Killarney Waste Disposal Aughacureen, Killarney, Co. Kerry. Waste Licence Reg. No. W0217-01





Killarney Waste Disposal

Annual Environmental Report Waste Licence (Reg. W0217-01)

March 2009







Killarney Waste Disposal Ltd Aughacureen, Killarney, Co. Kerry.

Waste Licence Reg. No. W0217-01

Annual Environmental Report 2008

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1.0 Introduction

This document is the first Annual Environmental Report (AER) covering environmental performance at the Killarney Waste Disposal Ltd., Aughacureen facility, under Waste Licence Reference No. W0217-01 which was issued by the EPA 01 August 2006. Before the granting of a Waste Licence the facility reported annual environmental performance to Kerry County Council as a Condition of their Waste Permit (WP23/03) on an annual basis.

The report covers the period from January 1st to December 31st, 2008 and has been prepared in accordance with the Environmental Protection Agency (EPA) 'Guidance Note for Annual Environmental Report' (October 2000) and other relevant guidance as provided by the EPA on the its website (<u>www.epa.ie</u>).

Since the Waste Licence was issued in August 2006, Killarney Waste Disposal Ltd. (KWD) installed a dust gauge and conducts surface water sampling. In addition a number of lower frequency reports have been commissioned to assess the impact of Killarney Waste Disposal Ltd. operations on the local environment such as a Hydrological Assessment, an Energy Assessment and assessments of Raw Material and Water Consumption on site.

The next AER will cover the calendar year 2009 and will be issued in early 2010.

1.1. Licence Details

Waste Licence Register No.:W0217-01Licence Issue date:01 AugustLicensee:Killarney WLocation of Activity:Aughacure

W0217-01 01 August 2006 Killarney Waste Disposal Limited. Aughacureen, Killarney, Co. Kerry

1.2. Summary Data Table

Current Waste Licence annual reporting requires the submission of an EPA Pollution Release Transfer Register (PRTR) form which documents the emissions and waste management information in the form of a spreadsheet, which is transmitted to the Agency electronically.

A print out of the newly formatted summary data spreadsheet is included as Attachment A to this AER. The spreadsheet has been submitted electronically to the EPA at <u>http://aer.eap.ie/prtr</u>

1.3. Description of Facility

The Killarney Waste Disposal (KWD), a Material Recovery Facility (MRF), first established in 1987, is located on a site of 2.2 hectares, at Aughacureen; approximately 4 km northwest of Killarney Town. The MRF is situated on a rural site and there is no considerable residential and commercial development in its proximity; the primary landuse of the surrounding locale is agricultural with some of the land now being used for commercial forestry.

Killarney Waste Disposal directly employs approximately 44 staff.

A copy of the Environmental Management Structure for the facility is outlined in Figure 1.

Normal operating hours at the facility are 07.00. to 20.00, Monday to Saturday inclusive and waste is accepted at and dispatched from the facility between the times of 07.30 and 19.30.

KWD see contamination as a significant issue in affecting the efficiency of waste collection and segregation processes, and as a result have focused additional emphasis on housekeeping and waste storage procedures on site. All work surfaces are cleaned regularly and maintained to a suitable standard to prevent the build up of anaerobic bacteria. All areas where there is potential for the generation of odour (i.e. temporary storage areas, skips, bins etc) are covered to reduce the potential for escape of odours.

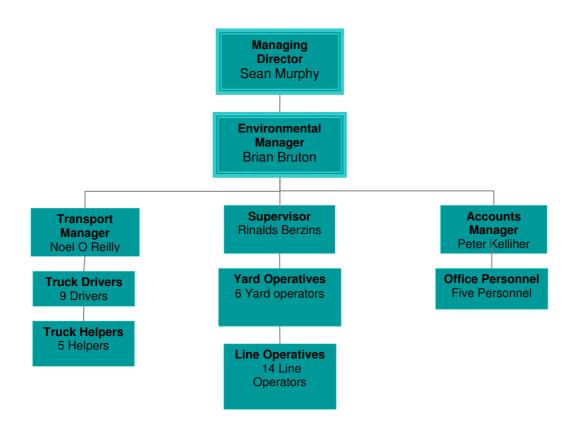


Figure 1 Company Environmental Management Structure

1.4. Description of Activity

The Waste Licence Register Number W0217-01 allows for up to 40,000 tonnes of waste to be processed at the facility per annum (Schedule A), this can be broken down as follows:

Table 1 Waste Categories and Quantities KWD are Licenced to Process

Waste Type	MAX. (Tonnes per annum)
Mixed municipal waste	15,500
Organic waste (kitchen and canteen waste)	6,000
Dry recyclable wastes	6,500
Non-Hazardous Construction and Demolition (C&D)	12,000
Total waste intake	40,000

Waste is accepted from a number of domestic and commercial waste sources in the Cork/Kerry Region. Processed materials are sold to customers for further processing and recycling.

KWD operate licenced waste disposal and recovery activities under the current Waste Licence in accordance with the Third and Fourth Schedule of the Waste Management Acts 1996 to 2005 (Attachment B).

Schedule A of the current Waste Licence specifies the authorised processes that can be carried out at KWD MRF as set out below:

	Authorised Process
i	The sorting and separation of waste to recover organic substances such
	as paper and cardboard, plastics, wood, and biodegradable waste
	(kitchen and canteen waste).
ii	Sorting of metals from other wastes.
iii	Sorting, separation and processing of mixed municipal waste separately
	collected dry recyclables and non-hazardous Construction & Demolition
	waste to recover organic substances, inorganic materials and metals.
iv	The drying of organic substances.
V	The shredding of wood.
vi	The baling, wrapping and placing of waste into containers or trailers prior
	to submission to a recycling facility.
vii	The exchange of recycling at the facility.
viii	The mixing and baling of wastes prior to transfer to another facility for
	disposal.
ix	Storage of waste prior to recovery/disposal off-site

Process Description

All incoming waste is weighed on the weighbridge which is located near the site entrance and the following information is recorded for site records:

- Description of waste, waste types, composition form and relevant EWC code
- Origin of waste including customer details
- Weight of the waste load
- Truck registration

The waste material is deposited in the MRF at the Waste Intake Area where it is inspected prior to processing. Any load failing inspection is transferred to the quarantine area where it undergoes further inspection and if found to be non complaint is returned to the customer.

Waste for recovery is segregated into the relevant waste steams and depending on the nature of the material is either bailed for further processing offsite or loaded for off site disposal.

Materials undergoing further processing offsite are transferred to the holding area where they are stored until sufficient quantities are available for shipment by container.

KWD ensures that all information relating to the loading of containers on site is recorded for site records. All containers are sealed prior to shipment off site.

The main waste Streams for processing are set out below:

- Mixed Municipal Waste originating from both domestic and commercial sources.
- Source segregated waste, which includes organic waste and dry recyclables (plastic, paper and cardboard and packaging waste, glass and metals).
- Timber.

Construction and Demolition (C&D) waste.

Dry recyclables are delivered to the facility and processed every week. The processing of C&D waste takes place over a few hours weekly. Storage of the waste is minimised as far as possible with regular shipments off site.

Mixed Municipal Waste

Mixed Municipal Wastes, household and commercial wastes (originating from, factories, offices, hotels, and retail sources) are stored and shipped to North Kerry Landfill.

Dry Recyclables

Source segregated municipal dry recyclables also originate from the same sources as the Mixed Municipal Waste (the majority of customers both domestic and commercial, have a green bin along with the black bin, collections alternating every second week). The dry recyclables waste stream requires a significant amount of processing due to its nature. The process stream can be seen in Figure 2 below. A ballistatic separator is employed in the case of mixed dry recyclables, whereas segregated dry recyclables are simply inspected and baled.

Organics

Organic waste goes directly to a bulk trailer and is shipped to an Irish compost facility.

Construction and Demolition (C&D) Wastes

C&I (or C&D) from commercial and industrial sources is tipped internally and presorted to remove bulky items and large metals. The residual material is passed through a Trommel to remove the fine fraction containing subsoil and topsoil. The C&I fines are sent to landfill as cover material. The remaining material (non-fine fraction) is sent over a picking line and segregated into metals, concrete, timber, plasterboard, and residual material. Metals are stored pending removal off-site and timber is sent to the on-site timber shredder. Recoverable materials are sent off-site for recovery and residual material goes to landfill.

No hazardous waste is at present accepted at the facility

Waste Process Diagrams

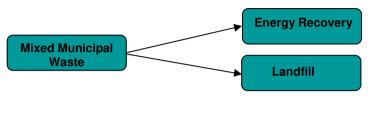
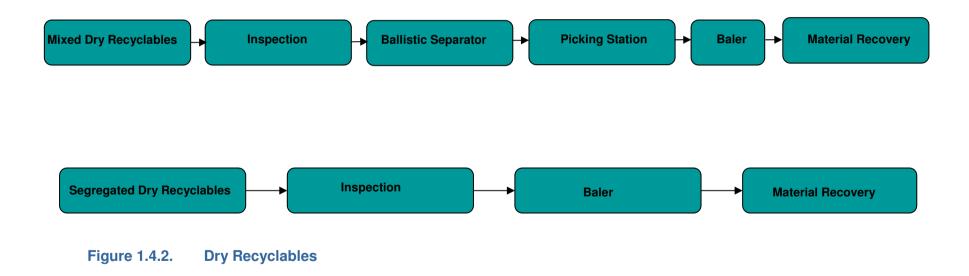


Figure 1.4.1. Municipal Waste



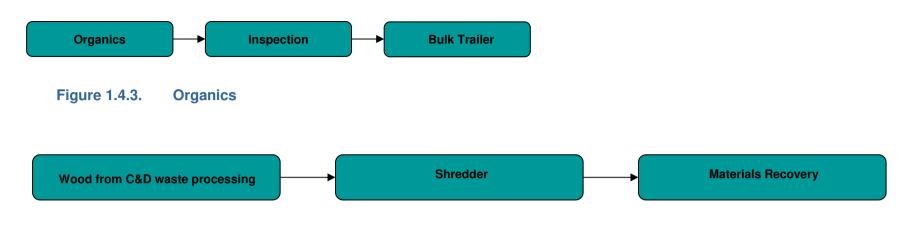


Figure 1.4.4. Timber from Construction and Demolition Sources

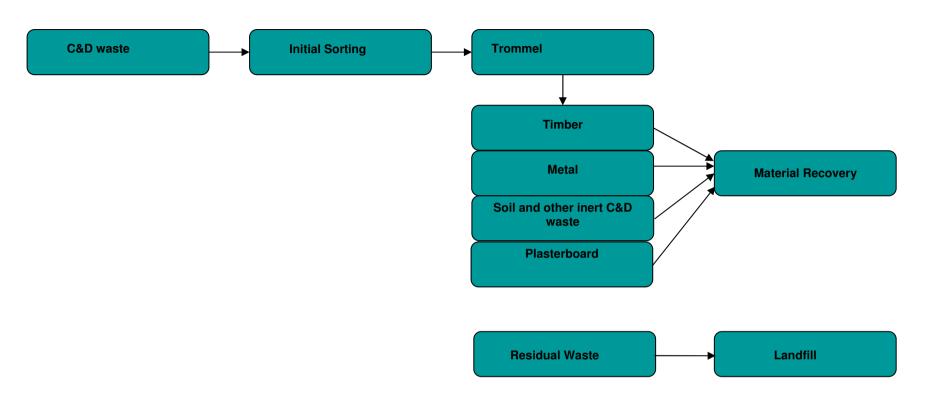


Figure 1.4.5. Construction and Demolition Waste

2.0 Discharges, Wastes and Resources Summary Data

This section of the Annual Environmental Report (AER) summarises all environmental and resource monitoring information for the calendar year 2008.

Information on discharges to water are summarised and are based on the average measured concentration for the relevant parameter for the year from the relevant emission point.

Information on waste arisings is presented in accordance with the PRTR electronic report spreadsheet as issued by the EPA.

Summary totalised and relative data on resource (power and fuel) and water usage at the plant during 2008 are presented in comparison with previous year's data to allow comparison.

Summary information on all emissions and discharges, waste arisings and resource use has been compiled on an electronic spreadsheet which has been submitted to the Agency electronically to <u>http://aer.eap.ie/prtr</u>.

2.1 Process Effluent

The processing of municipal waste gives rise to an effluent which is collected in an underground bund within the Materials Recovery Facility. The composition of this process effluent would be typical of a landfill leachate. It has been estimated that 6.68 m³ for the 2008 monitoring period.

