.76	7.62	15.04	69.12
Timber Pallets	15 01 03	5.84	0	0	0	0	0	0	0	0	0	0	0	5.84
Builders Skip	17 09 04	47.06	56.48	42.62	31.16	28.36	29.82	28.24	54.88	40.42	30.88	80.34	32.18	502.44
Dry Recyclables	20 03 01	209.48	259.98	235.94	233.6	253.87	242.96	263.56	223.21	255.22	152.76	249.58	188.38	2768.54
Confidential Shredding	20 01 01	2.76	0.36	0.38	0	0.1	1.3	1.04	3.76	0	0.58	0.3	0	10.58
Green Waste	20 02 01	15.5	11.2	43.36	56.4	23.84	26.78	39.88	37.86	24.06	13.26	17.88	3.56	313.58
Mix C.B./Plastic/News	15 01 06	107.16	105.5	106.04	99.38	97.02	117.76	89.1	110.68	124.92	108.8	119.26	116.32	1301.94
Newspapers	20 01 01	60.16	39.6	59.56	41.06	37.18	34.18	38	34.08	39.72	20.58	43.6	32.44	480.16
Plastic & Cardboard	15 01 06	0	0	6.14	2.5	5.26	0	6.5	0	0	6.58	0	0	26.98
Tetra-Pak	15 01 05	3.22	3.58	3.08	2.44	3.04	2.34	1.94	3.24	2.66	1.4	3.24	1.62	31.8
Mixed Papers	20 01 01	0	0	0	0	0	0	3.44	0	0	0	0	0	3.44
Gypsum	17 08 02	3.88	4.32	5.98	4.92	1.86	4.18	1.66	0	0	0	0	0	26.8
Plastic Bottles	15 01 02	10.1	8.74	9.66	8.78	4.24	4.48	0	3.08	0	0	0	0	49.08
Mixed Plastic	15 01 02	13.78	1.23	4.94	8.64	1.94	2.4	5.2	4.1	1.1	0.88	1.34	0.6	46.15
Aluminium	20 01 40	0	0	0	0	0	0	0	1.94	0	0	0	0	1.94
Aluminium Packaging	15 01 04	2.4	1.88	1.38	2.18	0.78	1.38	1.52	0	0	0	0.16	0	11.68
Tyres	16 01 03	0	0	0	0	0	0	0	0	0	0	0	0	0
Hard plastics	20 01 39	0	0	0.98	0	0	0	0	0	0	0	0	0.38	1.36
Copper wire	20 01 40	0	0	0	0	0	0	0	0	0	0	0	0	0
Steel Packaging	15 01 04	8.72	6.76	6.98	4.82	3.14	5.1	5.44	5.18	4.48	2.58	5.04	4.16	62.4
Municipal Waste	20 03 01	1592.42	1038.72	1244.64	1076.74	998.76	965.68	747.38	845.53	899.98	787.94	1215.05	1195.94	12608.78
TOTALS		2646.1	2076.85	2445.7	2116.5	2115.11	2016.86	1757.06	1906.54	1860.3	1649.16	2213.89	1964.05	24768.1

Figure 16 Waste Accepted into Cavan Waste Disposal facility



#### 4.2 Quantities of Waste Disposed or Recycled

Waste collected and brought to Cavan Waste Disposal facility was sent for recycling/disposal to a number of different licensed facilities.

Non-Recyclable waste was sent to Scotch Corner Landfill, Co. Monaghan, Whiteriver Landfill, Co. Louth, Derryclure Landfill, Co. Offaly, Indaver Ireland, Co.Meath, and Drehid Landfill, Co. Kildare. Some waste was sent for processing to Oxigen Environmental, Robinhood and Oxigen Environmental, Co. Dundalk.

Cardboard was sent to Oxigen Environmental, Ballymount, Paper, Confidential Shredding, tetra pac and plastic bottles were also sent to Oxigen Environmental, Ballymount.

Wood received onsite is stockpiled and sent to Enrich Environmental and Panda Waste Services, both in Co. Meath.

Dry recyclables collected from the "green bin" operations were sent to Oxigen Environmental, Ballymount and also to Oxigen Environmental, Dundalk.

C&D material went to Oxigen Environmental, Ballymount and Clean Rubble to individual farmers for infilling/development works.

Metal packaging and scrap metals are primarily sent to Clearway Disposal Ltd., Co. Armagh, with a small proportion to Gormley Metals and Treanor Metals. Copper Wire is sent to P.Carney Ltd.

All glass types were sent to Oxigen Environmental, Ballymount or Glassco Recycling in Co. Kildare.

Gypsum material was sent to Enviro Grind Ltd, Co. Donegal.

