ANNUAL ENVIRONMENTAL REPORT 2008

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

Waste Licence W0207-01

Complied by: Brian Abbott

Compliance Officer

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1. INTRODUCTION

Cavan Waste Disposal Ltd. Killygarry Industrial Park, Cavan, Co. Cavan, hold a Waste License (Reg. No. W0207-01), issued on the 28th 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

2. 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, processed and the materials are loaded for recycling at another waste licensed facility. Non-Recyclable waste is sent for disposal.

2.1 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	Process Operation
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 using a picking line and a trommel screen. Residual waste is sent to Corranure 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 loaded into a trommel where C&D fines are removed and materials such as metal, timber and blocks are picked by hand as the material passes through the picking line. The fine C&D material is sent to Corranure Landfill.
Wood Products	Wood is tipped in a timber bay. Timber is shredded on site and sent to Finsa for further processing. Some is sent to farmers for use as animal bedding, and to Corranure Landfill.
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 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 Glassdon Recycling, Toomebridge, Co. Antrim.
Cardboard & Paper	Cardboard is segregated and sent to Oxigen Environmental Ltd. Ballymount and Paper to Smurfit Ireland Ltd.

Waste Description	Process Operation									
Plastic	Segregated plastic is sent to mainly Retech Processing									
	Ltd. and some to Oxigen Environmental Ltd.									
	Robinhood.									
Household/Municipal Waste	No Household Municipal Waste is currently accepted on									
	site. Municipal waste was accepted however for a 3 day									
	period in December as agreed by the EPA. During this									
	period the waste tipped in the processing shed, where it									
	was loaded on the same day into open top ejector trailers									
	and brought to a licensed facility/landfill.									
Dry Recyclables	Cavan Waste Disposal collects Dry Recyclables from a									
	large number of households in the Cavan and the									
	surrounding region. The dry recyclables is tipped in the									
	processing shed, where it is inspected and sorted prior to									
	being sent to JVC Ltd. Clonshaugh and McElvaney's									
	Waste and Recycling, Co. Monaghan.									

3.0 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.

3.1 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 on the 23rd of May and the 29th of October as per requirements of Schedule D.5.1 Wastewater Emissions.

A summary of results for all samples taken from the 1^{st} of January to 31^{st} of December 2008 is given in Table 2 and illustrated in Figures 1 to 7.

pН **COD BOD** Mineral Suspended **Sulphate** Ammonia pН Oil **Solids** Units mg/L ug/L mg/L mg/L mg/L mg/L May 6.65 1475 604 16 < 0.1 336 28.4 900 122 410.7 October 6.26 448 6.6 < 0.1

Table 2: Wastewater Emissions (FW1)

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

Figure 1: pH

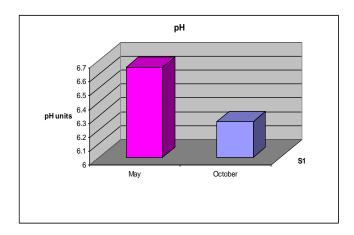


Figure 2: BOD

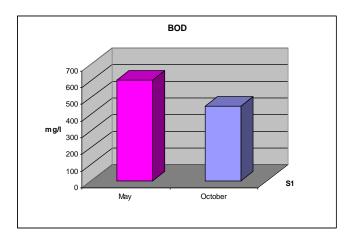


Figure 3: COD

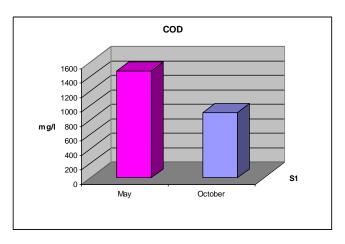


Figure 4: Suspended Solids

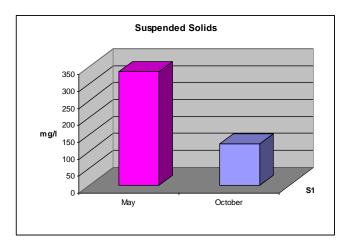


Figure 5: Ammonia

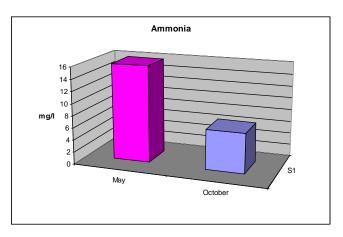
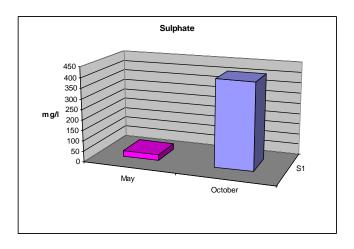


Figure 6: Mineral Oil

(Both Samples were less than 0.1mg/l)

Figure 7: Sulphate



3.2 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 29^{th} of January, the 23^{rd} of May, the 21^{st} of August and the 29^{th} of October.

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 8 to 15. SW-5 is a nonexistent monitoring location on the site.