As per Condition 11.10, for each consignment of process effluent removed from the facility the following is recorded:

- The name of the tanker transporter.
- Details of the ultimate disposal/recovery destination.
- The date and time of removal of process effluent from the facility.
- The volume of process effluent in cubic metres, removed from the facility on each occasion.
- Any incidents or spillages of process effluent during its removal or transportation.

A fully bunded pre-cast concrete underground effluent collection tank has been installed to collect all liquid arising, prior to its transport by tanker to Tralee Waste Water Treatment Plant (WWTP) for treatment.

KWD do not discharge process effluent to sewer and are required to monitor the process effluent as part of Waste Monitoring required as per Schedule C.4, requiring analysis of the effluent on an annual basis.

A sample of the process effluent was sampled on the 04/04/2008, and monitoring results of the collected process effluent are shown in Table 2.1.1.

Parameter	Concentration (mg/l)
BOD	977.9
COD	2800
Ammonia (NH ₄ ⁺ -N)	20.73
Total Organic Nitrogen (N)	4.2
Sulphate	647.4
Chloride	206.3
Magnesium	37.5
Sodium	177.0
Potassium	122.88
Cadmium	0.03
Lead	0.41
Nickel	0.39
Zinc	2.89
Iron	28.4
Copper	1.75
Manganese	1.68
Chromium	0.10

Table 2.1.1 Annual Analysis of Process Effluent 2008

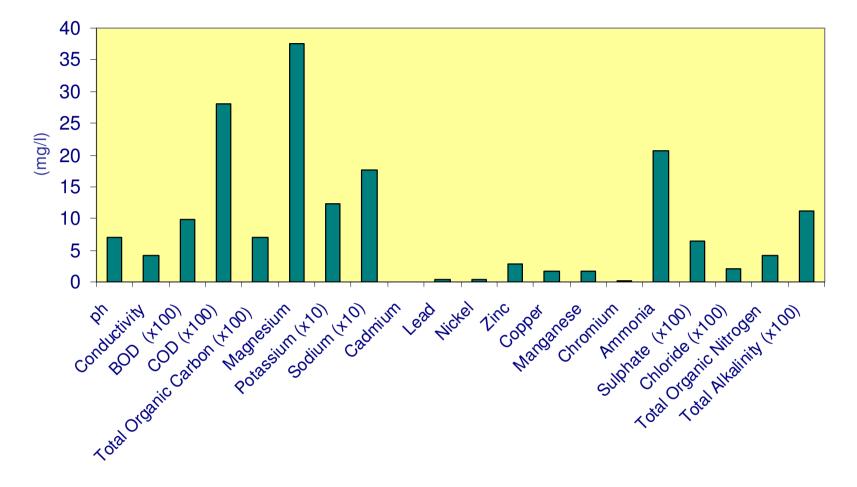


 Table 2.1.2
 Annual Analysis of Process Effluent 2008

2.2 Surface Water Monitoring Summary

In accordance with Schedule C.2.3 of the Waste Licence storm water monitoring is undertaken at two monitoring locations.

Final disposal of this surface water runoff is collected from roof and yard area is to surface water, via the Aughacureen drain, which flows through the site. The drain flows to join one of the headwater tributaries of the Glancoragh River approximately 0.5 km downstream of the facility. Total surface water runoff has been previously estimated as approximately 13m³/day. Surface water collected and treated is discharged via R1, R2 and SW1 licenced emission points.

Analysis of surface water is to be undertaken on a weekly basis for emission point SW1, and annually for emission point R1 and R2. Analysis of pH, COD, Suspended Solids, Total Ammonia, Sulphate, Chloride and Heavy Metals are carried out, in accordance with Schedule C.2.3 of the site Waste Licence. A visual inspection of the storm water discharge is carried out on a weekly basis.

While SW1 was analysed on a weekly basis during the reporting period of 2008 there was no flow for certain periods and hence it was not possible to collect a sample.

The heavy metal concentration is reported as the sum of antimony, arsenic, cadmium, chromium, copper, lead, mercury, nickel, selenium, tellurium, thallium and tin as required by Schedule C.2.3 of the Waste Licence. The surface water analytical results for heavy metal are outlined in Table 2.2.1.

Parameter	R1	R2	SW1
рН	7.40	7.00	6.90
Conductivity μS	69.10	69.50	670.68
Suspended Solids mg/l	8.00	2.00	33.24
Total Ammonia			
as N mg/l	0.02	0.05	1.66
Sulphate mg/l	9.65	8.93	201.48
Chloride mg/l	10.10	9.72	23.69
Antimony mg/l	0.05	0.05	1.58
Arsenic mg/l	1.00	1.00	0.98
Cadmium mg/l	0.02	0.02	0.02
Chromum mg/l	0.02	0.02	0.05
Copper mg/l	0.02	0.02	0.02

Table 2.2.1 Surface Water Analytical Results and Heavy Metal Results

Parameter	R1	R 2	SW1
Lead mg/l	0.10	0.10	0.10
Mercury mg/l	0.05	0.05	0.28
Nickel mg/l	0.05	0.05	0.05
Selenium mg/l	0.05	0.05	0.05
Tellurium mg/l	1.00	1.00	1.00
Thallium mg/l	1.00	1.00	0.60
Tin mg/l	0.10	0.10	0.18

Results based on average monitoring results over the 12-month, Jan – Dec 2008 monitoring period.

In addition, a visual examination at each of the three surface water discharge points is carried out on a weekly basis.

On visual inspection, surface water samples from SW1 were seen to be slightly coloured ranging from a pale straw colour to brown. There was no olfactory evidence of contamination of surface water during the 12-month inspection period ending December 2008. There are no emission limit values for surface water parameters set out in the Waste Licence.

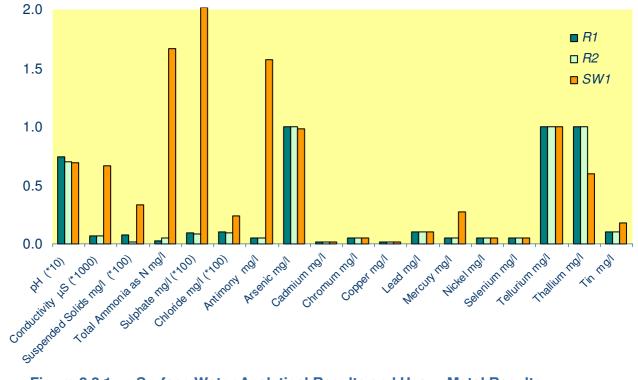


Figure 2.2.1 Surface Water Analytical Results and Heavy Metal Results

An increase in the concentration of ammonia was noted in SW1 in October 2008. As a result monitoring the Agency required the lagoon, SW1, the oil separator to be monitored on a daily basis. Figure 2.2.2 details of Ammonia levels for Killarney Waste Disposal Ltd.





Overall the results of analysis as indicated a declining trend in concentrations of ammonia between October to December with occasional sporadic increases in Figure 2.2.1. Further details in relation to this incident are outlined in Section 2.10 of the report.

2.3 Groundwater Monitoring

The underlying bedrock of the site is shale and sandstone. The aquifer is classified as being of local importance and is moderately productive in local zones. Shale and sandstone are of low permeability, groundwater only present in fractures of the bedrock. It has been established that the majority of houses within a 1 km radius are connected to the Local Authority water supply. According to the GSI database two active wells exist at Knockasarnet, located just outside the 1 km radius of the site facility. It has been previously established that the wells are used for agricultural and domestic use and are of poor yield.

Schedule C.6 of the Waste Licence requires that groundwater quality to be monitored on a biannual basis, the location of the groundwater monitoring wells has yet to be agreed with the agency as per Condition 6.14. The requirements of this Schedule can be seen in Table 2.3.1.

Parameter	Monitoring Frequency	Analysis Method/Technique
Total Ammonia (as N)	Biannually	Standard Method
Nitrates (as N)	Biannually	Standard Method
Conductivity	Biannually	Standard Method
Chloride	Biannually	Standard Method
Sulphates	Biannually	Standard Method
Diesel range organics	Biannually	To be agreed by the Agency

A Hydrogeological Study was undertaken in 2008 for the purposes of determining the most appropriate location to site the boreholes. A part of the assessment proposed four monitoring locations were proposed to the Agency as denoted in Attachment C. KWD are currently awaiting Agency approval to install the boreholes and proceed with the Waste Licence monitoring requirements.

2.4 Receiving Water Monitoring Summary

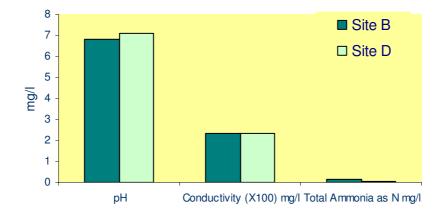
The KWD facility is located within the catchment area of the Glanooragh River. The Aughacureen Drain flows within and along the KWD site boundary. The drain flows to a tributary of the Glanooragh River which in turn flows to the Gweestin River a further 10 km downstream of the KWD facility. Following the Glanooragh River a further 10 km the River Laune is reached.

From previously conducted assessments of the receiving aquatic environments it has been established that the Aughacureen Drain is incapable of supporting salmonid fish; however there exists potential for the Glanooragh River to spawn salmonid fish species.

Analysis of the Glanooragh River is carried out at two monitoring locations Site B an upstream monitoring location (Grid Reference V 9357 9384) and Site D a down stream monitoring location (Grid Reference V 9374 9395) for the purpose of evaluating the any influence that KWD would have on receiving waters. Analysis of this receiving water is carried out on a biannual basis for pH, conductivity, suspended solids, total ammonia, chloride and heavy metals, in accordance with Schedule C.6 Ambient Monitoring of the Site Waste Licence. The results of surface water analysis are tabulated on Table 2.4.1.

Table 2.4.1Receiving Water Analytical Results 2008

Parameter_		ite B of site Boundary)	(just dow	Site D /n stream of site oundary)
^а рН	6.9	6.7	7.2	7
Conductivity	234	237	218	210
Total Ammonia eas N	0.075	0.17	0.081	0.05





2.5 Noise Emissions

A noise survey of site operations is carried out by OES Consulting on for the 2008 reporting period. The noise survey is scheduled to be undertaken on a biannual basis in accordance with Condition 6.12.1 of the Waste Licence.

The surveys are undertaken as per Condition 6.12 of the Waste License, to determine compliance in terms of noise emissions from the site and to aid in establishing work practices for the control of noise emissions from the site.

The EPA guidelines for Noise Surveys for IPPC and Waste licensing sets out the following requirements in relation to noise:

Activities on-site shall not give rise to noise levels off site, at noise-sensitive locations, (at specified noise sensitive locations) which exceed the following sound pressure limits (LAeq, 30 min):

- Daytime (08:00hrs to 22:00hrs): 55dB(A)
- Night-time(22:00hrs to 08:00hrs): 45dB(A)

Guidelines also specify that here shall be no clearly audible tonal or impulsive components at any noise-sensitive locations.

Killarney Waste Disposal Ltd. requested a reduction in the monitoring frequency from a requirement to undertake a bi-annual noise survey to an annual survey. The reduction in the noise monitoring frequency is requested based 100% compliance in all of the previous noise surveys. The Agency provided verbal agreement.

A summary of the previous noise surveys completed to date at the facility are indicated in Tables 2.5.1-2.5.2. The EPA guidelines of 55 dB(A) LA_{eq} (day time) and 45 dB(A) LAeq (night), for all NSL's for the daytime and nighttime results meet the EPA guidelines, subsequently KWD are fully compliant with Condition 6.12 of their Waste Licence.

As part of KWD's Environmental Management Plan and commitment to ongoing environmental improvements Killarney Waste Disposal Ltd. they have upgraded the junction to the site to assist in further reducing noise emissions from the site. The most recent survey noted that the "junction to the site was significantly improved since the last survey and will lead to noise reduction in the long term.

The most recent noise survey identified the road noise as being the single most significant noise source both within and off site. It was noted that the junction to the site was significantly improved since the last survey and will lead to noise reduction in the long term. The survey results indicate that the MRF is not having a significant impact on NSL outside the boundary of the site.