Green waste sent to Enrich Environmental, Co. Meath.

Plastic packaging is sent mainly to Retech Processing, Cootehill, Co. Cavan and some to Thorndale Environmental Recycling, Co. Derry.

Batteries recovered on site were sent to The Recycling Village, Co. Louth, Tyres to Crumb Rubber, Co. Dublin.

Interceptor waste was sent to Rilta Environmental, Co. Dublin

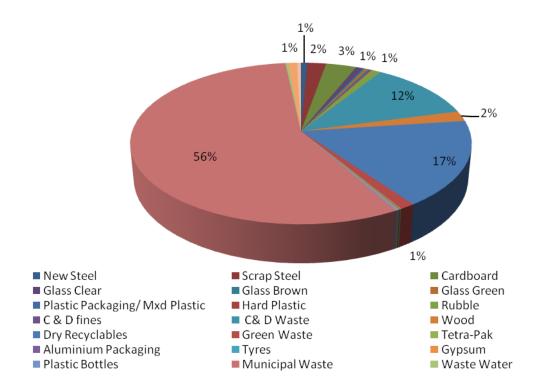
All facilities are either fully licensed by the EPA or permitted by the relevant Local Authority. Consignments to facilities in the North of Ireland are covered by Trans Frontier Shipment Forms (TFS) obtained from Cavan County Council and the relevant Northern Ireland Authorities where applicable.

The relative quantities of waste removed from the facility for disposal/recycling during the reporting period are summarised in Table 12 and a graphical representation of the waste types can be seen in Figure 17.

Table 12 Monthly Waste Quantities removed from Cavan Waste Transfer and Recycling Facility (Metric Tonnes)

Waste Type	EWC Codes	January	February	March	April	May	June	July	August	September	October	November	December	Total
New Steel	20 01 40/15 01 04	10.94	13.64	19.46	10.36	13.9	15.08	13.7	12.14	22.94	0	26.6	16.26	175.02
Scrap Steel	20 01 40	49.26	61.78	49.24	56.64	33.02	30.98	37.22	47.92	50.56	28.8	37.74	25.46	508.62
Cardboard	15 01 01	111.34	93.58	122.36	83.92	68.2	70.68	51.08	43.18	51.46	47.62	41.74	49.12	834.28
Glass Clear	15 01 07	13.92	45.12	0	28.54	14.5	14.16	15.12	13.5	11.2	15.7	0	28.72	200.48
Glass Brown	15 01 07	0	0	0	17.72	0	0	20.8	0	0	14.88	0	0	53.4
Glass Green	15 01 07	19.74	18.56	0	12.02	9.84	0	0	10.14	0	12.5	0	0	82.8
Mixed Plastic Packaging	15 01 02	8.44	4.22	14.96	1.6	6.94	20.3	5.82	0	1.48	3.02	2.68	0	69.46
Hard Plastic	20 01 39	5.1	10.4	2.28	5.04	1.52	1.92	4.02	1.54	0	2.72	1.26	1.8	37.6
Rubble	17 01 07	0	12.8	29.58	29.96	32.4	16.48	0	13.48	13.12	50.86	12.58	53.68	264.94
C& D Waste	17 09 04	195.54	249.78	326.98	256.54	200.64	288.88	259.04	304.42	235.84	202.5	265	159.08	2944.24
Wood	20 01 38/17 02 01	39.42	45.5	102.68	56.64	17.06	64.68	29.96	21.72	62.2	25.06	23.46	28.52	516.9
Dry Recyclables	20 01 01	337.34	343.96	355.48	348.2	357.84	331.84	384.82	378.36	388.74	300.44	394.12	347.88	4269.02
Green Waste	20 02 01	20.64	19.78	40.82	59.3	18.38	14.78	46.18	18.86	36.46	21.94	12.1	5.92	315.16
Tetra-Pak	15 01 05	3.82	5.76	2.7	0	3.68	0	4.5	0	4.12	0	4.52	0	29.1
Aluminium Packaging	15 01 04	2.46	3.26	1.98	3.92	0.78	1.38	1.52	0	2.18	0.84	0.26	0	18.58
Tyres	16 01 03	0	0	1.74	3.86	0	0	0	4.54	0	0	0	0	10.14
Gypsum	17 08 02	12.04	0	10.88	0	5.62	0	0	0	0	3.88	0	0	32.42
Plastic Bottles	20 01 39	10.36	6.94	10.42	5.98	6.1	2.98	3.02	3.08	0	0	0	0	48.88
Municipal Waste	20 03 01	1749.2	1168.3	1372.82	1126.44	1046.62	1081.14	853.78	995.84	995.04	906.2	1345.02	1353.66	13994.06
Waste Water	20 03 99	9.46	5.4	5.26	0	9.26	9.24	4.64	0	5.22	9.94	9.9	10.08	78.4
Aluminium	20 01 40	0	0	0	0	0	0	0	0	0	0	0	0	0
Soil & stones	17 05 04	0	0	0	0	206.43	24.44	0	0	0	0	0	0	230.87
Gas cylinders	16 05 04	0	0.6	0	0	0	0	0	0	0	0	0	0	0.6
Batteries	16 06 01	0	0	0	0	0	0	2	0	0	0	0	0	2
Copper	17 04 01	0	0	0	0	0	0	0	0	0	0	0	0	0
Interceptor waste	13 05 08	0	0	0	0	0	0	0	0	6.02	0	0	0	6.02
Steel packaging	15 01 04	11.64	16.5	14.22	5.2	13.72	12.78	6.22	5.6	2.68	7.58	4.46	2.16	102.76
Clothes	20 01 10	0.46	0	0.22	0	0	0	0	0	0	0	0	0	0.68
Total		2611.12	2125.88	2484.08	2111.88	2066.45	2001.74	1743.44	1874.32	1889.26	1654.48	2181.44	2082.34	24826.43