Table 3: SW-1

SW1	pН	BOD	COD	Ammonia	Conductivity	Chloride	Mineral	Suspended	Sulphate
							Oil	Solids	
Jan	7.17	6	110	0.21	725	36.6	< 0.01	25	157.4
May	6.67	123	380	30	1431	41.9	< 0.01	98	157.8
Aug	6.33	11	35	0.24	563	36.2	< 0.01	7.6	102.4
Oct	6.45	3	29	0.15	547	23.8	< 0.01	19.2	68.3

Table 4: SW-2

SW1	pН	BOD	COD	Ammonia	Conductivity	Chloride	Mineral	Suspended	Sulphate
							Oil	Solids	
Jan	7.04	3	89	< 0.01	429	14.7	< 0.01	107.5	19.9
May	6.68	18	39	1.8	733	21.8	< 0.01	280	35.8
Aug	6.35	19	107	1.2	448	18.2	< 0.01	223	13.1
Oct	7.17	3	37	0.12	450	15.1	< 0.01	28.8	< 0.2

Table 5: SW-3

SW1	pН	BOD	COD	Ammonia	Conductivity	Chloride	Mineral	Suspended	Sulphate
							Oil	Solids	
Jan	6.93	1	59	0.16	519	23.9	< 0.01	33.5	50.4
May	6.68	9	18	0.23	622	12	< 0.01	53	41.5
Aug	6.65	5	18	0.34	539	11.4	< 0.01	41.3	38.8
Oct	6.62	8	75	0.57	415	15	< 0.01	17.6	< 0.2

Table 6: SW-4

SW1	pН	BOD	COD	Ammonia	Conductivity	Chloride	Mineral	Suspended	Sulphate
							Oil	Solids	
Jan	6.88	1	53	0.01	485	13.6	< 0.01	19	59.3
May	6.61	14	45	1.2	630	13.7	< 0.01	452	18.2
Aug	6.54	16	64	1.8	571	22.6	< 0.01	406	38.5
Oct	7.02	9	400	0.54	504	10.4	< 0.01	638.4	< 0.2

The only emission limit provided on the Waste Licence 207-01 is for Mineral Oils there a limit of 5 mg/l applies. In all quarterly samples the Mineral Oil results for each monitoring point were <0.01 mg/l.

Figure 8: pH

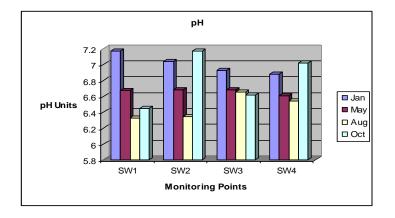


Figure 9: Ammonia

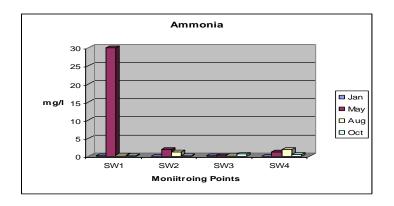


Figure 10: COD

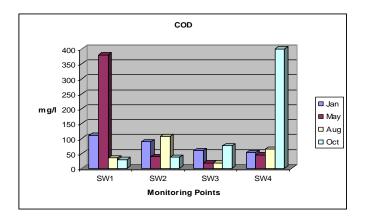


Figure 11: Conductivity

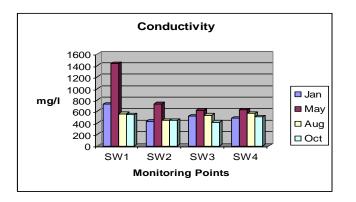


Figure 12: BOD

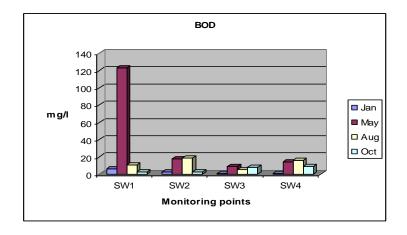


Figure 13: Suspended Solids

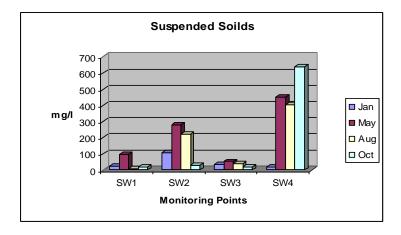


Figure 14: Sulphate

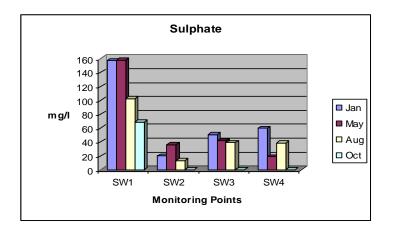
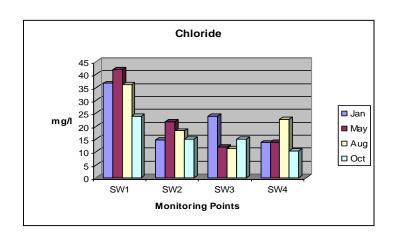


Figure 15: Chloride



3.2 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 9th of July 2008. The monitoring locations are shown in the attached noise monitoring location map. Ambient monitoring results are presented in Figure 17. Octave band analysis was also carried out to determine whether tonal or impulsive noise components existed as a result of the on-site activities.

	NSL1	NSL2	NSL3	NSL4	NSL5
L_{AEQ}	47	44	48.1	48.9	54.7
L_{A10}	48.3	46.9	50.5	52.7	56.7
L_{A90}	44.2	40.2	44	42.3	41.2

Daytime Noise Monitoring

Output

Daytim

Figure 16: Daytime Noise Monitoring Results Summary

The locations chosen for the survey were at points along the boundary walls of the site locations N1, N2, N3, N5 and NSL1. 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. NSL1 is 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 the trommel and the wood shredder during operation.

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) with the exception of the $L_{\rm A10}$ value at N5. This limit was slightly exceeded at monitoring location N5. The value of N5 is largely due to the close proximity of the monitoring point to passing vehicles onsite and the general activities of these vehicles.

3.3 Air Quality/Dust Monitoring

Three dust monitoring surveys were carried out during 2008, in August, September and November 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 this monitoring are presented in Table 8 and Figure 17.

As can be seen from the table all dust levels obtained at both points were below the deposition limit of 350 mg/m²/day.

Table 8: Dust Monitoring Results

Location	August	September	November	ELV(mg/m ² /day)
D2	250.2	119.4	54.7	350
D5	239.9	100	184.7	350

Dust Monitoring

mg m-2 d-1 150
100
50
August September November

Figure 17: Dust Deposition Rates

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.