Noise	ise Survey December 2007		Survey April 2007		
Sensitive Locations	Daytime ELV 55 dB L(A)eq (daytime)	Night time ELV 45 dB L(A)eq (daytime	Daytime ELV 55 dB L(A)eq (daytime)	Night time ELV 45 dB L(A)eq (daytime	
NSL1	49.3	30.3	46.6	29.8	
NSL2	44.6	23.9	39.2	22.8	
NSL3	40.6	29.5	35.7	28.2	
NSL4	42.6	30.3	39.6	29.1	

Table 2.5.1Noise Monitoring Results 2007

Table 2.5.2Noise Monitoring Results 2008

Noise Sensitive	Survey July 2008		
	Daytime ELV 55 dB L(A)eq (daytime)	Night time ELV 45 dB L(A)eq (daytime	
NSL1	48.2	28.3	
NSL2	43.9	27.8	
NSL3	39.6	28.9	
NSL4	38.3	28.2	

2.6 Emissions to Air

Dust and Odour Control

All waste for disposal and malodorous waste stored overnight at the facility are stored within the materials recovery building or in suitably covered and enclosed containers, pending regular removal of waste from the facility.

All areas where there is a potential for generation of odour (temporary storage area, skips, and bins) are covered. Airborne dust in dry weather periods is reduced by spraying of site roads with water, access roads with hard standing are swept regularly. Plant equipment is regularly washed down to minimise dust and odour generation, as well as to prevent contamination of different waste streams.

Dust Emissions

Three bergerhoff gauges was installed in site in 2008 to monitor the ambient air quality for total dust deposition. Samples were colleted in the third and fourth quarters for the 2008 reporting period as tabulated below and shown in Figure 2.6.1

Table 2.6.1Total Dust Deposition for 2008

Dust Monitoring Results 2008 Total Particulates								
Quarter	Back Road mg/m2/day	Gate mg/m2/day	Back Road mg/m2/day	ELV mg/m2/day				
Quarter 3 (July)	107	*	112	350				
Quarter 4 (November)	109	321	175	350				

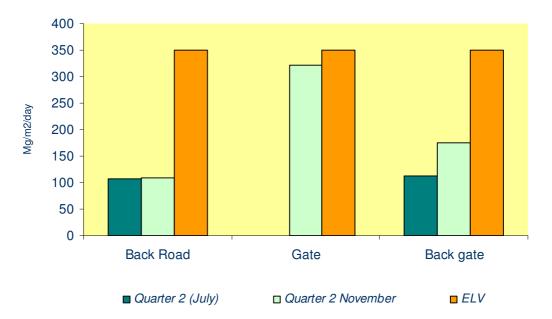


Figure 2.6.1 Dust Depositions for 2008

The results of analysis indicated that all of the monitoring locations are within the Licence Emission Limit Value of 350 mg/m2/day.

2.7 Waste Management

Management of solid non-hazardous and hazardous wastes are recorded in accordance with Condition 7 of the Waste Licence.

Table 2.7.1 shows the total quantities of waste received and consigned from the facility in the reporting period. A breakdown of the waste types is provided in accordance with the European Waste Catalogue and Hazardous Waste list. The total quantity of waste process at the facility for 2008 was 45.234 tonnes.

Full details of the waste processed onsite were submitted as part of the EPA Waste Characterisation Survey under separate cover.

Table 2.7.1Onsite Treatment and Transfer of Waste 2008

Transfer Destination	European Waste Code	Quantity T/Year	Description of Waste	Waste Treatment Operation	Location of Treatment	Name and Licence / Permit No. of Recoverer / Disposer / Broker	Address of Recoverer / Disposer / Broker
Within the Country	15 01 04	45.38	Aluminium	R4	Offsite in Ireland	Green Dragon Recycling (WP/136-2)	Corbally North Glanmire Cork Co. Cork
To Other Countries	15 01 04	18.16	Cans	R4	Abroad	CF Booth Ltd. (WD20 R729)	Wharf Road Doncaster South Yorkshire DN1 2ST.
To Other Countries	15 01 01	274.92	Cardboard	R5	Abroad	Parry & Evans (OPK 2002)	Severn Farm Industrial Estate, Welshpool, Powys SY21 7DF, England (NOW/268322)
To Other Countries	15 01 01	8194	Cardboard	R5	Abroad	Peute Papier Recycling, (OPK 2002)	Bannhoekweg 4, 3313 La Dordrecht, Nederland
To Other Countries	15 01 01	1293.44	Cardboard	R5	Abroad	Highlander International Recycling Ltd., (SCO/044794/CB)	1 Teign Grove East Kilbridge, G75 8UZ, UK (SCO/044794/CB)
Within the Country	15 01 01	4532.01	Cardboard	R5	Offsite in Ireland	Marwin Environmental Trading Ltd. (WMP 926)	Rubicon Centre, CIT Campus, Bishopstown, Co. Cork.
Within the Country	15 01 01	865.92	Cardboard	R5	Offsite in Ireland	Greyhound Waste, (W0205-01)	Galvone Industrial Estate, Limerick
To Other Countries	15 01 01	719.58	Cardboard	R5	Abroad	F.B.I. Ltd., (SCO/046475/B)	Century Court, Riverside Way, Riverside Business Park, Irvine, Ayrshire, KA11 5DD UK (SCO/046475/B)

Transfer Destination	European Waste Code	Quantity T/Year	Description of Waste	Waste Treatment Operation	Location of Treatment	Name and Licence / Permit No. of Recoverer / Disposer / Broker	Address of Recoverer / Disposer / Broker
To Other Countries	15 01 01	4025.1	Cardboard	R5	Abroad	Stirling Fibre Ltd.,	Poplar House Four Arches Croy, Kilsyth G65 9TS
Within the Country	15 01 01	16.32	Cardboard	R5	Offsite in Ireland	Veolia (W0082-02)	Dock Road, Co. Limerick
Within the Country	20 01 08	1040.1	Compost	R3	Offsite in Ireland	O' Toole Composting (WP 01-07)	Ballintrane, Fenagh, Co. Carlow.
Within the Country	17 01 07	1828.63	Fines	D1	Offsite in Ireland	Kerry County Council Landfill (Coolcashlaugh W0072-01), (Miltown W0069-01)	Kerry County Council Landfill Coolcashlaugh , Miltown
Within the Country	20 01 23	6.660	Fridges	D1	Offsite in Ireland	KMK Metals Recycling (W0113-03)	Cappincur Industrial Estate, Co Offaly
Within the Country	20 3 01	12,774.4 2	Mixed Municipal Waste	D1	Offsite in Ireland	Kerry County Council Landfill (W0072-01), (Miltown W0069-01)	Kerry County Council Landfill Coolcashlaugh , Miltown
Within the Country	20 03 01	346.14	Mixed Municipal Waste	D1	Onsite in Ireland	Gortadroma Landfill, (W0017-03)	Ballyhahill, County Limerick
To Other Countries	17 02 03	39.14	Hard Plastic	R5	Offsite in Ireland	Greyhound Waste, (W0205-01)	Galvone Industrial Estate, Limerick
To Other Countries	17 02 03	32.32	Hard Plastic	R5	Abroad	Highlander International Recycling Ltd. (SCO/044794/CB)	1 Teign Grove East Kilbridge, G75 8UZ, UK
Within the Country	17 02 03	31.58	Hard Plastic	R5	Offsite in Ireland	Marwin Environmental Trading Ltd. (WMP 926)	Rubicon Centre, CIT Campus, Bishopstown, Co. Cork.

Transfer Destination	European Waste Code	Quantity T/Year	Description of Waste	Waste Treatment Operation	Location of Treatment	Name and Licence / Permit No. of Recoverer / Disposer / Broker	Address of Recoverer / Disposer / Broker
To Other Countries	15 01 02	1269.1	Mixed Film/Hard Plastic	R5	Abroad	Choice Waste (TES/385621/CB)	Unit D Stratton Business Park, Montgommery Way, Biggleswade, Bedfordshire, SG18 8QB, UK
Within the Country	15 01 02	297.68	Mixed Film/Hard Plastic	R5	Offsite in Ireland	Greyhound Recycling & Recovery, (W0205-01)	Clondalkin Industrial Estate, Crag Avenue, Clondalkin, Dublin 22
To Other Countries	15 01 02	223.02	Mixed Film/Hard Plastic	R5	Abroad	Peter Nicholson (HAM/409446/CB)	75,Mullins Close Basinstoke RG21 5QZ England
To Other Countries	15 01 02	168.16	Mixed Film/Hard Plastic	R5	Abroad	Pink Skips (Wellings Ltd) (BUS/722136)	Recycling House,Rock Road, Ketley, Telford, Shropshire, TF1 5HW
To Other Countries	15 01 02	212.66	Mixed Film/Hard Plastic	R5	Abroad	Marwin Environmental Trading Ltd., (WMP 926)	Rubicon Centre, CIT Campus, Bishopstown, Co. Cork.
To Other Countries	15 01 02	40.04	Mixed Film/Hard Plastic	R5	Abroad	Highlander International Recycling Ltd., (SCO/044794/CB)	1 Teign Grove East Kilbridge, G75 8UZ, UK (SCO/044794/CB)
Within the Country	17 08 02	38.6	Plasterboard	R5	Offsite in Ireland	Gypsum Recycling (WMP 238/2006)	Rathcoffey, Dondea, Naas, Co. Kildare
Within the Country	17 01 07	1302.24	Rubble	R5	Offsite in Ireland	Rubble Yard (WP31/04)	Sheen East, Killarney Co. Kerry
Within the Country	17 04 07	18.22	Scrap Metal	R4	Offsite in Ireland	Country Clean Recycling Ltd. (W0257-01)	Church field Industrial Estate, John F. Connolly Road, Cork
Within the Country	17 04 07	255.58	Scrap Metal	R4	Offsite in Ireland	Hegarty Metal, Metal (WP-05 -04)	Dock Road, Limerick(WP- 05 -04)

Transfer Destination	European Waste Code	Quantity T/Year	Description of Waste	Waste Treatment Operation	Location of Treatment	Name and Licence / Permit No. of Recoverer / Disposer / Broker	Address of Recoverer / Disposer / Broker
Within the Country	17 04 07	2.7	Scrap Metal	R4	Offsite in Ireland	KMK, (W0113-03)	Cappincur Industrial Estate, Daingean Road, Tullamore, Co Offaly.
Within the Country	17 04 07	214.6	Scrap Metal	R4	Offsite in Ireland	Molloy Metal Recycling, (WP/00/015)	Ballycarney, Ferns Co. Wexford.
To other Countries	17 04 07	23.62	Scrap Metal	R4	Abroad	S.Norton & Co Ltd. (WML/195/02/M01.	Tenax Road Trafford Park Manchester M17 1JT
Within the Country	15.04.04	183.38		5.4	Offsite in Ireland	Marwin Environmental Trading. Ltd (WMP 926)	Rubicon Centre, CIT Campus, Bishopstown, Co. Cork.
To other Countries	- 15 01 04	194.78	Steel Cans	R4	Abroad	CF Booth Ltd. (WD20 R729)	Wharf Road Doncaster South Yorkshire DN1 2ST.
Within the Country	17 02 01	25.51	Woodchip	R11	Offsite in Ireland	Dillon's Waste (WP-07-30)	The Kerries, Tralee, Co. Kerry
Within the Country	17 02 01	85.99	Woodchip	R11	Offsite in Ireland	Higgins (WP-50-04)	The Kerries, Tralee, Co. Kerry
Within the Country	17 02 01	2,260.46	Woodchip	R11	Offsite in Ireland	Yard Sales	Farmers within the area.
Within the Country	17 02 01	2,130.75	Woodchip	R11	Offsite in Ireland	Weyerhaeuser Europe Ltd (Medite Europe Ltd) (P0027-02)	Redmondstown, Clonmel, Co. Tipperary
Within The Country	20 01 33	1.06	Batteries	D2	Offsite in Ireland	Returnbatt, Returnbatt Ltd, (W0105-01)	Old Mill Industrial Estate, Kill, Co. Kildare.

Transfer Destination	European Waste Code	Quantity T/Year	Description of Waste	Waste Treatment Operation	Location of Treatment	Name and Licence / Permit No. of Recoverer / Disposer / Broker	Address of Recoverer / Disposer / Broker
Within The Country	20 01 10 /		Textile waste	R11	Offsite in Ireland	Yard Sales	Millstreet Co Cork.
20 01 11	34.76		XTIIE WASTE RTT		Veolia (W0082-02)	Dock Road, Co. Limerick	

Table 0.0.1

2.8 Resource Management

Data relating to energy consumption (electricity and fuel oil) for the 2008 reporting period are summarised in the following sections.

Data are presented as annual totals and per tonne of waste handled.