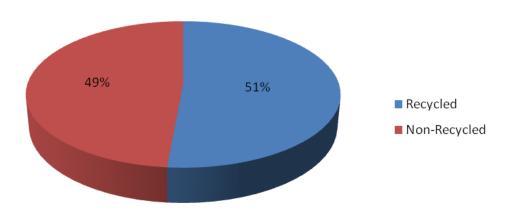




## **4.3 Recycling Rates**

The following figure shows the Recycling trend for the Cavan Waste Disposal Facility from January to December 2011. As shown below, of all waste received on site 51% of waste was recycled with 49% being sent to landfill.

Figure 18 Recycling trend



## 4.4 Unacceptable Waste List

Cavan Waste Disposal does not accept the following waste types into the facility.

WASTE TYPE	<u>DESCRIPTION</u>
Waste Oil	Oil liquids
Oil Filters	Vehicle/Machine types
Oil/Sand mixtures and/or mixtures or Oil and other materials	Oil spill clean ups and soak ups
Petroleum wastes	Petrol liquids and sludges
Chemical Wastes	Drum chemicals
Paint, Inks and Thinners	Solvent based liquids
Infectious Healthcare Wastes	Hospital and Industry waste
Lead Acid Batteries	Vehicle and Machine types
Fluorescent Light Bulbs	Tube and Bulb types
Gas bottles/Cylinders/Kegs	Empty/full metal types
CFC gases from refrigerators	Waste fridges/freezers
Large volumes of liquids	Volumes greater than 200 litres
Asbestos	Sheeting, Cement, Packaging
Toner	Printer Cartilages
WEEE	Televisions and Microwaves

## 5. REGISTER OF WASTE CONTRACTORS & OFFSITE WASTE FACILTIES

Facility Name and Address	License/Permit no.	EWC Code	Description	Letter Ref Number (EPA)
African Clothing Exports Ltd.,145 Fenaghy Rd., Cullybackey, Co. Antrim, N. Ireland	WMEX 04/12 WCP/MH/2006/84B	20 01 10	Clothes	
Enva Oil Laboratories Limited, Clonminam Industrial Estate, Portlaoise, Count Laois	W0184-01 WCP/MH/2001/107B	17 05 04 15 02 02	Soil & Stones Paint Waste	WO207-01 (07)Gen09JG
Cavan County Council Treatment Works, Keadue Lane, Cavan	Treatment works	20 03 99	Waste Water	WO207-01 (05)gen1JG
Clearpoint Recycling Ltd, Ballylynch, Carrick on Suir, Co. Tipperary	WM/WP/12/05	15 01 02	Plastic Packaging	WO207-01 (07) Gen10JG
Clearway Disposal Ltd. 41 Dobbin Road, Portadown, Co. Armagh	LN/09/29/A WCP/MH/2006/68B	20 01 40 15 01 04 20 01 40	Metals  Metal Packaging  Aluminium	WO207-01 (06) Gen06JG
Corranure Landfill, Cootehill Road, Co. Cavan	W077-04	20 03 01 19 12 12 20 03 99 17 01 07 20 01 38	Municipal waste Mixed C&D NR waste C&D Waste Woodchips	WO207-01 (05)gen1JG
Crumb Rubber Ireland Ltd. Mooretown, Dromiskin, Dundalk, Co. Louth	WP2007-01	16 01 03	Tyres	WO207-01 (05)gen1JG
EnviroGrind Ltd. Pettigo, Co. Donegal	ENV/143/WP04-08	20 02 01 17 08 02	Green Waste Gypsum	WO207-01 (07) Gen09JG
D.M Waste, Labadish, Letterkenny, Co. Donegal  Enrich Environmental Ltd, Larch Hill Stud, Kilcock, Co. Kildare	ENV 143 11-1207 WFP/MH/08/0001/01	20 01 01 02 01 03 02 01 07	Dry Recyclables Plant tissue Waste Waste from Forestry	W0207-1(08)Gen12JG W0207-1(08)Gen13JG