3.4 Complaints handling

There were no complaints received at the Cavan Waste Disposal facility in 2008.

4.0 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 2008

Development	Date
Upgrade of concrete area in Processing shed and in	
upper yard area.	April
Replacement of damaged sheeting, doors, lighting,	
dust probes, confidential shredding machine and	
plastic baler in Processing shed due to fire.	November

5.0 WASTE RECEIVED AND CONSIGNED BY THE FACILITY

5.1 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 23,329 tonnes which is 1,661 tonnes below 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 as opposed to the total quantities of materials allowed to be accepted.

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

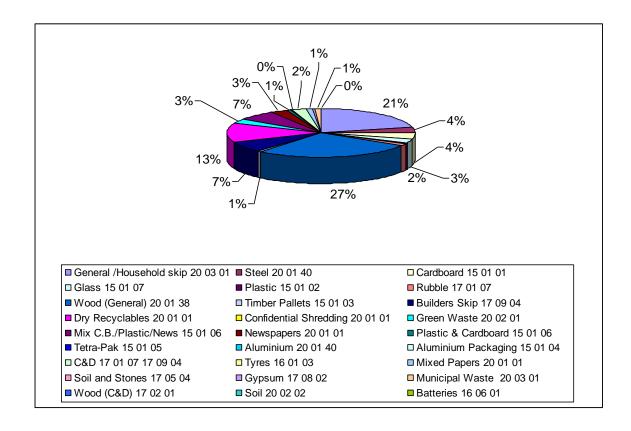
Waste Type	Max(Tonnes per annum) as per Waste Licence W0207-01	Tonnes accepted into the facility 2007
Total	24,990	23,329

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 13.

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

table 11: Dreakdown of waste coming into Facility on a month by month basis (Metric Tonnes)														
Waste Type	EWC Codes	Jan	Feb	Mar	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Total
General waste	20 03 01	383.64	472.46	477.86	408.66	362.5	423.98	376.7	361.9	406.02	372.94	347.2	557.44	4951.3
Steel	20 01 40	75.3	56.28	76.56	93.32	103.28	82.66	77.36	88.52	78.74	68.64	57.54	47.84	906.04
Cardboard	15 01 01	66.42	70.06	66.06	77.82	88.74	78.76	81.1	78.68	77	90.7	77.66	85.68	938.68
Glass	15 01 07	57.66	51.84	46.98	38.04	52.46	49.18	57.92	50.74	48.24	47.08	39.18	46.06	585.38
Plastic	15 01 02	3.54	3.64	7.23	11.18	10.68	9.76	9.74	11.16	12.48	9.9	9.04	8.76	107.11
Rubble	17 01 07	151.86	113.14	0	24.74	19.48	0	14.04	22.06	2.18	14.52	13.8	12.12	387.94
Wood (C&D)	17 02 01	0	0	0	0	0	0	0	0	0	0	0	0	0
Wood (General)	20 01 38	287.96	386.21	387.08	411.04	460.4	360.38	762.58	694.13	728.82	677.76	677	520.44	6353.8
Timber Pallets	15 01 03	17.12	36.56	29.94	17.1	31.6	16.62	2.98	7.14	13.52	2.98	5.66	6.1	187.32
Builders Skip	17 09 04	176.3	233.92	206.88	193.86	170.58	111.32	118.57	105.28	117.34	46.5	50.38	76	1606.93
Dry Recyclables	20 01 01	247.87	237.47	229.12	224.08	266.86	187.7	291.95	195.03	280.89	246.31	270.08	268.2	2945.56
Confidential Shredding	20 01 01	0.88	0.66	1.48	1.48	2.74	1.08	0.5	0.6	0.96	1.32	0.74	0	12.44
Soil	20 02 02	0	0	0	0	0	0	0	0	0	0	0	0	0
Green Waste	20 02 01	10.88	17	21.9	34.2	96.56	87.28	119.82	109.32	103.12	49.14	35.38	12.96	697.56
Batteries	16 06 01	0	0	0	0	0	0	0	0	0	0	0	0	0
Mix C.B./Plastic				-						-	-			
/News	15 01 06	149.2	131.85	119.38	125.12	148.94	121.86	138.7	145.19	128.26	150.4	119.24	108.66	1586.8
Newspapers	20 01 01	48.92	50.13	53.38	48.98	52.2	57.24	58.34	65.4	67.52	46.76	59.94	63.06	671.87
Plastic & Cardboard	15 01 06	10.52	6.4	3.01	31.24	19.4	14.38	19.34	14.16	18.7	0	0	4.78	141.93
Tetra-Pak	15 01 05	3.36	2.66	3.04	4.39	4.87	4.42	5.3	6.58	3.9	4.26	3.94	5.58	52.3
Aluminium	20 01 40	0	1.06	2.08	0.26	2.46	0	0.84	0	3.56	0	1.16	0	11.42
Aluminium Packaging	15 01 04	0.76	0.42	1.26	1.15	1.22	1.6	0.66	1.62	0.98	1.52	0.26	0.7	12.15
C&D 17 01 07	17 09 04	129.8	30.82	72.06	21.08	199.76	42.48	69.14	0	5.48	0	0	0	570.62
Tyres	16 01 03	1.8	0	3.22	0	0	3.84	0	0	0	4.72	0	0	13.58
Mixed Papers	20 01 01	2.78	1.44	9.86	19.5	38.44	34.28	27	20.9	29.12	24.86	13.68	26.42	248.28
Soil and Stones	17 05 04	0	0	0	20.24	0	1.38	10.62	0	0	0	0	0	32.24
Gypsum	17 08 02	6.78	9.54	0	0	0	0	0	3.76	4	2.92	9	1.64	37.64
Municipal Waste	20 03 01	0	0	0	0	0	0	0	0	0	0	0	270.08	270.08
TOTALS		1833.35	1913.56	1818.38	1807.48	2133.17	1690.2	2243.2	1982.17	2130.83	1863.23	1790.88	2122.52	23328.97





5.2 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 is disposed of at Corranure landfill.