2.8.1 Summary Energy Consumption

Energy, both as electrical power and fuel oil represents a significant input to processing activities at Killarney Waste Disposal and is closely tracked on an ongoing basis. Tracking and evaluation of energy data allows for the setting of targets and development of programmes for monitoring energy efficiency.

Electricity consumed is used for lighting and heating in the offices. Site vehicles and an onsite generator is consume either green or white diesel. Fuel consumption has increased since the upgrading and the greater intensification of the activity on site.

Energy demand is primarily associated with operations plant equipment which includes the wood shredder, waste segregation process lines, in addition to diesel process vehicles. This load may remain relatively static for a range of throughputs as a similar power demand arises in relation to processing intensification.

Table 2.8.1 provides a comparison of the diesel consumption in line with waste processing activities for 2008.

Table 2.8.1	Comparison of the	Diesel	Consumption	and	Waste
	Processing Activities	or 2008			

Month 2008	Oil (litres)	Waste Processed (tonnes)
Jan	10570	3215.22
Feb	10925	3944.61
March	9621	3456.88
April	12047	3902.29
Мау	11036	3664.49
June	10235	3613.1
July	12838	4898.45
August	14211	4383.76
September	10492	4333.64
October	9611.61	3304.38
November	11247.3	3240.28
December	8474.85	3766.04

Oil consumption at KWD is related to plant processing operations and hence the amount of waste material process is closely tracked by the amount waste processed. This is illustrated in Figure 2.8.1.

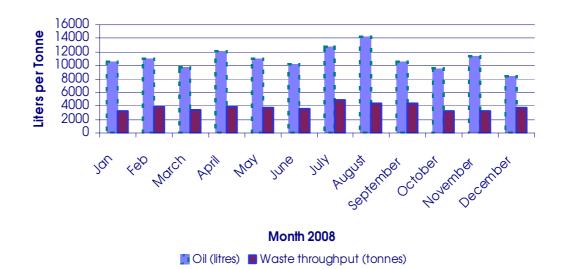


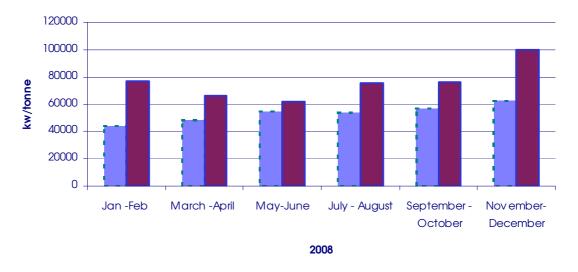
Figure 2.8.1 Comparison of the Diesel Consumption and Waste Processing Activities for 2008

Electrical consumption at the facility is largely used from site offices and hence is independent of plant processing operations. Table 2.8.2 and Figure 2.8.2 illustrate electrical consumption for 2007 and 2008.

Electrical consumption increased by circa 40% in 2008. The increase in electrical usage is largely due to more efficient picking operations along the conveyor to increase the quality of recyclable material recovered. These operations resulted in slower processing operations requiring more electrical power.

Months (2008)	Electricity (KW) 2007	Electricity (KW) 2008
Jan -Feb	43,950	76,800
Mar-Apr	48,450	66,100
May-Jun	54,750	62,150
Jul - Aug	54,200	75,600
Sept -Oct	56,650	76,100
Nov-Dec	62,450	99,600

Table 2.8.2Summary Electrical Consumption (2007 and 2008)



2007 Electricity (KW) 2008 Electricity (KW)

Figure 2.8.1 Energy Consumption in 2007 and 2008

As can be seen in Figure 2.8.2 electrical consumption was greatest for the winter months in particular November and December 2008.

An Energy Audit of the facility was undertaken in 2008. A copy of the Energy Audit was submitted to the Agency under separate cover.

The Audit established energy consumption at KWD, and recommended the implementation of an Energy Management System to help track, and subsequently minimise energy usage on site.

As part of implementing the Energy Management System the follow key recommendations were made:

- Setting up an excel spreadsheet to recording energy consumption, cost, and throughput figures should to track efficiency.
- Energy consumption should be reviewed on a monthly basis
- Establish Energy Performance Indicators (EPI's) based on electricity Consumption (kWh) per tonne of material produced, and Diesel consumption (L) per tonne of material produced.

The report also recommended developing an energy policy for the site.

These recommendations have been incorporated into the Environmental Management System (EMS) objectives and targets for 2009.

Third Party Inspection Audits

2.9.1 EPA Monitoring and Site Inspections

The Agency undertook one site inspection at the KWD facility on the 30/11/2007 however the inspection report was not issued until 28/04/08. A number of non-compliances and observations were raised. The corrective actions required and the status of each of these corrective actions is tabulated in Tables 2.9.1.

A meeting was held with the EPA on foot of the inspection report. During the meeting the exceedence of the tonnage was discussed and Killarney Waste Disposal noted that they intent to apply for a licence review. The drainage from the yard areas to the surface water lagoon was also discussed. A second site inspection report was then issued to Killarney waste disposal on the 15/08/2008. Details of non-compliances and corrective measure 8.put in place are detailed in Table 2.9.2.

2.9.2 EPA Audits

There was no EPA Audit undertaken of the Killarney Waste Disposal facility for the 2008 reporting period.

Table2.9.1EPA Inspection Observations

Ref.	IPPCL Ref.	Non Compliance	Corrective Action	Status
NC/1	Condition 1.2 of the Waste Licence	Exceedence of waste tonnage limit. The total tonnage of material take offsite for the year 2007 was estimated at 52,000. A meeting was held with KWD on the 12 th of December in relation to the matter.	The licensee shall comply with the licenced limitations on waste acceptance as outlined in Schedule A.2 of the Waste Licence. The licensee shall submit a proposal as to how it will come back into compliance with the Licence.	
NC/2	Condition 11.1 and 11.4	Low quality discharge to surface water drain form site. The Agency's and the licence monitoring indicate that a potentially polluting discharge to the river Catchment in the area is occurring.	The licensee shall comply with Condition 11.1 and 11.4 of the licence.	We are currently monitoring the discharge of Ammonia from the reed bed with latest EPA sample (report no 280070/1) coming in at 0.433 mg/l. We have been in discussions with the original designer of the reed bed who has recommended that we increase the size of the aeration unit in the lagoon, as the one that is fitted appears to be too small. This has now been upgraded and will help the digestion process. The reed bed is lined with a 2mm HDPE sealed
				liner with 300mm of clay on top of it. I will forward pictures of this at the construction stage when I receive them from Tim Clarke (the designer). He has recommended that any testing for water discharge quality should be carried out after the reed bed as this is the end of the digestion process as per his original design. The agency has requested testing between the lagoon and

Ref.	IPPCL Ref.	Non Compliance	Corrective Action	Status
				reed bed and we will carry out tests in this area to build up a profile of the water quality in the lagoon. Please find enclosed the 2 copies of existing drainage drawing as requested.
NC/3	Condition 11.1 and 11.4	Failure to notify the Agency in relation (i) An exceedence of the daily duty capacity of the waste handling equipment through the exceedence of the maximum waste tonnage limit. (ii) an indication that environmental pollution in the form of a discharge of contaminated surface water from the facility has, or may have, taken place.	The licensee shall comply with Condition 11.1 and 11.4 of the licence.	Killarney Waste Disposal acknowledges that these matters should have been reported to the agency as per condition 11,1 and 11.4. Any future issues will be reported as per licence requirements.
NC/4	Condition 3.7	Processing Outside Processing of construction and demolition waste and plasterboard is occurring outside the Materials Recovery Building (except for wood, metals and masonry waste).	Enclose the construction and demolition waste within the MRF. Store all wastes incl. plasterboard within the MRF.	Improvements have been made on the C & D picking line as per pictures 1 and 2 attached with the bays for plasterboard and the light fraction now fully closed. These are emptied at the end of each day and plasterboard is stored within the processing building until disposal at a permitted facility.
NC/5	Condition 6.1 and Schedule C.6.	No dust monitoring results available	Comply with the licence requirements.	Bergerhoff gauges currently being sourced and will be installed before end of May 2008 with results available 28 days after installation.
NC/6	Condition 3.11.1	The fuel tank is unbunded and in a precarious location at the edge of a trench on made ground. The bund constructed for the bank nearby remains empty.	Place the fuel tank within the bund.	
NC/7	Condition 2.12	The facility manager has not	The licence shall obtain	Facility Manager has completed the FAS course

Ref.	IPPCL Ref.	Non Compliance	Corrective Action	Status
		completed the FAS waste management training course within 12 month of the grant of the licence.	the relevant qualification.	as of the 21/5/08.
NC/8	Condition 3.18	High Level Alarm for the effluent storage tank has not yet been fitted.	The licensee shall obtain high level alarms for all sumps storage tanks, effluent holding tanks, lagoons.	Complete - The high level alarm has now been installed in the effluent tank.
NC/9	Condition 6.21	A data management system has not been developed	Comply with the condition.	All test results are now being received from external labs in electronic format so that they can be compiled in a data management system.
NC/10	Condition 7.1	An Energy efficiency audit has not been developed.	Comply with the condition.	Complete – Audit report enclosed
NC/11	Condition 8.9.2	No written procedures for the accepting and handling of wastes were available on inspection.	Establish and maintain detailed procedures for the acceptance and handling of waste.	Complete – Procedure enclosed
NC/12	Condition 11.7.41	No calibration records were available for the weighbridge	Make Weighbridge Calibration available for inspection.	Complete – See calibration cert enclosed
NC/13	Condition 3.7	The licensee has not provided weighbridge and wheel cleaner for the facility.	Comply with the condition	KWD has begun a licence review process. This condition is being assessed as part of this licence review.
OBS/1	Not Applicable	There were 57 names on the summary sheet of the permit and licence holders used by the facility. Some of whom were being used and some who were not according to the Environmental Manager. There was no indications as to which were currently in use.	Maintain an up-to-date list of authorised waste contractors which will be available for agency inspection.	Complete - Waste authorization folder now sorted by current permit sites being used. Complete – Permit details for waste broker Highlander sent through. Copy enclosed.

Ref.	IPPCL Ref	Non Compliance	Corrective Action	Status
		A Waste broker Highlander being used did not appear on the company's authorisation list.		
OBS/2	Not Applicable	No report to justify the proposed location of the boreholes was available for review.	Provide the Agency with a copy of the report.	OBS/2 Not Applicable No report to justify the proposed Provide the Agency Complete – Report on ground water monitoring location of the boreholes was with a copy of the points prepared by a suitably qualified person available for review.

Table 2.9.2 EPA Audit Non-Compliances

Ref.	Non Compliance	Corrective Action	Status
NC /1 Condition 5.1	Emission of Environmental Significance SW1 was subsequently sampled by Agency staff 27/08/2008. An interim EPA result on analysis of this sample indicated a low quality discharge with an elevated level of Ammonia at 7.82mg/l. A sample from the lagoon also indicated an interim result of 5.82mg/l. The elevated level of ammonia at this point indicates that the surface water drainage from the site is contaminated.	 There shall be no emission of environmental significance other than that specified in Schedule B (i.e. only emissions to air and noise). The licensee shall arrange for an independent consultant to carry out an assessment on the management of surface water drainage and the surface water treatment. The licensee shall continue to monitor weekly the discharge at SW1 at its current location (ref: Condition 3.17) and notify the Agency by fax of any results, which are of environmental significance. The licensee shall label SW1 and all other required monitoring points (ref: Condition 3.9). The licensee shall also monitor at the lagoon for the same parameters as SW1 to build up a profile of the performance of the treatment system (ref: Condition 6.7). 	Current ammonia discharge from the reed bed ranges from 6.36 to 7.82 mg/l at sampling point SW1. The corresponding ammonia levels at the exit from the site boundary range from 0.069 to 0.19 mg/l As per condition 5.2 the ammonia levels do not result in significant impairment to the environment beyond the facility boundary. A full review of the facility operations will be carried out to find the source of the ammonia within 4 weeks of this response. KWD would request that ground water monitoring locations should be agreed as soon as possible to evaluate ground water quality outside the facility boundary. An amended borehole location map is attached for approval. KWD will continue to monitor weekly the Lagoon, SW1 and Boundary Discharge to build a profile of the water quality as requested.