		Ī		ſ
		20 02 01	Biodegradable Waste	
		20 02 02	Soil	
				W0207-
		17 02 01	Wood	01(09)AP05JG.doc
		15 02 01	Wood	
Finsa, Scarrif, Co. Clare	P022-01	20 01 38	Wood chips	WO207-01 (05)gen1JG
			Green, Clear and	
Glassdon Recycling, 52 Creagh Rd, Toomebridge, Co. Antrim	ROC 84	15 01 07	Brown Glass	WO207-01(07) Gen 08JG
	LN/06/08			
Hammond Lane Metal Co., Garycastle, Athlone, Co. Westmeath.	WP173-2008	20 01 40	Metals	Approval sought 06/07/06
JVC Ltd, Unit 27B Clonshaugh Industrial Estate, Dublin 17	WP/98086	15 01 02	Plastic Packaging	WO207-01 (05)gen1JG
		15 01 01	Paper & Card	
		20 01 01	Dry Recyclables	
Longford County Council Treatment Works	D0060-01	20 03 99	Wastewater	
Monaghan County Council Treatment Works	D0061-01	20 03 99	Waste Water	
Monaghan County Council, Scotch Corner Landfill, Letterbane, Annyalla,				
Castleblaney,	W020-02	20 03 01	Municipal waste	WO207-01 (05)gen1JG
Co.Monaghan		20 03 99	NR waste	
		19 12 12	Mixed C&D waste	
Mc Elvaney's Waste and Recycling, Corcaghan, Monaghan, Co. Monaghan	W020-02	20 01 01	Dry Recyclables	WO207-1(07)Gen11JG
	WCP/MH/2005/89B			
Oxigen Environmental Ltd., Merrywell Industrial Estate, Ballymount, Dublin 22	W0208-01	15 01 02	Plastic Packaging	WO207-01 (07) Gen09JG
		20 01 01	Dry Recyclables	
		15 01 01	Cardboard	
		20 03 01	Municipal Waste	
		20 01 01	Newspapers	
		15 01 07	Glass	

		1		
		15 01 04	Aluminium Packaging	
		15 01 04	Steel Packaging	
Oxigen Environmental Ltd., Coes Rd, Dundalk, Co. Louth	W0144-01	15 01 01	Cardboard	W0207-1(08)Gen13JG
		20 03 01	Dry Recyclables	
Oxigen Environmental Ltd., Robinhood Industrial Estate, Robinhood Road, Ballymount, Dublin 22	W0152-03	15 01 02	Plastic	WO207-01 (05)gen1JG
		20 03 01	Municipal waste	
P.Carney Ltd., Crosskiel, Kells, Co. Meath.	P0402-2	20 01 04	Beer Kegs	WO207-01 (05)gen1JG
		20 01 40	Copper wire	
Retech Processing Ltd. IDA Estate, Cootehill, Co. Cavan	WP07-04	15 01 02	Plastic Packaging	WO207-01 (05)gen1JG
				WO207-01(07)Gen11JG
ReGen Waste Ltd. Shephards Drive, Carnbane, Industrial Estate, Newry, Co. Down	LN/04/08/A	15 01 01	Cardboard	W0207-1(08)Gen13JG
		20 03 01	Dry Recyclables	
Rilta Environmental Ltd. Greenogue Business Park, Rathcoole, Dublin (Sita Environmental)	W0192-03	17 05 03	Contaminated soil	WO207-01 (06)Gen05JG
Returnbatt Ltd.Unit A Oldmill Industrial Estate,Oldmilltown,Kill,Co.Kildare	W0105-01	16 06 01	Batteries	
The Recycling Village. Unit 4 Tenure Business Park, Manasterboice, Drogheda, Co. Louth.	WP2007/20	16 06 01	Batteries	W0207-1(08)Gen13JG
Nurendale t/a Panda Waste, Ballymount Road, Walkinstown, Dublin 12	WPR021/3	15 01 01	Paper & Card	WO207-01 (05)gen1JG
		15 01 01	Cardboard	
		20 01 01	Conf shredding	
		15 01 05	Tetra pak	
Textile Recycling Ltd, Glenabbey Complex, Belgard Rd, Tallaght, Dublin 24	WPR014/2	20 01 10	Clothes	
Treanor Metals (T-Met), 84 Armagh rd, Moy, Dungannon, Co. Armagh	WDL/13	20 01 40	Metals	WO207-01 (05)gen1JG
	WCP/MH/2004/38B	20 01 40	Aluminium	
	NI 00216			