Cardboard was sent to Oxigen Environmental, Ballymount, Paper and Confidential Shredding is also sent to Oxigen Environmental, Ballymount.

Shredded timber was sent to Finsa, Co. Clare, Corranure Landfill, and also individual farmers who accepted shredded timber for use as animal bedding.

Dry recyclables collected from the "green bin" operations were sent to JVC Recycling Ltd. Clonshaugh, D.M Waste in Donegal, and McElvaneys Waste and Recycling Facility in Monaghan.

Tetra Pak was sent to JVC Recycling Ltd., Clonshaugh, and also Oxigen Ballymount.

C&D material went mainly to Corranure Landfill and Clean Rubble recycled in the yard and some sent 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 Glassdon Recycling.

Green waste and Gypsum was sent to Enviro Grind Ltd, Co. Donegal.

Plastic packaging is sent to Oxigen Robinhood, and Retech Processing, Cootehill, Co. Cavan.

Batteries recovered on site were sent to The Recycling Village, Co. Louth and Returnbatt, Co. Kildare.

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.

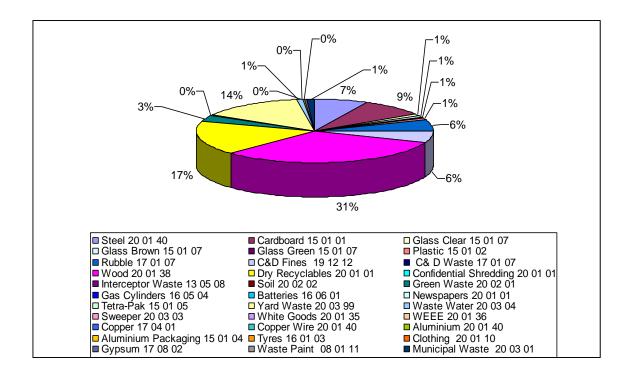
The relative quantities of waste removed from the facility for disposal/recycling during the reporting period are summarised in Table 12 and a graphical representation of the waste types can be seen in Figure 14.

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

	EWC													
Waste Type	Codes	Jan	Feb	Mar	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Total
Steel	20 01 40	140	146.38	143.8	189.52	198.36	150.8	147.48	157.24	159.18	148.78	83.26	83.3	1748.6
Cardboard	15 01 01	171.95	170.88	155.23	190.26	189.63	163.53	189.68	180.8	176.28	178.16	172.2	183.2	2121.8
Glass Clear	15 01 07	37.8	18.32	19.06	37	14.14	37.4	17.24	41.76	16.72	33.26	35.7	0	308.4
Glass Brown	15 01 07	14.56	14.18	0	15.94	0	22.42	0	20.16	0	18.36	15.18	0	120.8
Glass Green	15 01 07	17.38	16.92	0	17.46	21.44	0	0	37.28	0	17.18	15.64	0	143.3
Plastic	15 01 02	19.94	15.3	24.08	23.94	21.28	17.14	20	20.54	25	21.86	15.1	21.4	245.58
Rubble	17 01 07	242.14	211.92	88.79	114.72	114.64	67.74	77.7	99.2	70.56	47.46	126.74	73.8	1335.41
C&D Fines	19 12 12	101.1	185.36	271.58	150.86	182.82	177.52	133.88	53.94	135.64	77.2	24.56	0	494.46
C& D Waste	17 01 07	0	0	0	0	0	0	0	0	0	0	0	0	0
Wood	20 01 38	404.94	489.08	497.4	577.91	540.77	580.82	782.35	852.32	833.3	701.68	776.78	504.3	7541.65
Dry														
Recyclables	20 01 01	342.17	315.1	296.05	358.53	384.45	295.73	422.3	337.67	407.93	321.3	357.18	367.76	4206.17
Confidential		_	_	_	_	_	_	_	_	_	_	_	_	
Shredding	20 01 01	0	0	0	0	0	0	0	0	0	0	0	0	0
Interceptor Waste	13 05 08	0	15.68	0	0	0	0	0	0	0	9.82	0	0	25.5
														0
Soil	20 02 02	0	0	0	0	0	0 84.7	0	0 109.16	0	0	0 42.84	0	702.32
Green Waste	20 02 01	10.22	24.78	9.6	40.8	94.84		121.56		98.12	51.9		13.8	
Gas Cylinders	16 05 04	0	0	0	0	0	0.42	0	0	0	0	0	0	0.42
Batteries	16 06 01	0.52	0	0.7	0	0	0.94		0	0	0.36	0	0	2.52
Newspapers	20 01 01	0	0	0	0	0	0	0	0	0	0	0	0	0
Tetra-Pak	15 01 05	2.88	0	2.22	7.94	4.6	3.9	3.18	7.42	6.72	6.12	10.84	3.72	59.54
Yard Waste	20 03 99	333.82	288.19	323.13	275.04	295.72	269.18	240.46	257.86	239.2	268.86	243.6	429.66	3464.72
Waste Water	20 03 04	35.74	10.42	26.38	15.46	0	8.78	10.11	25	10.84	10.68	10.62	5.18	179.21
Sweeper	20 03 03	0	0	0	0	0	0	0	3	0	0	0	0	0
White Goods	20 01 35	0	0	0	0	0	0	0	0	0	0	0	0	0
WEEE	20 01 36	0	0	0	0	0	0	0	0	0	0	0	0	1
Copper	17 04 01	0	0	0	0	0	0	2.02	0	0	0.54	0	0	2.56
Copper Wire	20 01 40	2.16	1.26	0	1.18	1.62	1.3	1.52	0	1.18	0	0	1.26	11.48