NC /2 Condition 3.7	Processing of construction/ demolition (C&D) waste is being carried out outside the materials recovery building. Efforts to enclose the processing of this waste since the last site inspection are not to the satisfaction of the Agency	Enclose the processing of construction and demolition waste within the materials recovery building. Store all wastes including gypsum/plasterboard in the materials recovery building (except for wood, metals and masonry waste).	KWD proposes to enclose all bays in the rubble picking station to prevent loose litter in the yard and also KWD will not process/sort the light fraction recovered from the c&d through the picking line as was observed on the day of the inspection. The light fraction will instead be sorted on the dry recyclable line, which is housed inside the MRF building.
	(see Fig 2). Storage of C&D waste, in particular plasterboard in a skip, was observed outside the materials recovery building (See Fig.3). This issue was raised as a non-compliance in the		All material except metal, masonry and timber is now stored inside the MRF building.

Obs/1	The 'Well Selection Report' submitted on 12/06/2008 is not to the satisfaction of the Agency. None of the proposed monitoring locations were directly downgradient of the facility in relation to the groundwater gradient, which was determined and indicated in Figure 7 of the report.	 locations must be justified to monitor for: Potential downgradient impact to groundwater from the emissions to ground at SW1. 	Complete. New groundwater monitoring locations points were proposed to the Agency. KWD is currently awaiting Agency approval to install the boreholes and proceed with the Waste Licence monitoring requirements.
Obs /2	The licensee provided waste records, which indicated that 29,232.798 tonnes had been accepted at the facility to date (15/08/2008). The licensee estimated that the total intake for the year would be 46,000 tonnes. This would be an exceedance of the waste acceptance limit specified in the licence.	The licensee shall monitor the waste acceptance tonnage on a continuing basis and notify the Agency immediately if the licence limit is exceeded.	Waste accepted at the facility up until 31/8/2008 was 31,322T. To continue at this level would exceed the licenced limit (40,000T) by the end of November 08, with an estimated waste accepted for the year of 46,983T A technical amendment was requested on the 3/01/08 to increase licenced tonnage to 55,000T. The Agency advised on the 1/10/08 that the changes would be more appropriately assessed as part of a licence review. KWD have since begun the licence review process.

2.9 Complaints Summary

KWD did not receive any complaints during the 2008 reporting period.

2.10 Reported Incidents Summary

Concentrations of ammonia increased in October 2008. Killarney Waste Disposal monitored the discharges of ammonia on a daily basis. Corrective action was undertaken enhance the digestion process by cleaning surface water sumps, enlarging the waste water lagoon, and replacing the reed bed.

There were no other incidents during 2008 at the Killarney Waste Disposal facility.

3.0 Environmental Management Programme

Section 3 of the AER contains summary information on the Killarney Waste Disposal Environmental Management Programme (EMP), together with a review of performance in meeting specified targets throughout 2007.

A revised EMP is presented in Section 3.2 for agreement and Agency approval.

It is noted that both the EMP and Schedule of Objectives and Targets fall under the site Environmental Management System and accordingly, are included within a structured system of management review and periodic auditing by internal auditors.

3.1 EMP Summary Progress Report

This section contains a brief summary of the progress in meeting targets established under the Environmental Management Programme 2007 - 2008, details of which were submitted to the Agency as part of the EMS for approval.

EMP 2008

1.0 Obj		mental management at KWD.	
<u>No.</u>	Target	Plan	Status
1.1	Environmental Management System	Carry out internal environmental audits	Ongoing
1.2	To ensure that all employees are made aware of requirements	Identify environmental training needs of all employees	Ongoing - Continuous
	of the site environmental system	Schedule appropriate training	Ongoing- Continuous
		Provide environmental awareness training to all employees	Ongoing
1.3	Maintenance programme for vehicles and equipment	Completing the maintenance programme	Ongoing
1.4	To conduct Annual Environmental Review Meetings	Review environmental performance of facility.	Ongoing
		Review EMP for 2007 / 2008	Ongoing
1.5	Submit AER	Prepare and Review AER 2008	Complete
		Submit AER	
1.6	Prepare annual statement in accordance with	Preparation of Closure Plan and Environmental Liabilities Reports	Complete
	condition 12.2.2 of 1of Waste Licence No	Submit as part of AER	Complete
	WO217-01	Review every three years	Ongoing

1.0 Obj _To ma No.		mental management at KWD. Plan	Status
1.7	Data Management System in accordance with Condition 6.21 of Waste Licence No W0217-01	Maintenance of Data Management System	Ongoing - Continuous

2.0 Obj			
_To esta No.	Iblish and maintain a suitab Target	le site infrastructure at KWD. Plan	Status
2.1	Provide report to EPA as required under	Carry out survey	Completed
	Condition 3.8.2 of Waste Licence W0217-	Compile Report	Completed
	01detailing duty and standby capacity of all waste handling and processing equipment at KWD.	Submit to EPA	Completed
2.2	Label and provide safe and permanent access	Review access	Completed
	to all onsite sampling and monitoring points	Upgrade if necessary	Completed
	and to offsite points as required by Condition	Source signs	Completed
	3.10 of Licence	Erect signs	Completed
2.3	All tank container and drum storage areas shall be rendered impervious in accordance with Condition 3.11.1 of Waste Licence W0217- 01	Review storage of tanks, drums and container areas. Demonstrate that all storage areas are impervious to materials stored therein and repair if necessary	Completed Complete Ongoing
2.4	Integrity testing of all bunding structures tanks and containers as required under Condition 3.11.5 of Waste Licence W0217- 01	Undertake programme of integrity testing To be carried out at three years intervals.	Ongoing Ongoing
	Thereafter to be carried out at three years intervals.		
2.5	Install and provide adequate measures for	Review existing dust and odour measures currently on	

		le site infrastructure at KWD.	
_No.	Target	Plan	Status
	control of odours and dust emissions in accordance with condition 3.20of Waste Licence No W0217-01	site. Identify and quantify additional controls are necessary.	Ongoing Dust monitoring undertaken on a quarterly basis
		Carry out works required.	Complete
2.6	Submit proposals to EPA for groundwater	Prepare proposal	Complete
	Borehole Monitoring points in accordance with condition 3.21 of Waste Licence No W0217-01	Submit Proposal to EPA	Ongoing

3.0 Ob Establi No.	ish and maintain site contro	ol at KWD Plan	Status
3.1	Carry out integrity testing on all underground tanks and pipes. in accordance with condition 6.9 of Waste Licence No W0217-01	Undertake programme of integrity testing. To be carried out at three years intervals.	Ongoing
3.2	Carry out Biannual Noise Survey in accordance with Condition 6.12.1 of Waste Licence No W0217-01	Annually Noise Survey-Verbal agreement obtained for the EPA to reduce the frequency to an annual noise survey.	Complete
3.3	Prepare programme for the identification and reduction of noise emissions in accordance with Condition 6.12.1 of Waste Licence No W0217-01	Review Noise survey reports Prepare programme based on findings of Noise surveys. Submit programme to EPA	Ongoing Noise results are in compliance with noise requirements. Road upgrade works undertaken to reduce the impact road traffic noise.

_To im	ojective prove the efficient use of re Target	esources at KWD. Plan	Status
4.1	To carry out energy efficiency Audit in accordance with Condition 7.1of Waste Licence No W0217-01	Carry out energy efficiency Audit.	Complete
4.2	To benchmark all energy and water usage at KWD	Prepare and review on monthly basis energy and water consumption figures in relation to tonnage of waste processed.	Ongoing
4.3	To prepare report examining waste recovery options in accordance with Condition 11.11 of Waste Licence No W0217-01	Prepare Waste recovery report Review Report Submit as part of AER	In Progress Installation of hi- tech vision sorting to recover and segregate mixed film Diversion of plastic
			from landfill to recovery facility

	bjective prove Materials handling (at KWD	
No.	Target	Plan	Status
5.1	Procedures for the acceptance and handling of waste.	Review Annually	Complete

	ojective prove emergency preparedn	ess and response at KWD	
No.	Target	Plan	Status
6.1	Accident Prevention Policy	Review Annually	Ongoing
6.2	Emergency Response procedure	Review Annually	Complete

3.1 Ongoing Environmental Programmes for 2009

It is noted that a significant investment, in terms of time and finance has been made in improving environmental awareness and reducing environmental impacts at the facility. KWD has also concerted great effort in compliance with their newly granted Waste Licence.

The EMP in 2009 will largely focused on resource management and energy consumption, while ensuring compliance with the IPPC Licence will remain a high priority.

A number of long term on-going programmes initiated at the site will continue on an on-going basis to ensure compliance with the conditions of the IPPC Licence and the site environmental management system as follows:

- 1. Energy Measurement, Tracking and Reduction.
- 2. Resource consumption Measurement, Tracking and Reduction.
- 3. Programme to minimise water demand and reduction in volume of process effluent.
- 4. Hydrogeological Assessment.
- 5. Bund Integrity testing
- 6. External Housekeeping Programme.
- 7. Staff Training.
- 8. Solid Waste Minimisation, Recovery and Re-use.
- 9. Surface Water Quality Monitoring.
- 10. Ground Water Quality Monitoring.
- 11. Ambient Environmental Monitoring
- 12. Environmental Management and Auditing.
- 13. Inspection of storage areas.

Records and other documentation relevant to the tracking of the above programmes are maintained on site. A copy of the proposed objectives and targets for 2009 are appended as Attachment D of the report.

Records and other documentation relevant to the tracking of the above programmes are maintained on site.

3.2 Pollution Emission Register

Killarney Waste Disposal Ltd. already provides details of the types, volumes and destinations of all waste transferred from the facility in the AER. Additional information is submitted under separate cover for as part of a National Waste Characterisation Survey using the web-based system.

3.3 Programme for Public Information

Killarney Waste Disposal Ltd. are committed to setting the standard in waste management and ensuring compliance with all environmental operations. In addition, Killarney Waste Disposal Ltd. Environmental Policy makes a specific commitment to make the environmental policy and records available to the public and interested parties.

Killarney Waste Disposal Ltd has implemented a public communications Programme which details how members of the public are facilitated in accessing environmental information at the facility.

The Environmental Policy is available in reception for any member of the Public to review. In addition if a member of the public requests a copy of the environmental policy it will be provided to them by the Environmental Manager.

In addition the following records are available to the public upon request:

- Environmental Management System,
- Environmental Policy,
- Waste Licence,
- Monitoring Records,
- Complaints File.

3.4 Environmental Liabilities Risk Assessment

A Closure Plan and Environmental Liabilities Risk Assessment have been completed for Killarney Waste Disposal.

Killarney Waste Disposal Ltd. has adequate insurance cover for environmental liabilities to €2,600,000 for any one occurrence, which will apply to "sudden identifiable and unintended incidents".

The facility has an Environmental Management Programme (EMP) in place. The EMP serves as a guidance document for facility staff and describes operational control and management practices that are applied at the facility. The EMP is also the core element of the Environmental Management System (EMS) for the facility and is designed to ensure that management of site activities complies with regulatory requirements and best practice. The EMS includes a detailed Emergency Response Procedure which sets out the steps to be taken in the event of an incident at the facility with the potential to cause environmental damage.

In addition to the abovementioned Killarney Waste Disposal Limited implements a comprehensive monitoring programme which will highlight any potential environmental incidents with the potential to cause environmental damage.

A full copy of the report will be issued to the Environmental Protection Agency under separate cover Report.

Attachment A Pollution Release Transfer Register (PRTR)



AER Returns Worksheet

Version 1.1.03

REFERENCE YEAR 2008

1. FACILITY IDENTIFICATION

Parent Company Name Killarney Waste Disposal Limited
Facility Name Killarney Waste Disposal Limited
PRTR Identification Number W0217
Licence Number W0217-01

Waste or IPPC Classes of Activity

class_name
Recycling or reclamation of organic substances which are not used
as solvents (including composting and other biological transformation
processes).
Recycling or reclamation of metals and metal compounds.
Recycling or reclamation of other inorganic materials.
Use of waste obtained from any activity referred to in a preceding
paragraph of this Schedule.
Exchange of waste for submission to any activity referred to in a
preceding paragraph of this Schedule.
Storage of waste intended for submission to any activity referred to in
a preceding paragraph of this Schedule, other than temporary
storage, pending collection, on the premises where such waste is
produced.
Blending or mixture prior to submission to any activity referred to in a
preceding paragraph of this Schedule.
Repackaging prior to submission to any activity referred to in a
preceding paragraph of this Schedule.
Storage prior to submission to any activity referred to in a preceding
paragraph of this Schedule, other than temporary storage, pending
collection, on the premises where the waste concerned is produced.