Farmers-Various	N/A	20 01 38	Wood Chips	Approved
Farmers-Various	N/A	17 01 07	Clean Masonry	Approved
Rehab Glassco, Naas, Co. Kildare	WP247/2006	15 01 07	Glass	W0207- 01(09)AP06JG.doc
		17 02 02	Glass	
		20 01 02	Glass	
		20 01 40	Metals	
James W Corry and Sons Ltd.(Campsie and Thorndale Ltd) 77 Clooney rd, Campsie, Co. Derry	WDL 14	15 01 02 20 01 39	Plastic Plastic	W0207- 01(09)AP07JG.doc
Ballydonagh landfill, Co. Westmeath	W028-03	20 01 03	Municipal waste	W0207- 01(10)AP09JG.doc
Gormley Felix, Monery, Crossdooney, Co. Cavan	WP/07/15	20 01 40	Metals	
		15 01 04	Metal Packaging	
Derryclure Landfill, Tullamore, Co. Offaly	W029-03	20 03 01	Municipal Waste	
Knockharley Landfill, Knockharley, Navan Co.Meath	W0146-02	20 03 01	Municipal Waste	
Kyletalesha Landfill, Clonsoughy, Kyleclonhobert, Co. Laois	W0026-02	20 03 01	Municipal Waste	
KTK Landfill Ltd., Brownstown and Carnalway, Kilcullen, Co.Kildare	W0081-03	17 05 04	Soil & Stones	
Whiteriver Landfill, Dunleer, Co. Louth	W0060-02	20 03 01	Municipal waste	
		19 12 09	Minerals (sand/stone)	
		19 12 12	Fine material	
Rampier Landfill, Baltinglass, Co. Wicklow	W006603	20 03 01	Municipal Waste	W0207-1(10)APJGdocx
O'Tooles Composting,Co.Carlow	WFP-CW-10-0003-01	20 02 01	Green Waste	
		20 01 08	Brown Bin	
Nurendale t/a Panda Waste Services, Navan Co.Meath	W0140-03	20 01 38	Wood	
		17 01 02	Bricks	
Nurendale t/a Panda Waste Services, Finglas, Co.Dublin	W0261-01	20 01 38	Wood	
		17 01 02	Bricks	

Rehab Glassco, Ballymount, Dublin 4	WPR-004	15 01 07	Glass	
John Gannon Concrete Ltd. Kilbeggan, Co.Westmeath	WFP-WM-2009-0007- 01	15 01 07 17 02 02	Glass Glass	
Bord Na Mona PLC, Drehid Landfill, Carbury, Co. Kildare	W0213-03	20 03 01	Municipal waste	
Irish Packaging Recycling Ltd. Ballymount Road, Dublin 12	W0263-01	15 01 01 20 01 01	Paper & Cardboard Cardboard	W0207- 1(11)AP13JG.docx
Indaver Ireland, Carranstown, Duleek, Co. Meath	W0167-02	20 03 01 20 03 07	Municipal waste Bulky waste Mechanically treated	W0207- 1(11)AP14JG.docx
		19 12 12 08 01 14	waste Paint Sludge	

## 6. ENVIRONMENTAL INCIDENTS

## **6.1. Incidents Summary**

Condition 12.3 requires that the licensee shall submit a written record of environmental incidents to the agency.

There were no incidents at Cavan Waste during 2011

#### 7. ENVIRONMENTAL OBJECTIVES AND TARGETS

#### 7.1 Progress Report on the Achievement of 2011 Objectives and Targets

#### **Objective 1** Continued compliance with Waste License W0207-1

**Target 1.1:** Review of operations and processes on site and in waste collection to ensure energy and resource efficiency in all aspects of waste management.

Facility and waste collection operations were reviewed by management at the beginning of 2011. From this management review a tonnage quota system has implemented so as to ensure the permitted tonnage capacity was not exceeded in 2011. A weekly tonnage quota was established and monitored, with all waste streams diverted from source to their end destination where possible. As diesel prices continued to rise throughout 2011 additional changes to operations were made including the use of more local destinations for certain wastes such as metals and wood.

**Target 1.2:** Upgrading of the site to include repair and maintenance of concrete areas in the facility, upgrade of roadway entrance and fencing and gates maintained to ensure adequate security. Re-paint gullies, drainage grids and manhole covers.