Aluminium	20 01 40	3.39	1.5	1.64	3.06	1.22	2.06	0.6	0.94	2.68	0.76	0.96	1.22	20.03
Aluminium														
Packaging	15 01 04	0.64	0.78	0	1.46	0	1.88	0.68	1.7	2.88	1.5	0	0.5	12.02
Tyres	16 01 03	0	2.8	4.6	0	1.3	4.66	0	0	0	6.98	0	0	20.34
Clothing	20 01 10	0.54	0.02	0	0	0	0	0	0	0	0	0	0	0.56
Gypsum	17 08 02	14.34	8.66	0	0	0	0	0	0	10.1	0	16.52	12.94	62.56
Waste Paint	08 01 11	0	0.24	0	0	0.08	0	0	0	0	0.28	0	0	0.6
Municipal														
Waste	20 03 01	0	0	0	0	0	0	0	0	0	0	0	273.34	273.34
TOTALS		1896.7	1937.8	1864.3	2021.0	2066.9	1890.9	2170.7	2203	2196.3	1923	1947.7	1975.4	24093.9





Recycling Rates

The Following figure shows the Recycling trend for the Cavan Waste Disposal Facility from January to December 2008. As shown below, of all waste received on site 85% of waste was recycled with only 15% being sent to landfill.

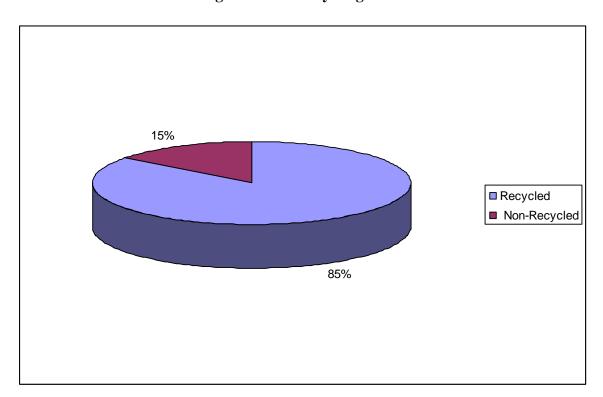


Figure 20: Recycling trend

5.4 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		
Odorous Waste	Odorous and putricible waste		
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		
Municipal Waste	Food and Yard Waste		
WEEE	Televisions and Microwaves		

6.0 Register of Waste Contractors and offsite Waste Facilities approved by the EPA

		EWC			Letter Ref Number
Facility Name and Address	License / Permit no.	Code	Description	Details	(EPA)
African Clothing Exports Ltd.,145 Fenaghy				Valid until	
Rd., Cullybackey, Co. Antrim, N. Ireland	WMEX 04/12	20 01 10	Clothes	29/11/2007	
	WCP/MH/2006/84B				
Enva Oil Laboratories Limited, Clonminam				Valid from	WO207-01
Industrial Estate, Portlaoise, Count Laois	WL184-01	17 05 04	Soil & Stones	16/01/2004	(07)Gen09JG
	WCP/MH/2001/107B	15 02 02	Paint Waste		
Cavan County Council Treatment Works,					WO207-01
Keaduage Lane, Cavan	Treatment works	20 03 99	Waste Water		(05)gen1JG
Clearpoint Recycling Ltd, Ballylynch,			Plastic	Valid from 01	WO207-01
Carrick on Suir, Co. Tipperary	WM/WP/12/05	15 01 02	Packaging	June 2005	(07) Gen10JG
Clearway Disposal Ltd. 41 Dobbin Road,				Valid	WO207-01
Portadown, Co. Armagh	LN/05/02/A	20 01 40	Metals	from18/05/1994	(06) Gen06JG
	WCP/MH/2006/68B	15 01 04	AL Packaging		
		20 01 40	Aluminium		
Corranue Landfill, Cootehill Road, Co.				Valid from	WO207-01
Cavan	W077-02	20 03 01	Municipal	12/06/2001	(05)gen1JG
		19 12 12	Mixed C&D		
		20 03 99	NR waste		
		17 01 07	C&D Waste		
		20 01 38	Woodchips		
Crum Rubber Ireland Ltd. Mooretown,			•	Valid until 6th	WO207-01
Dromiskin, Dundalk, Co. Louth	WP2005/20	16 01 03	Tyres	Jan 2008	(05)gen1JG
EnviroGrind Ltd. Pettigo, Co. Donegal	ENV/143/WP0405	20 02 01	Green Waste	Issued 30 May 2005	WO207-01 (07) Gen09JG

]	
				Valid until	
		17 08 02	Gypsum	29/05/2008	
D.M Waste, Labadish, Letterkenny, Co.			Dry		W0207-
Donegal	ENV 143 11-1207	20 01 01	Recyclables	Issued 28/02/08	1(08)Gen12JG
Enrich Environmental Ltd, Marymount,			Plant tissue		W0207-
Castleknock Rd, Castleknock, Dublin 15		02 01 03	Waste	Issued 12/06/08	1(08)Gen13JG
			Waste from		
		02 01 07	Forestry		
			Biodegradable		
		20 02 01	Waste		
		20 02 02	Soil		
				Issued 16-06-	WO207-01
Finsa, Scarrif, Co. Clare	P022-01	20 01 38	Wood chips	2006	(05)gen1JG
			Green, Clear		
Glassdon Recycling, 52 Creagh Rd,		1.5.01.05	and Brown	Valid from	WO207-01(07)
Toomebridge, Co. Antrim	ROC 84	15 01 07	Glass	10/12/05	Gen 08JG
	I N/06/00			Expires on	
Hammand Lana Maral Ca. The Damaia	LN/06/08			10/12/2008 Valid from	
Hammond Lane Metal Co., The Batteries, Athlone, Co. Westmeath.	WP/62/2005	20 01 40	Metals	31/05/2005	Approval
JVC Ltd, Unit 27B Clonshaugh Industrial	W P/02/2003	20 01 40	Plastic	Valid from	sought 06/07/06
Estate, Dublin 17	WP/98086	15 01 02	Packaging	01/8/2005	WO207-01
Estate, Dubini 17	W1/90000	13 01 02	1 ackaging	Expires on	(05)gen1JG
		15 01 01	Paper & Card	01/08/2008	
		13 01 01	Dry	01/00/2000	
		20 01 01	Recyclables		
Longford County Council Treatment Works		20 03 99	Wastewater		
Monaghan County Council Treatment		20 03 77	* Table water		
Works		20 03 99	Waste Water		