Address 1	Aughacurreen
Address 2	Killarney
Address 3	
Address 4	
Country	Ireland
Coordinates of Location	0.000
River Basin District	IE-South Western
NACE Code	3832
	Recovery of sorted materials
AER Returns Contact Name	Sean Murphy
AER Returns Contact Email Address	brian.bruton@kwd.ie
AER Returns Contact Position	
AER Returns Contact Telephone Number	064 32458
AER Returns Contact Mobile Phone Number	
AER Returns Contact Fax Number	
Production Volume	0.0
Production Volume Units	N/A
Number of Installations	1
Number of Operating Hours in Year	3250
Number of Employees	44
User Feedback/Comments	
Web Address	www.kwd.ie

2. PRTR CLASS ACTIVITIES	
Activity Number	Activity Name
5c	Installations for the disposal of non-hazardous waste

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

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

4.2 RELEASES TO WATERS

| PRTR# : W0217 | Facility Name : Killarney Waste Disposal Limited | Filename : W0217_2008(1).xls | Return Year : 2008 |

24/03/2009 14:50

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								I / PRTR Reporting a					
	RELEASES TO WATERS POLLUTANT											QUANTITY	
				Method Used				Proc	cess Effluent				
No, Annex II	Name	M/C/E	Method Code	Designation or Description	Emission Doint 1	Emissia	n Point 2 Emission Point 3	Emissi		Emission Point 5		A (Accidental) KG/Year	F (Fugitive) KG/Year
NO. ATTREX IT	Chlorides (as Cl)	IVI/G/E	Wethou Code	Designation of Description	Emission Point 1	0.0	0.0	0.0	206.3		.0 206.3		
	Arsenic and compounds (as As)					0.0	0.0	0.0			.0 208.		
								0.0	0.0				
	Chromium and compounds (as Cr)					0.0	0.0	0.0	0.1		.0 0.		
	Cadmium and compounds (as Cd)					0.0	0.0	0.0	0.03		.0 0.0		
	Copper and compounds (as Cu)					0.0	0.0	0.0	1.75	0	.0 1.7	5 0.0	0
	Lead and compounds (as Pb)					0.0	0.0	0.0	0.41	0	.0 0.4	1 0.0	0
	Mercury and compounds (as Hg)					0.0	0.0	0.0	0.0	0	.0 0.	0 0.0	0
	Nickel and compounds (as Ni)					0.0	0.0	0.0	0.39	0	.0 0.3	9 0.0	0
	Zinc and compounds (as Zn)					0.0	0.0	0.0	2.89		.0 2.8		
	Total nitrogen					0.0	0.0	0.0	4.2		.0 2.0		

SECTION B : REMAINING PRTR POLLUTANTS

	RELEASES TO WATERS							
	POLLUTANT						QUANTITY	
				Method Used				
No. Annex II	Name	M/C/E	Method Code	Designation or Description	Emission Point 1	T (Total) KG/Year	A (Accidental) KG/Year	F (Fugitive) KG/Year
						0.0 0.0	0.0	0.0

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

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

		RELEASES TO WATERS												
- [POLLUTANT											(QUANTITY
											Process		1	
					Method Used						Effluent		1	
													1	
													1	A.
										Emission	Emission	Emission Point	T (Total) ((Accidental
	Pollutant No.		M/C/E	Method Code		Emission Point 1	Emission Point 2	Emission Point 3	Emission Point 4	Point 5	Point 6	7	KG/Year)	KG/Year
	240	Suspended Solids	M	M	PER	0.0	0.0	0.0	0	.0 0.	0.0	0.0	0.0	0.0
	238	Ammonia (as N)	М	M	PER	0.0	0.0	0.0	0	.0 0.	20.73	3 0.0	20.73	0.0
	343	Sulphate	М	M	PER	0.0	0.0	0.0	0	.0 0.	0.0	0.0	0.0	0.0
	205	Antimony (as Sb)	М	M	PER	0.0	0.0	0.0	0	.0 0.	0.0	0.0	0.0	0.0
	358	Tin	М	M	PER	0.0	0.0	0.0	0	.0 0.	0.0	0.0	0.0	0.0
	371	Tellurium	М	M	PER	0.0	0.0	0.0	0	.0 0.	0.0	0.0	0.0	0.0
	321	Manganese (as Mn)	М	M	PER	0.0	0.0	0.0	0	.0 0.	0 1.68	3 0.0	1.68	0.0
	338	Potassium	М	M	PER	0.0	0.0	0.0	0	.0 0.	122.88	3 0.0	122.88	0.0
	341	Sodium	М	M	PER	0.0	0.0	0.0	0	.0 0.) 177.0	0.0	177.0	0.0
	370	Selenium	М	M	PER	0.0	0.0	0.0	0	.0 0.	0.0	0.0	0.0	0.0
		COD	М	M	PER	0.0	0.0	0.0	0	.0 0.	2800.0	0.0	2800.0	0.0
	303	BOD	М	M	PER	0.0	0.0	0.0	0	.0 0.	977.9	0.0	977.9	0.0
	352	Total Organic Carbon (as Toluene)	М	M	PER	0.0	0.0	0.0	0	.0 0.	0.0	0.0	0.0	0.0
		Magnesium	м	М	PFR	0.0	0.0	0.0	0	.0 0.	37.5	5 0.0	37.5	0.0

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

		1					Method Used					42
Transfer Destination	European Waste Code	Hazardous	Quantity T/Year	Description of Waste	Waste Treatment Operation	M/C/E		Location of Treatment	Name and Licence / Permit No. of Recoverer / Disposer / Broker	Address of Recoverer / Disposer / Broker	Name and Address of Final Destination i.e. Final Recovery / Disposal Site (HAZARDOUS WASTE ONLY)	Licence / Permit No. of Final Destination i.e. Final Recovery / Disposal Site (HAZARDOUS WASTE ONLY)
				· · · ·					Green Dragon Recycling (WP/136-2)	Corbally North Glanmire Cork		,
Within the Country	15 01 04	No	45.38	8 Aluminium Cans	R4	М	Weighed	Offsite in Ireland	(WF/130-2)	Co. Cork		
To Other Countries	15 01 04	No	18.16	6 Aluminium Cans	R4	м	Weighed	Abroad	CF Booth Ltd.	Wharf Road Doncaster South Yorkshire DN1 2ST.		
										Severn Farm Industrial		
										Estate, Welshpool, Powys SY21 7DF, England		
To Other Countries	15 01 01	No	274.92	2 Cardboard	R5	М	Weighed	Abroad	Parry & Evans(OPK 2002)	(NOW/268322) Bannhoekweg 4, 3313 La		
T 01 0 11									Peute Papier Recycling,	Dordrecht, Nederland (OPK		
To Other Countries	15 01 01	No	8194.0	0 Cardboard	R5	М	Weighed	Abroad	(OPK 2002) Highlander International	2002) 1 Teign Grove East Kilbridge,		
To Other Countries	15 01 01	No	1002.4/	4 Cardboard	R5	м	Weighed	Abroad	Recycling Ltd., (SCO/044794/CB)	G75 8UZ, UK (SCO/044794/CB)		
To Other Countries	150101	No	1293.44	4 Cardboard	no	IVI	Weighed	Abroad		Rubicon Centre, CIT		
To Other Countries	15 01 01	No	4532.01	1 Cardboard	R5	м	Weighed	Abroad	Marwin Environmental Trading Ltd. (WMP 926)	Campus, Bishopstown, Co. Cork. (WMP 926)		
									Greyhound Waste, (W0205-	Galvone Industrial Estate,		
Within the Country	15 01 01	No	860.92	2 Cardboard	R5	М	Weighed	Offsite in Ireland	01)	Limerick Century Court, Riverside		
										Way, Riverside Business Park, Irvine, Ayrshire, KA11		
To Other Countries	15 01 01	No	719.58	8 Cardboard	R5	М	Weighed	Abroad	F.B.I. Ltd., (SCO/046475/B)	5DD UK (SCO/046475/B)		
										Poplar House Four Arches		
										Croy, Kilsyth		
To Other Countries	15 01 01	No		1 Cardboard	R5	М	Weighed	Abroad	Stirling Fibre Ltd.,	G65 9TS		
Within the Country	15 01 01	No	16.32	2 Cardboard	R5	М	Weighed	Offsite in Ireland	Veolia (W0082-02) O' Toole Composting	Dock Road, Co.Limerick Ballintrane, Fenagh, Co.		
Within the Country	20 01 08	No	1040.1	1 Compost	R3	М	Weighed	Offsite in Ireland	(WP 01-07)	Carlow.		
									Kerry County Council Landfill			
Within the Country	17 01 07	No	1828.63	3 Fines	D1	м	Weighed	Offsite in Ireland	(Coolcashlaugh W0072-01), (Miltown W0069-01)	Kerry County Council Landfill Coolcashlaugh, Miltown		
									(Cappincur Industrial Estate,
Within the Country	20 01 23	Yes	0.07	7 Fridges	R4	М	Weighed	Offsite in Ireland	Kerry County Council Landfill		(W0113-03)	Co Offaly
Within the Country	20 03 01	No	12774 42	2 Mixed Municipal Waste	D1	м	Weighed	Offsite in Ireland	(W0072-01), (Miltown W0069-01)	Kerry County Council Landfill Coolcashlaugh , Miltown		
Within the Obuntry	20 00 01	110	12774.42		51		Weighed		Gortadroma Landfill,	ooolousinuugii, wiitowii		
Within the Country	20 03 01	No	346.14	4 Mixed Municipal Waste	D1	м	Weighed	Offsite in Ireland	(W0017-03)	Ballyhahill, County Limerick		
To Other Countries	17 02 03	No	30.1/	4 Hard Plastic	R5	М	Weighed	Offsite in Ireland	Greyhound Waste, (W0205- 01)	Galvone Industrial Estate, Limerick		
To other obuilties	17 02 00	110	00.14		110		Weighed		Highlander International			
To Other Countries	17 02 03	No	32.32	2 Hard Plastic	R5	м	Weighed	Offsite in Ireland	Recycling Ltd. (SCO/044794/CB)	1 Teign Grove East Kilbridge, G75 8UZ, UK		
									Marwin Environmental	Rubicon Centre, CIT Campus, Bishopstown, Co.		
Within the Country	17 02 03	No	31.58	8 Hard Plastic	R5	М	Weighed	Offsite in Ireland	Trading Ltd. (WMP 926)	Cork.		
										Unit D Stratton Business Park, Montgommery Way,		
	15 01 00	Ne	1000 1	t Hand Diastic (Missed Film	Dr	м		Abusad	Choice Waste	Biggleswade, Bedfordshire,		
To Other Countries	15 01 02	No	1269.1	1 Hard Plastic/Mixed Film	R5	IVI	Weighed	Abroad	(TES/385621/CB)	SG18 8QB, UK Clondalkin Industrial Estate,		
Within the Country	15 01 02	No	297 68	8 Hard Plastic/Mixed Film	R5	М	Weighed	Abroad	Greyhound Recycling & Recovery, (W0205-01)	Crag Avenue, Clondalkin, Dublin 22		
county			207.00						,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	75,Mullins Close		
										Basinstoke RG21 5QZ England		
To Other Countries	15 01 02	No	223.02	2 Hard Plastic/Mixed Film	R5	М	Weighed	Abroad	Peter Nicholson Pink Skips (Wellings Ltd)	Recycling House,Rock Road,		
									(BUS/722136)	Ketley, Telford, Shropshire,		
To Other Countries	15 01 02	No	168.16	6 Hard Plastic/Mixed Film	R5	М	Weighed	Abroad		TF1 5HW		