Repairs of the concrete surface were carried out in June 2011 to areas identified to be in poor condition. Upgrades to the facility roadway were carried out on several occasions in 2011 and included the grading and levelling of the roadway, with the staff parking area rotated on a regular basis so as to reduce to excessive corrosion on the roadway. Other site maintenance included the installation of new covers over the silt trap, the painting of the site manholes in the appropriate drainage markings and cleaning of the silt trap.

**Target 1.3:** To test the integrity and water tightness of the existing portable bunds and diesel tank on the site, replace if required and test any new tank and drum storage at the facility.

Cavan Waste Disposal received approval from the Agency in December 2010 to install a diesel tank on-site subject to specific conditions. To comply with this approval Cavan erected barriers around the tank to minimise risk of damage due to impact. Reflectors were affixed to these barriers to aid visibility during hours of darkness. Labels were affixed to the tank to outline the procedure to be used when using the tank. Labels also identify safety hazards/precautions. A Certificate of Integrity was submitted to the Agency prior to the initial filling of the tank.

A procedure for the use of the diesel tank was written up and incorporated as part of the Environmental Management System for the facility. This procedure identified requirements in the event of a spillage. Personnel using this tank for refuelling were trained on this procedure. The pump station of the tank was supplied with an emergency spill kit containing spill socks and reusable neoprene drain covers.

A full engineers report on the integrity of the site concrete surfaces and drainage was carried out in June 2011. Results from the report found areas of the concrete surface which were in poor condition with cracking and slight subsidence detected in certain areas. Corrective action was carried out in late June with the resurfacing of the areas in poor repair. An inspection of the site interceptor tank was carried out directly after the desludging by Rilta Environmental in 16<sup>th</sup> September, with no visual damage detected.

**Target 1.4:** Carry out de-sludging of oil interceptor by an approved contractor and have all drains jet washed so as to ensure that the yard drainage system is operating successfully.

De-sludging of the Site Interceptor was completed in September by Rilta Environmental. Maintenance of the interceptor also included the replacement of the tank filters and readjustment of the tank float ensuring the correct operation of the discharge outlet of the interceptor.

### **Objective 2** Compliance with National Recycling Targets

**Target 2.1:** Aim to initiate further roll out of brown bins to all commercial customers to help meet national recycling targets.

Information letters and brochures were sent to all commercial customers in 2011 to avail of a brown bin collection service and information leaflets have been produced to increase customer awareness and help meet national recycling targets.

**Target 2.2:** Increase and achieve annual recycling targets. Provide increased waste collection options and services to all customers to encourage and promote increased recycling.

Cavan Waste Disposal continued to modify its waste management services so as to achieve full compliance with national regulations and recycling rates. Diversion from landfill increased in 2011, with a significant portion of municipal waste being sent the Indaver Waste to Energy facility in Duleek, Co. Meath. Distribution of brown bins continued to increase throughout 2011, while the distribution and sale of domestic waste bags decreased throughout the Cavan region. These changes and the subsequent diversion of organic material away from landfill is seen as a key long term objective by Cavan Waste Disposal and is in line with the National Biodegradable Waste Strategy, the EU Waste Framework directive (2006/12/EC) and the EU Landfill directive (1999/31/EC) and will therefore contribute to reaching both Cavan Waste and Government objectives.

#### Objective 3 Continued compliance and updating of the EMS

**Target 3.1:** Review and update the EMS, scheduled for completion in 2011. This shall be implemented and maintained by all relevant personnel and updated as necessary.

A full review of the EMS took place in May and June 2011. Several new procedures including a new site inspection and monitoring procedure, and fire drill procedure were established, while out of date procedures relating to old operations were removed. All procedures and documentation were reviewed and updated in line with the ISO14001 standard and EPA guidance documents. A copy of the latest EMS is kept of file onsite at all times.

#### **Objective 4** Staff Awareness and Training

**Target 4.1:** Update and provide on-site and off-site training and awareness to all staff of Cavan Waste Disposal.

H&S training and toolbox talks were ongoing throughout 2011, with the Oxigen Group H&S manager and site H&S Manager involved in continuously updating staff with the relevant Environmental and Health & Safety Issues.

**Target 4.2:** Provide induction training to all new staff in Cavan Waste Disposal and maintain records at the facility.

No new staffs were employed by Cavan Waste Disposal in 2011. Records of training completed are kept in the training file on-site.

#### 7.2 Objectives and Targets for 2012

Cavan Waste Disposal aim to achieve environmental compliance at all times. The facility operates and is managed to ensure activities do not cause nuisance or environmental pollution.

It is the responsibility of the compliance officer and site manager to work towards continual improvement as set in the objectives and targets for 2011. This schedule is ongoing and objectives /targets may be added as deemed necessary over the coming year.