Monaghan County Council, Scotch Corner]	
Landfill, Letterbane, Annyalla,			Municipal/ Nr	Valid from	WO207-01
Castleblaney,	W020-01	20 03 01	Waste	07/12/2001	(05)gen1JG
Co.Monaghan		20 03 99	NR waste		
-			Mixed C&D		
		19 12 12	waste		
Mc Elvaney's Waste and Recycling,			Dry	Valid from:	WO207-
Corcaghan, Monaghan, Co. Monaghan	WO20-2	20 01 01	Recyclables	18/09/2007	1(07)Gen11JG
				Valid from:	
	WCP/MH/2005/89B			23/02/06	
Oxigen Environmental Ltd., Merrywell			Plastic	Valid from	WO207-01 (07)
Industrial Estate, Ballymount, Dublin 22	W0208-01	15 01 02	Packaging	31/03/2007	Gen09JG
			Dry		
		20 01 01	Recyclables		
		15 01 01	Cardboard		
			Municipal		
		20 03 01	Waste		
		20 01 01	Newspapers		
		15 01 07	Glass		
			Aluminium		
		15 01 04	Packaging		
			Steel		
		15 01 24	Packaging		
Oxigen Environmental Ltd., Coes Rd,					W0207-
Dundalk, Co. Louth	W0144-01	15 01 01	Cardboard	Issued 12/06/08	1(08)Gen13JG
			Dry		
		20 03 01	Recyclables		
Oxigen Environmental Ltd., Robinhood					
Industrial Estate, Robinhood Road,				Valid from	WO207-01
Ballymount, Dublin 22	W0152-03	15 01 02	Plastic	18/12/2001	(05)gen1JG

P.Carney Ltd., Crossaliel, Kells, Co. Meath.	P0402-2	20 01 04	Beer Kegs	Issued 3-08-06	WO207-01 (05)gen1JG
		20 01 40	Copper wire		
Retech Processing Ltd. Enterprise Centre,			Plastic	Valid from	WO207-01
Kingscourt, Co. Cavan	WP/05/27	15 01 02	Packaging	16/11/2005	(05)gen1JG
				Expires on	
				16/11/08	
					WO207- 01(07)Gen11JG
ReGen Waste Ltd. Shephards Drive,					
Carnbane, Industrial Estate, Newry, Co.					W0207-
Down	LN/04/08/A	15 01 01	Cardboard	Issued 12/06/08	1(08)Gen13JG
			Dry		
		20 03 01	Recyclables		
Rilta Environmental Ltd.Greenogue					
Business Park, Rathcoole, Dublin (Sita			Contaminated	Valid from Dec	WO207-01
Environmental)	W0192-01	17 05 03	soil	2004	(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,					W0207-
Co. Louth.	WP2007/20	16 06 01	Batteries	Issued 12/06/08	1(08)Gen13JG
Smurfit Ireland Ltd. Ballymount Road,				Valid until	WO207-01
Walkinstown, Dublin 12	WPR021/3	15 01 01	Paper & Card	30/06/2009	(05)gen1JG
		15 01 01	Cardboard		
			Conf		
		20 01 01	shredding		
		15 01 05	Tetra pak		
Textile Recycling Ltd, Glenabbey Complex,			1		
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	Valid from 26/10/2004	WO207-01 (05)gen1JG
	WCP/MH/2004/38B	20 01 40	Aluminium		
				Expires	
	NI 00216			09/04/2006	
Farmers-Various	N/A	20 01 38	Wood Chips	Approved	
			Clean		
Farmers-Various	N/A	17 01 07	Masonry	Approved	

7.0 ENVIRONMENTAL INCIDENTS

7.1. Incidents Summary

Condition 12.3 requires that the licensee shall submit a written record of environmental incidents to the agency. One incident was recorded during the reporting period and a summary of these events is presented in Table 13. An outline of the steps taken to minimise the emissions and remedial action undertaken is also presented.

Table 13: Summary of Environmental Incidents

Nature Of	Date	Action Taken
Incident		
Computer	31 st May 2008	New computer installed and all weighbridge
weighbridge stolen		dockets manually inputted into the new
		system.
Fire in Dry	17 th October 2008	5 units of Cavan County Council fire brigade
Recyclable area of		used to extinguish fire. The EPA was notified
processing shed.		that morning of the incident and a full report
		of the incident was submitted to the EPA later
		that day.

8.0 ENVIRONMENTAL OBJECTIVES AND TARGETS.

8.1 Progress Report on the Achievement of 2008 Objectives and Targets

Objective 1

Target 1.1: Carry out improvement works on hardstand areas.

Improvement works were carried out to the current concreted area in the processing shed and to the upper yard in front of the processing shed.

Target 1.2: Provide recycling service to a wider customer base.