To Other Countries 15 01 02 No 212.66 Hard Plasto/Mixed Film R5 M Weighed Abroad Marvin Environmetal Tarling Lit. (WM B8) Only BRUCh Countries Control To Other Countries 15 01 02 No 40.04 Hard Plasto/Mixed Film R5 M Weighed Abroad (SCO04734 (SB) (SCO04734 (SB) (SCO										
To Other Counting 15 01 02 No 40.04 Hard Plastic/Maxed Film PS M Weighed Abroad (SCD/04/794/CB) Graphone Requires) (WB) 238/2006) (SCD/04/794/CB) (SCD/04/794/CB) (SCD/04/794/CB) (SCD/04/794/CB) (SCD/04/794/CB) (SCD/04/794/CB) (SCD/04/794/CB) (SCD/04/794/CB) (SCD/04/794/CB) (SCD/04/794/CB) (SCD/04/794/CB) (SCD/04	To Other Countries	15 01 02	No	212.66 Hard Plastic/Mixed Film	R5	м	Weighed	Abroad	Trading Ltd., (WMP 926) Highlander International	Campus, Bishopstown, Co. Cork. 1 Teign Grove East Kilbridge,
Within the Country 17 08 02 No 38.8 Plasterboard FB M Weighed Offset in Ireland 288/2000 Co. Kidare Within the Country 17 04 07 No 1302.24 Rubble Rbb M Weighed Offset in Ireland Contry (W257-01) Johner East, Killarmey Co. Within the Country 17 04 07 No 255.58 Sona Metal R4 M Weighed Offset in Ireland Contry (W257-01) Johner East, Killarmey Co. Within the Country 17 04 07 No 255.58 Sona Metal R4 M Weighed Offset in Ireland Contry (W257-01) Johner East, Killarmey Co. Within the Country 17 04 07 No 255.58 Sona Metal R4 M Weighed Offset in Ireland Contry (W257-01) Johner East, Killarmey Co. Within the Country 17 04 07 No 25.62 Sona Metal R4 M Weighed Offset in Ireland Contry (W257-01) March Starmey Co. Within the Country 17 04 07 No 23.62 Sona Metal R4 M Weighed Offset in Ireland March Starmey Co. March Starmey Co. <td>To Other Countries</td> <td>15 01 02</td> <td>No</td> <td>40.04 Hard Plastic/Mixed Film</td> <td>R5</td> <td>М</td> <td>Weighed</td> <td>Abroad</td> <td>(SCO/044794/CB)</td> <td>(SCO/044794/CB)</td>	To Other Countries	15 01 02	No	40.04 Hard Plastic/Mixed Film	R5	М	Weighed	Abroad	(SCO/044794/CB)	(SCO/044794/CB)
Within the Country 17 04 07 No 1322.2 Rubble FB M Weighed Offste in lead Country (Gean Recycling LL) Country (Gean Re	Within the Country	17 08 02	No	38.6 Plasterboard	R5	М	Weighed	Offsite in Ireland	238/2006)	
Within the Country 17 04 07 No 18.22 Scrap Metal R4 M Weighed Offste in Ireland (W0257-0) Output (W257-0) Weight (W257-0) Output (W257-0) Mark (Within the Country	17 01 07	No	1302.24 Rubble	R5	М	Weighed	Offsite in Ireland	(WP31/04)	
Within the Country 17 04 07 No 255.88 Sorap Metal File M Weighed Offste in Ireland 05°.41 Capacity in Lossing Estate, Dargean Road, Tullamore, Colfaly, Balycarne, Ferrs Co. Colfaly, Balycarne, Ferrs Co. Colfaly, Balycarne, Ferrs Co. Within the Country 17 04 07 No 2.3.62 Sorap Metal R4 M Weighed Offste in Ireland S.Norton & Co Ltd Trading Lid (WMP 926) Within the Country 17 04 07 No 2.3.62 Sorap Metal R4 M Weighed Offste in Ireland S.Norton & Co Ltd Trading Lid (WMP 926) Within the Country 15 01 04 No 183.38 Steel Cans R4 M Weighed Offste in Ireland Warvin Environmental Trading Lid (WMP 926) Cork, Within 16 Country	Within the Country	17 04 07	No	18.22 Scrap Metal	R4	М	Weighed	Offsite in Ireland	(W0257-01)	John F. Connolly Road, Cork
Within the Country 17 04 07 No 2.7 Scrap Metal R4 M Weighed Offsite in Ireland KMK, (W011-30) Moley Meal Recycling, Weizhord, Tartiord Park Marvine Environmental Co Offaly, Balyance Within the Country 17 04 07 No 214.6 Scrap Metal R4 M Weighed Offsite in Ireland KMK, (W011-30), Moley Meal Recycling, Weizhord, Tartiord Park Marvine Environmental Shorton & Co Ltd Balyance, Balyance, Sectord, Tartiord Park Marvine Environmental Within the Country 17 04 07 No 23.62 Scrap Metal R4 M Weighed Offsite in Ireland KMK, (W011-30), KWP (WP (WP (WP (WP (WP (WP (WP (WP (WP (Within the Country	17 04 07	No	255.58 Scrap Metal	R4	М	Weighed	Offsite in Ireland		04) Cappincur Industrial Estate,
Within the Country 17 04 07 No 214.6 Scrap Metal R4 M Weighed Offsite in Ireland (WP/00/015) Weiznad, Cardia Trafford Park Within the Country 17 04 07 No 23.62 Scrap Metal R4 M Weighed Offsite in Ireland S. Norton & Co. Ltd Rubicon Centre, CIT Within the Country 15 01 04 No 183.38 Steel Cans R4 M Weighed Offsite in Ireland S. Norton & Co. Ltd Marvin Environmental Carpus, Bishopstown, Co. Within the Country 15 01 04 No 194.78 Steel Cans R4 M Weighed Abroad CF Booth Ltd Yorkshire DN1 2ST. Within the Country 17 02 01 No 2551 Woodchip R11 M Weighed Offsite in Ireland Ullor's Waste (WP-07-03) Tralee, Co. Kerry Within the Country 17 02 01 No 2559 Woodchip R11 M Weighed Offsite in Ireland Higgins (WP-50-04) Tralee, Co. Kerry Within the Country 17 02 01 No 2260.46 Woodchip R11 M Weighed Offsite in Ireland Higgins (WP-50-04) Farmers within the area	Within the Country	17 04 07	No	2.7 Scrap Metal	R4	М	Weighed	Offsite in Ireland		Co Offaly.
Within the Country 17 04 07 No 23.62 Scrap Metal R4 M Weighed Offsite in Irelad S.Notro & Co. Ld. Hubicon Centre, CIT Within the Country 15 01 04 No 183.38 Steel Cans R4 M Weighed Offsite in Irelad Marvine=nurionmental Campus, Bishopsown, Co. Campus, Bishopsown, Co. Campus, Bishopsown, Co. Within the Country 15 01 04 No 183.38 Steel Cans R4 M Weighed Abroad CF Booth Ld Within the Country Within the Country 17 02 01 No 25.51 Woodchip R11 M Weighed Offsite in Irelad Time Karries, Tratee, Co. Kerry Tratee, Co. Kerry Within the Country 17 02 01 No 25.51 Woodchip R11 M Weighed Offsite in Irelad Highers (WP-97.30) Tratee, Co. Kerry Within the Country 17 02 01 No 25.05 Woodchip R11 M Weighed Offsite in Irelad Highers (WP-97.30) Tratee, Co. Kerry Within the Country 17 02 01 No 2130.75 Woodchip R11 M Weighed Offsite in Irelad Moltolinstrate State, Kill, Co. Kill, Co. Kill, Co. Kill, Co	Within the Country	17 04 07	No	214.6 Scrap Metal	R4	М	Weighed	Offsite in Ireland		Wexford. Tenax Road
Within the Country 15 01 04 No 183.38 Steel Cans R4 M Weighed Offsite in Ireland Trading. Lifu/WIP 926) Cork. Within the Country 15 01 04 No 194.78 Steel Cans R4 M Weighed Offsite in Ireland Trading. Lifu/WIP 926) Cork. Wind Road Donceater South Within the Country 15 01 04 No 194.78 Steel Cans R4 M Weighed Abroad CF Booth Ltd Wind Road Donceater South Within the Country 17 02 01 No 25.51 Woodchip R11 M Weighed Offsite in Ireland Higgins (WP-50-04) Tradee, Co. Kerry Within the Country 17 02 01 No 85.99 Woodchip R11 M Weighed Offsite in Ireland Higgins (WP-50-04) Tradee, Co. Kerry Within the Country 17 02 01 No 2260.46 Woodchip R11 M Weighed Offsite in Ireland Higgins (WP-50-04) Tradee, Co. Kerry Within the Country 17 02 01 No 2130.75 Woodchip R11 M Weighed Offsite in Ireland (Modifie Europe Ltd) Co. Tipperary <	Within the Country	17 04 07	No	23.62 Scrap Metal	R4	М	Weighed	Offsite in Ireland	S.Norton & Co Ltd	
Within the Country 15 01 04 No 183.38 Steel Cans R4 M Weighed Offsite in Ireland Trading. Ltd (WMP 926) Cork. Warf Road Doncaster South Yorkshire DN1 2ST. The Kerries, Tratee, Co. Kerry Within the Country 15 01 04 No 194.78 Steel Cans R4 M Weighed Abroad CF Booth Ltd Warf Road Doncaster South Yorkshire DN1 2ST. The Kerries, Tratee, Co. Kerry Within the Country 17 02 01 No 25.51 Woodchip R11 M Weighed Offsite in Ireland Higgins (WP-50-04) The Kerries, Tratee, Co. Kerry Within the Country 17 02 01 No 85.99 Woodchip R11 M Weighed Offsite in Ireland Higgins (WP-50-04) Farmers within the area. Within the Country 17 02 01 No 2260.46 Woodchip R11 M Weighed Offsite in Ireland Higgins (WP-50-04) Farmers within the area. Within the Country 17 02 01 No 2130.75 Woodchip R11 M Weighed Offsite in Ireland (Moft Eaurite) Co. Tipperary Within the Country 20 01 33 Yes 1.06 Batteries D2 M Weighed Offsi										
Within the Country 15 01 04 No 194.78 Steel Cans R4 M Weighed Abroad CF Booth Ltd Yorkshire DN1 2ST. The Kerries, Trailee, Co. Kerry Within the Country 17 02 01 No 25.51 Woodchip R11 M Weighed Offsite in Ireland Dillon's Waste (WP-07-30) The Kerries, Trailee, Co. Kerry Within the Country 17 02 01 No 85.99 Woodchip R11 M Weighed Offsite in Ireland Higgins (WP-50-04) The Kerries, Trailee, Co. Kerry Within the Country 17 02 01 No 85.99 Woodchip R11 M Weighed Offsite in Ireland Higgins (WP-50-04) Farmers within the area. Within the Country 17 02 01 No 2260.46 Woodchip R11 M Weighed Offsite in Ireland Hogins (WP-50-04) Co. Tipperary Within the Country 17 02 01 No 2130.75 Woodchip R11 M Weighed Offsite in Ireland (P0027-02) Returnbatt, Returnbatt Ltd, (W0105-01) Co. Kildare, Millstreet Co. Kildare, Millstreet Co. Kildare, Millstreet Co. Cork Within the Country 20 01 33 Yes 1.06 Batteries </td <td>Within the Country</td> <td>15 01 04</td> <td>No</td> <td>183.38 Steel Cans</td> <td>R4</td> <td>М</td> <td>Weighed</td> <td>Offsite in Ireland</td> <td>Trading. Ltd (WMP 926)</td> <td>Cork.</td>	Within the Country	15 01 04	No	183.38 Steel Cans	R4	М	Weighed	Offsite in Ireland	Trading. Ltd (WMP 926)	Cork.
Within the Country 17 02 01 No 25.51 Woodchip R11 M Weighed Offsite in Ireland Dillon's Waste (WP-07-30) Within the Country 17 02 01 No 85.99 Woodchip R11 M Weighed Offsite in Ireland Higgins (WP-50-04) Within the Country 17 02 01 No 2260.46 Woodchip R11 M Weighed Offsite in Ireland Higgins (WP-50-04) Within the Country 17 02 01 No 2130.75 Woodchip R11 M Weighed Offsite in Ireland Higgins (WP-50-04) Farmers within the area. Within the Country 17 02 01 No 2130.75 Woodchip R11 M Weighed Offsite in Ireland (P0027-02) Returnbatt Let, Kill, Co. Kildare, Millstreate, Kill, Co. Cork Co. Criterate Within the Country 20 01 10 No 168.08 Clothes/Textiles R11 M Weighed Offsite in Ireland Neel C Duggan Within the Country 20 01 10 No 168.08 Clothes/Textiles R11 M Weighed Offsite in Ir	Within the Country	15 01 04	No	194.78 Steel Cans	R4	М	Weighed	Abroad	CF Booth Ltd	Yorkshire DN1 2ST. The Kerries,
Within the Country 17 02 01 No 85.99 Woodchip R11 M Weighed Offsite in Ireland Higgins (WP-50-04) Farmers within the area. Within the Country 17 02 01 No 2260.46 Woodchip R11 M Weighed Offsite in Ireland Higgins (WP-50-04) Farmers within the area. Within the Country 17 02 01 No 2130.75 Woodchip R11 M Weighed Offsite in Ireland Higgins (WP-50-04) Farmers within the area. Within the Country 17 02 01 No 2130.75 Woodchip R11 M Weighed Offsite in Ireland (P0027-02) Returnbatt, Returnbatt, Let, Vill, Co. Co. Kildare, Millstreat Co.	Within the Country	17 02 01	No	25.51 Woodchip	R11	М	Weighed	Offsite in Ireland	Dillon's Waste (WP-07-30)	
Within the Country 17 02 01 No 2260.46 Woodchip R11 M Weighed Offsite in Ireland Yard Sales Farmers within the area. Within the Country 17 02 01 No 2130.75 Woodchip R11 M Weighed Offsite in Ireland (P0027-02) Returnbatt, Returnbatt Ltd, (V0105-01) Old Mill Industrial Estate, Kill, Co. Kildare, Millstreet Co Cork Within the Country 20 01 33 Yes 1.06 Batteries D2 M Weighed Offsite in Ireland You Soles Old Mill Industrial Estate, Kill, Co. Kildare, Millstreet Co Cork Within the Country 20 01 10 No 168.08 Clothes/Textiles R11 M Weighed Offsite in Ireland Volia (W0082-02) Dock Road, Co. Limerick Within the Country 20 01 10 No 34.76 Clothes/Textiles R11 M Weighed Offsite in Ireland Velia (W0082-02) Dock Road, Co. Limerick	Within the Country	17 02 01	No	85,99 Woodchip	R11	м	Weighed	Offsite in Ireland	Higgins (WP-50-04)	Tralee, Co. Kerry
Within the Country 17 02 01 No 2130.75 Woodchip R11 M Weighed Offsite in Ireland (P0027-02) Within the Country 20 01 33 Yes 1.06 Batteries D2 M Weighed Offsite in Ireland (P0027-02) Old Mill Industrial Estate, Kill, Co. Kildare, Millstreet Co. Co. Co. Kildare, Millstreet Co. Co. Kildare, Millstreet Co. Co. Kildare, Millstreet Co. Co. Co. Kildare, Millstreet Co. Co. Co. Kildare, Millstreet Co. Co. Co. Co. Kildare, Millstreet Co.	Within the Country	17 02 01	No	2260.46 Woodchip	R11		Weighed		Yard Sales Weyerhaeuser Europe Ltd	Redmondstown, Clonmel,
Within the Country 20 01 33 Yes 1.06 Batteries D2 M Weighed Offsite in Ireland (W0105-01) Co. Kildare, Milistreet Co Cork Within the Country 20 01 10 No 168.08 Clothes/Textiles R11 M Weighed Offsite in Ireland Noel C Duggan Within the Country 20 01 11 No 34.76 Clothes/Textiles R11 M Weighed Offsite in Ireland Noel C Duggan	Within the Country	17 02 01	No	2130.75 Woodchip	R11	М	Weighed	Offsite in Ireland	(P0027-02)	
Within the Country 20 01 10 No 168.08 Clothes/Textiles R11 M Weighed Offsite in Ireland Noel C Duggan Within the Country 20 01 11 No 34.76 Clothes/Textiles R11 M Weighed Offsite in Ireland Veolia (W0082-02) Dock Road, Co. Limerick	Within the Country	20 01 33	Yes	1.06 Batteries	D2	М	Weighed	Offsite in Ireland		Co. Kildare, Millstreet
Within the Country 20 01 11 No 34.76 Clothes/Textiles R11 M Weighed Offsite in Ireland Veolia (W0082-02) Dock Road, Co. Limerick	Within the Country	20 01 10	No	168.08 Clothes/Textiles	R11	М	Weighed	Offsite in Ireland	Noel C Duggan	
										Dock Road, Co. Limerick
							9		(,