Table 13 Object	tives and Ta	rgets for 2012
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Objective	Description
Objective 1	Compliance with Waste Licence W0207-01
Target 1.1	Review operations and processes on site and in waste collections to ensure energy and resource efficiency in all aspects of waste management. This plan is to include specific targets including the reduction of the overall diesel consumption of up to 15%, and reducing the carbon footprint through decreasing vehicle numbers.
Target 1.2	Further upgrading of the concrete areas in the facility and of the roadway entrance as required.
Objective 2	Compliance with National Recycling Targets
Target 2.1	As part of the Oxigen Group's aim to meet all National Recycling Targets, extensive work is to be carried out in investigating new and viable technologies which will provide increased recycling of all major commodities.
Target 2.2	Provide increased waste collection options and services to all customers to encourage and promote increased recycling.
Objective 3	Review Site Layout
Target 3.1	Investigate the feasibility of carrying out significant improvements to the site infrastructure, including increasing the storage capacity of the Municipal and C&D shed, improving site drainage and upgrading the old wood shredding shed.
Objective 4	Staff Awareness and Training
Target 4.1	Train drivers on how to monitor and manage tyre pressure and tyre maintenance to increase life of tyre and reduce diesel consumption of the vehicle in conjunction with Bridgestone Ireland.
Target 4.2	Provide induction training to all new staff in Cavan Waste Disposal and maintain records at the facility.

#### 8. TANK AND BUND TESTING

Portable Bunds are maintained on site for the storage of hydraulic oil, engine oil, gear oil and waste oil. These bunds were tested onsite and are resistant to penetration by water. Bunds were all tested as per procedure in the site EMS on the 30<sup>th</sup> August 2006.

A bunded diesel tank was installed on-site in December 2010. A copy of the Certificate of Integrity for this tank is maintained on-site.

#### 9. RESOURCE AND ENERGY CONSUMPTION SUMMARY

Energy and resource consumption at the facility from 1<sup>st</sup> January to 31<sup>st</sup> December 2011 can be summarised as water consumption, electricity consumption and diesel usage on the site.

There was a decline in energy consumption for diesel used at the facility in comparison to the previous year, with a slight increase in electricity consumption. The slight increase in electricity can be attributed to the increased use of the facility powerwasher, while the decrease in diesel in consumption is reflective of the further reduced operation activities on the site.

#### 9.1 Water Consumption

The full annual water consumption value was unavailable at the time of this report however based on the figures for the first half of 2011 the total water consumption was approximately 81,816 Litres.

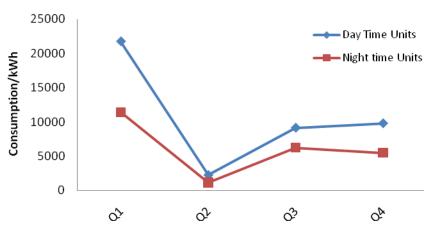
### 9.2 Electricity Consumption

Table 14 Summary Table of Electricity Usage during the reporting period

Month	Day Time Units/kWh	Night time Units/kWh
Q1	21750	11400
Q2	2250	1150
Q3	9150	6250
Q4	9800	5500

Figure 19 Graph showing Electricity usages for reporting period





As shown in Figure 19, both day and night time units show a seasonal pattern throughout the year, with general electricity consumption far lower in summer months compared to winter months. The very low figure for quarter two can be attributed to an underestimate by the electricity and it therefore lower than the true consumption rate. The relatively small increase in day time consumption rates in quarter four is reflective of the decrease in the facility activities and reduced operating hours compared with 2010.

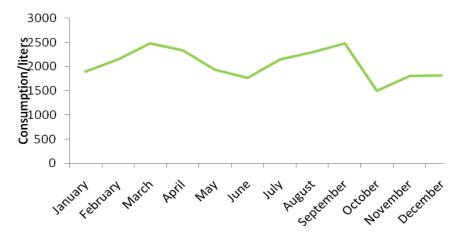
## **9.3 Diesel Consumption**

Table 15 Summary Table of Diesel Usage during the reporting period

Month	Consumption/Liters		
January	1892.39		
February	2148.22		
March	2481.44		
April	2339.63		
May	1932.09		
June	1762.55		
July	2143.71		
August	2296.38		
September	2475.38		
October	1493.48		
November	1801.48		
December	1812.34		
Total	24579.1		

Figure 20 Graph showing diesel usages for reporting period





#### 10. WASTE WATER REMOVED FROM THE FACILITY

Waste Water is removed from the facility once the storage tank is full. A record is kept onsite of each consignment of wastewater removed from the facility. PC Drain Cleaning transports the waste water to Monaghan Wastewater Treatment Works, Co. Monaghan.