Distribution of Cavan Waste Disposal Ltd green/recycling bins continued to increase throughout 2008 with greens bins supplied to all new customers. A noticeable increase was also found in the company's commercial customer base as well, resulting in a 5% increase in recycling rates.

Target 1.3: Achieve annual recycling rates

Cavan Waste Disposal Ltd's aim of continuously increasing its recycling rates bared much fruition in 2008 with an overall result of 85% of waste material accepted onsite being recycled.

Target 1.4: Improve the recycling of waste generated in the office and canteen at Cavan Waste Disposal.

Recycling bins are found in each of the main offices and outside the main canteen. All staff members are encouraged to put all dry recyclable waste into the green bins provided. Offices are provided with small bins for waste paper which is emptied into the green bin outside the office at the end of each working day.

Target 1.5: Implement an auditing system for customers/suppliers associated with Cavan Waste Disposal.

An audit was carried out on one of the offsite waste destinations. A summary of the audit is outlined in tables 6.5 below.

Table 6.5: Audit Summary of Oxigen Environmental Ltd, Ballymount Facility

Site Name:	Oxigen Environmental Ltd.
EPA Licence No.:	W0144-01
Date of Inspection:	
Audit Conducted By:	Claire Keogh
On-Site Contact Present:	Janet O'Shea

Summary of Waste Activities carried out on-site

Oxigen operates a dry recyclables; C&D and general skip waste recovery facility at Coes Road, Dundalk, Co. Louth. Skip waste was processed in the processing shed where it was trommelled and a positive picking line was in place. However since November 2008 this material is no longer segregated using a trommel and picking line

Overall Summary of Audit:

On the day of the audit the site was operational as normal. Construction works were being carried out on the site at the time of the visit so the audit was concentrated on the processing shed and records.

The flow of material in the site from point of entry at the weighbridge, through processing stages in the shed, until the segregated material/ waste residue leaves the facility for recycling/disposal was observed.

The Environmental Management System was also inspected.

Records Requested

- Weighbridge Tickets
- EMS Procedures
- Daily Inspection Sheets

All records requested were available for inspection on the day of the site audit.

Target 1.5: Aim to initiate a brown bin system to all customers.

Due to unforeseen circumstances, the introduction of a brown bin service was unable to commence in 2008, however Cavan Waste Disposal has not changed its original plans regarding brown bins, and instead has increased its efforts to provide the service. Current management plans include the distribution of brown bins in April 2009.

Objective 2

Target 2.1: Review and update the EMS as is necessary.

Cavan Waste Disposal Ltd company policy specifies that the company's EMS is appropriately updated and changed as deemed necessary. As no significant operational changes occurred during the period of 2008, no changes were made to the EMS.

Objective 3

Target 3.1: Update on-site and off-site training and awareness as required.

Compliance Officer Claire Keogh completed a two day chartered certificate in Practical Management and Control of Landfill gas in October from Northampton University.

Target 3.2: Provide induction training to all new staff in Cavan Waste Disposal

All drivers that commenced employment during the year were provided with training on the conditions of the Waste License, the Waste Collection Permit, all relevant procedures contained in the EMS. Records of this training are kept in the training file on-site.

Table 14: Objectives and Targets for 2009

Objective	Description
Objective 1	Continued compliance with Waste License 207-1
Target 1.1	Aim to initiate a brown bin system to all customers to increase
	further customer recycling rates. Should be implemented in first half of 2009
Target 1.2	Aim to provide a greater recycling service to all customers, particularly from commercial sources.
Target 1.3	Aim to increase recycling rates with all of the customers through the promotion of recycling. Achieve annual recycling targets.
Target 1.4	Implement an auditing system for customers/suppliers associated with Cavan Waste Disposal.
Target 1.5	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.
Objective 2	Continued compliance and updating of the EMS
Target 2.1	Review and update the EMS as is necessary.
Objective 3	Staff Training
Target 3.1	Update on-site and off-site training and awareness as required
Target 3.2	Provide induction training to all new staff in Cavan Waste
	Disposal.
Objective 4	Increasing standards of compliance
Target 4.1	Commence the process of attaining an ISO14001 in 2009

Cavan Waste Disposal continues to aim for increased recycling rates and thereby reducing waste to landfill. Recycling rates on site have increased by an impressive 5% in comparison to the previous year, however it will be the aim of all staff in Cavan Waste Disposal to increase this figure further during 2009. All skip drivers give an Unacceptable waste list to all customers on delivery of a skip, thereby increasing customer awareness to modern day hazardous waste material and in the process reducing the volumes of unacceptable waste brought into the facility.

It is the responsibility of the compliance officer and site manager to work towards continual improvement as set in the objectives and targets for 2009. This schedule is ongoing and objectives /targets may be added as deemed necessary over the coming year.

9.0 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 30th August 2006. The Diesel tank is contained in a concrete bund, this bund was tested in December 2005.

10.0 RESOURCE AND ENERGY CONSUMPTION SUMMARY

Energy and resource consumption at the facility from 1st January to 31st December 2008 can be summarised as follows:

10.1 Water Consumption

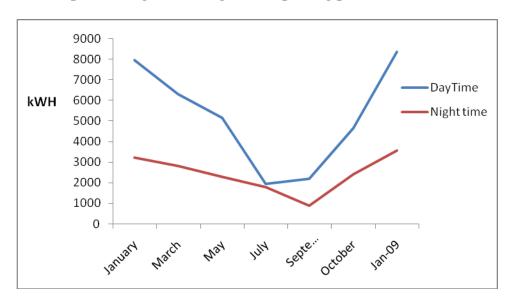
Water consumption for 2008 was approximately 2,016,000 litres.