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

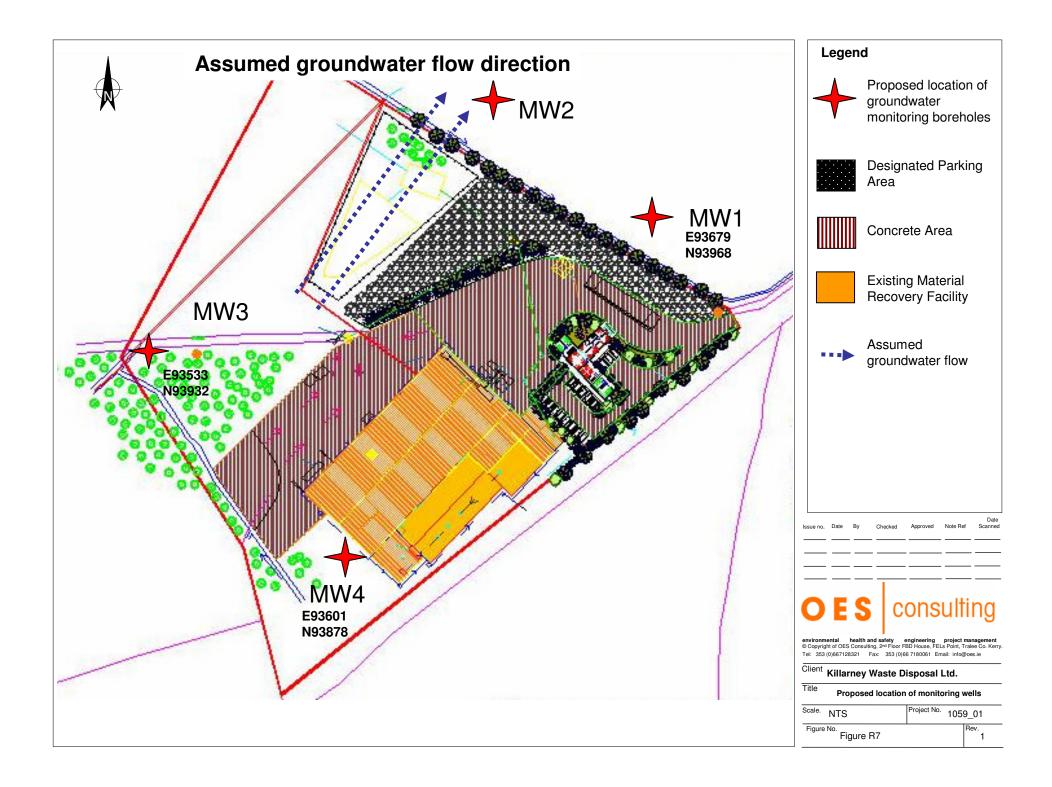
Attachment B Third and Fourth Schedule of the Waste Management Acts 1996 to 2005 Licenced waste *disposal* activities under the current Waste Licence in accordance with the Third Schedule of the Waste Management Acts 1996 to 2005 include:

Class	Activity
3.11	Blending or mixture prior to submission to any activity referred to in preceding Classes.
3.12	Repackaging prior to submission to any activity referred to in preceding Classes.
3.13	Storage prior to submission to any activity referred to in a preceding Class, other than temporary storage, pending collection, on the premises where the waste concerned is produced.

Licenced waste *recovery* activities in accordance with the Fourth Schedule of the Waste Management Acts 1996 to 2005 include:

Class	Activity
4.2	Recycling or reclamation of organic substances which are not used
	as solvents (including composting and other biological processes).
4.3	Recycling or reclamation of metals and metal compounds.
4.4	Recycling or reclamation of other inorganic materials.
4.11	Use of waste obtained form any activity referred to in a preceding
	paragraph of this Schedule.
4.12	Exchange of waste for submission to any activity referred to in a
	preceding paragraph of this Schedule.
4.13	Storage of waste intended for submission to any activity referred to
	in a preceding Classes, other than temporary storage, pending
	collection, on the premises where such waste is produced.

Attachment C Proposed Groundwater Monitoring Locations



Attachment D EMP 2009

EMP 2009

1.0 Obj To mai		mental management at KWD.	
No.	Target	Plan	Status
1.1	Environmental Management System	Carry out internal environmental audits	Ongoing
1.2	To ensure that all employees are made aware of requirements	Identify environmental training needs of all employees	Ongoing - Continuous
	of the site environmental system	Schedule appropriate training	Ongoing- Continuous
		Provide environmental awareness training to all employees	Ongoing
1.3	Maintenance programme for vehicles and equipment	Completing the maintenance programme	Ongoing
1.4	To conduct Annual Environmental Review Meetings	Review environmental performance of facility.	Ongoing
		Review EMP for 2007 / 2008	Ongoing
1.5	Submit AER	Prepare and Review AER	
		Submit AER	
1.6	Prepare annual statement in accordance with	Prepare annual statement on Environmental Liabilities	Ongoing - Continuous
	condition 12.2.2 of 1of Waste Licence No WO217-01	Submit as part of AER	
1.7	Data Management System in accordance with Condition 6.21 of Waste Licence No W0217-01	Maintenance of Data Management System	Ongoing - Continuous

	ojective tablish and maintain a suita Target	ble site infrastructure at KWD. Plan	Status
2.1	Provide report to EPA as required under	Carry out survey	Complete
	Condition 3.8.2 of Waste Licence	Compile Report	Complete
	W0217-01detailing duty and standby capacity of all waste handling and processing equipment at KWD.	Submit to EPA	Complete

2.0 Obje		ble site infrastructure at KWD.	
No.	Target	Plan	Status
2.2	Label and provide safe	Review access	Complete
	and permanent access to all onsite sampling and monitoring points	Upgrade if necessary	Complete
	and to offsite points as required by Condition	Source signs	Complete
	3.10 of Licence	Erect signs	Complete
2.3	All tank container and drum storage areas shall be rendered impervious in accordance with Condition 3.11.1 of Waste Licence W0217-01	Review storage of tanks, drums and container areas. Demonstrate that all storage areas are impervious to materials stored therein and repair if necessary	Complete Complete Ongoing
2.4	Integrity testing of all bunding structures tanks and containers as required under Condition 3.11.5 of Waste Licence W0217-01 Thereafter to be carried out at three years intervals.	Undertake programme of integrity testing To be carried out at three years intervals.	1st Jan 2009 Ongoing
2.5	Install and provide adequate measures for control of odours and dust emissions in accordance with condition 3.20of Waste Licence No W0217-01	Review existing dust and odour measures currently on site. Identify and quantify additional controls are necessary. Carry out works required.	
2.6	Submit proposals to EPA for groundwater Borehole Monitoring points in accordance with condition 3.21 of Waste Licence No W0217-01	Prepare proposal Submit Proposal to EPA	In Progress

	sh and maintain site contro		Ototus
<u>No.</u> 3.1	Target Prepare programme for identification and reduction of fugitive emissions in accordance with condition 6.8 of Waste Licence No W0217-01	Plan Compile Proposal. Include in EMP Submit to EPA as part of EMP.	Status Ongoing Ongoing Ongoing
3.2	Carry out integrity testing on all underground tanks and pipes. in accordance with condition 6.9 of Waste Licence No W0217-01	Undertake programme of integrity testing. To be carried out at three years intervals.	Ongoing
3.3	Carry out Biannual Noise Survey in accordance with Condition 6.12.1 of Waste Licence No W0217-01	Biannually Noise Survey	Ongoing
3.4	Prepare programme for the identification and reduction of noise emissions in accordance with Condition 6.12.1 of Waste Licence No W0217-01	Review Noise survey reports Prepare programme based on findings of Noise surveys. Submit programme to EPA	Ongoing In progress
3.5	Carry out Ambient Air Monitoring as per Schedule C.6	Implement measures to monitor fine particles (PM ₁₀). Implement measures to monitor airborne micro-organisms	In progress In progress

4.0 Objective To improve the efficient use of resources at KWD.			
No.	Target	Plan	Status
4.1	To carry out energy efficiency Audit in accordance with Condition 7.1of Waste Licence No W0217-01	Carry out energy efficiency Audit.	In Progress
4.2	To benchmark all energy and water	Prepare and review on monthly basis energy and water	Ongoing

	jective prove the efficient use of re Target	sources at KWD. Plan	Status
	usage at KWD	consumption figures in relation to tonnage of waste processed.	
4.3	To prepare report examining waste recovery options in accordance with Condition 11.11 of Waste Licence No W0217-01	Prepare Waste recovery report Review Report Submit as part of AER	In Progress

	bjective prove Materials handling a	at KWD	
No.	Target	Plan	Status
5.1	Procedures for the acceptance and handling of waste.	Review Annually	Complete

lo.	Target	Plan	Status
6.1	Accident Prevention Policy	Review Annually	Ongoing
6.2	Emergency Response procedure	Review Annually	Ongoing