The tonnages removed from Cavan Waste Disposal to Monaghan Wastewater Treatment Works are shown in Table 16.

Table 16 Tonnages removed from the Cavan Waste Disposal Facility

Date of transport	Weight/kg	Destination	
06/01/2011	4,420	Monaghan Wastewater Treatment Plant	
11/01/2011	5,040	Monaghan Wastewater Treatment Plant	
16/02/2011	5,400	Monaghan Wastewater Treatment Plant	
11/05/2011	4,540	Monaghan Wastewater Treatment Plant	
11/05/2011	4,720	Monaghan Wastewater Treatment Plant	
21/03/2011	5,260	Monaghan Wastewater Treatment Plant	
13/06/2011	4,820	Monaghan Wastewater Treatment Plant	
18/07/2011	4,640	Monaghan Wastewater Treatment Plant	
06/09/2011	5,220	Monaghan Wastewater Treatment Plant	
13/06/2011	4,420	Monaghan Wastewater Treatment Plant	
10/10/2011	4,920	Monaghan Wastewater Treatment Plant	
10/10/2011	5,020	Monaghan Wastewater Treatment Plant	
10/11/2011	9,900	Monaghan Wastewater Treatment Plant	
12/12/2011	4,920	Monaghan Wastewater Treatment Plant	
13/12/2011	5,160	Monaghan Wastewater Treatment Plant	
Total	78,400		

#### 11. NUISANCE CONTROL

A pest prevention service is provided by Eastern Pest Control (EPC) since April 2011. Sixteen bait locations are positioned onsite.

Eastern Pest Control and Rentokill carried out 6 visits during 2011 to monitor the pest nuisance on site. Records of all site inspection visits carried out by and Rentokill and EPC are kept on-file and uploaded on the company website. The EPC 'pest on-line' monitoring system was established in April 2011. This system allows for all bait points to be bar coded and scanned. These barcodes are scanned upon inspection recording the amount of bait put into that bait point. The inspection reports outline the controls, level of activity and observations for each site inspection.

Cavan Waste Disposal has no fly infestations or complaints to-date.

## 12. FINANCIAL PROVISIONS

Cavan Waste Disposal Ltd. shall pay to the agency an annual contribution of  $\[mathbb{e}\]$ 5,438 or such sum as the Agency from time to time determines, having regard to variations in the extent of reporting, auditing, inspection, sampling and analysis or other functions carried out by the agency, towards the cost of monitoring the activity, as the Agency considers necessary for the performance of its functions under the Waste Management Acts, 1996 to 2003.

## 13. SITE MANAGEMENT STRUCTURE

The management structure at the facility for 2011 is detailed below:

**Table 17 Management Structure** 

Name	Job Title	Responsibilities	Qualifications	Courses attended
Charlie Galligan	Facility Manager	Responsible for the day to day site operations, waste acceptance and dispatch and ensuring activities are carried on effectively and in a manner so as to minimise environmental nuisance.	16 years experience in the Waste and Recycling Industry	FAS Waste Management Course Manual Handling/Fire Training H&S Rep
Brian Abbott	Compliance Officer (October-Dec)	Compliance with EPA Licence Conditions. Liaising with EPA and Local Authority.	BSc (Hons) Environmental Science,	Safe Pass/Fire Training /manual Handling
Joan Harrington	Compliance Officer (Jan-October)	Overseeing Environmental Monitoring and Operation of the Weighbridge. Reporting of data	BSc (Hons) Environmental Science	FAS Waste Management Course Manual Handling/Fire Training
Aine Brady	Assistant to Facility Manager	Responsible for day to day operation of the site	10 years experience in the Waste Industry	Manual Handling/Fire Training
Igor Chakin	Site Supervisor	Responsible for yard operations	10 years experience in waste recycling and disposal	Manual Handling/Fire Training

#### 14. PUBLIC INFORMATION PROGRAMME

A program for public information is in place at the facility. During the reporting period there were no requests from the public to inspect any of the records and files listed in the submission.

The list of documents available for inspection is as follows:

#### **Communications Folder**

- Environmental Monitoring Results
- Complaints Register
- List of Unacceptable Waste accepted at the site
- Pest/Vermin Control Records
- Current Waste License
- CWD Environmental Policy

Members of the public who wish to inspect these files may do so Monday to Friday between the times 10am-12pm and 2pm to 4pm or by making an appointment either with the Facility Manager or Compliance Officer at the telephone number posted on the main facility entrance sign erected in accordance with Condition 3.3. The names of the appropriate personnel are as follows:

Charlie Galligan Facility Manager

Brian Abbott Compliance Officer

# APPENDIX I PRTR Emissions Data