10.2 Electricity Consumption

Table 4.4 Summary Table of Electricity Usage during the reporting period

	Day Units	Night Units
Month	kWh	kWh
January	7950	3200
March	6300	2800
May	5150	2300
July	1950	1800
September	2200	900
October	4650	2400
Jan-09	8350	3550
Total	36550	16950

Figure 20: Graph showing diesel usages for reporting period



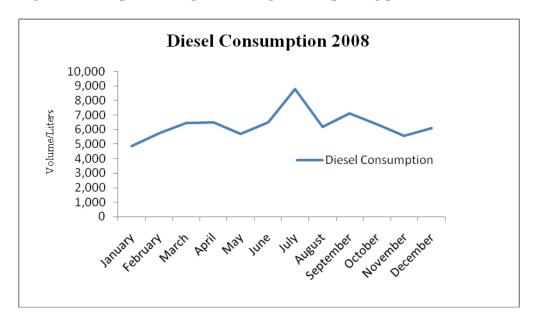
As shown in Figure 20, both day and night time units show a seasonal pattern throughout the year, with general electricity consumption far lower in summer months compared to winter months. This change in consumption is due to a greater need for electricity in the short days of winter and late autumn. Conversely, the electricity demand in summer is far less than in winter as most operational work in carried out during periods of natural light. The variation in night time consumption is less than that of daytime as no operational take place at night.

10.2 Diesel Consumption

Table 10.1 Summary Table of Diesel Usage during the reporting period

Month	Diesel Usage Litres		
January	4,849		
February	5,754		
March	6,466		
April	6,504		
May	5,699		
June	6,491		
July	8,795		
August	6,186		
September	7,100		
October	6,363		
November	5,550		
December	6,112		
Total	75,869		

Figure 20: Graph showing diesel usages for reporting period



11.0 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	Tonnage	Destination
02/01/08	4.54	Monaghan Wastewater Treatment Plant
08/01/08	5.08	Monaghan Wastewater Treatment Plant
10/01/08	5.6	Monaghan Wastewater Treatment Plant
21/01/08	5.04	Monaghan Wastewater Treatment Plant
21/01/08	5.14	Monaghan Wastewater Treatment Plant
30/01/08	5.26	Monaghan Wastewater Treatment Plant
18/02/08	5.3	Monaghan Wastewater Treatment Plant
18/02/08	5.5	Monaghan Wastewater Treatment Plant
18/02/08	4.88	Monaghan Wastewater Treatment Plant
05/03/08	5.14	Monaghan Wastewater Treatment Plant
05/03/08	5.34	Monaghan Wastewater Treatment Plant
12/03/08	5.38	Monaghan Wastewater Treatment Plant
12/03/08	5.48	Monaghan Wastewater Treatment Plant
31/03/08	5.04	Monaghan Wastewater Treatment Plant
02/04/08	5.06	Monaghan Wastewater Treatment Plant
25/04/08	5.02	Monaghan Wastewater Treatment Plant
29/04/08	5.38	Monaghan Wastewater Treatment Plant
03/06/08	4.64	Monaghan Wastewater Treatment Plant
04/06/08	4.14	Monaghan Wastewater Treatment Plant
31/07/08	4.72	Monaghan Wastewater Treatment Plant
03/07/08	5.39	Monaghan Wastewater Treatment Plant
01/08/08	4.5	Monaghan Wastewater Treatment Plant
07/08/08	4.42	Monaghan Wastewater Treatment Plant
11/08/08	5.28	Monaghan Wastewater Treatment Plant
26/08/08	5.28	Monaghan Wastewater Treatment Plant
27/08/08	5.52	Monaghan Wastewater Treatment Plant
16/09/08	5.56	Monaghan Wastewater Treatment Plant
16/09/08	5.28	Monaghan Wastewater Treatment Plant
17/10/08	5.38	Monaghan Wastewater Treatment Plant
17/10/08	5.3	Monaghan Wastewater Treatment Plant
20/10/08	5.14	Monaghan Wastewater Treatment Plant
20/10/08	4.68	Monaghan Wastewater Treatment Plant
10/11/08	5.48	Monaghan Wastewater Treatment Plant
19/11/08	5.14	Monaghan Wastewater Treatment Plant
19/12/08	5.18	Monaghan Wastewater Treatment Plant

12.0 NUISANCE CONTROL

A pest prevention service is provided by Rentokil Pest Control Company. Sixteen bait locations are positioned onsite. During 2008 a total of eight site visits were made by Rentokil. A Pest Prevention Report is completed and a record of each visit is maintained on site.

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

13.0 FINANCIAL PROVISIONS

Cavan Waste Disposal Ltd. shall pay to the agency an annual contribution of 5,438euro 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.

14.0 SITE MANAGEMENT STRUCTURE

The management structure at the facility 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.	13 years experience in the Waste and Recycling Industry	FAS Waste Management Course Manual Handling/Fire Training
Claire Keogh	Compliance Officer (January- December)	Compliance with EPA Licence Conditions. Liaising with EPA and Local Authority. Overseeing Environmental Monitoring and Operation of the Weighbridge	BSc in Environmental Health, M.Sc Applied (Environmental) Science	Safe Pass/Fire Training
Aine Brady	Assistant to Facility Manager	Responsible for day to day operation of the site	7 years experience in the Waste Industry	Manual Handling/Fire Training
John Tierney	Weighbridge Operator	Data Capture in and out. Reporting of data	21 years experience as Weighbridge Operator	Manual Handling/Fire Training
Igor Chakin	Site Supervisor	Responsible for yard operations	7 years experience in waste recycling and disposal	Manual Handling/Fire Training
13 x Staff	Site Operatives	Responsible for the segregation and recycling of waste on site		Manual Handling/Fire Training
10 x Skip Drivers (1 relief driver)	Lorry Driver	Collection /disposal of waste, Lorry maintenance		Manual Handling/Fire Training/Safe Pass

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