



**CASTLETOWNBERE WASTE TRANSFER STATION
AND CIVIC AMENITY SITE**

WASTE LICENCE W0160-01

**ANNUAL ENVIRONMENTAL REPORT 2011
31st December 2010– 31st December 2011**

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1 INTRODUCTION

1.1 Scope and Purpose of the Report

The Environmental Protection Agency (EPA) issued Cork County Council with a Waste Licence (Waste Licence No. 160-1) for Castletownbere Waste Transfer Station and Civic Amenity Site on 12th April 2002. In accordance with the requirement of Condition 11.5.1 of the waste licence,

'The licensee shall submit to the Agency for its agreement, within thirteen months from the date of grant of this licence, and within one month of the end of each year thereafter, an Annual Environmental Report (AER).'

On further correspondence with the Agency it was agreed that the (AER) would be submitted thirteen months after commencement of waste activities and one month after the end of each calendar year thereafter

1.2 Reporting Period

This is the first AER to be submitted under Condition 11.5 of the licence and covers the reporting period 31st December 2010—31st December 2011

1.3. Site Location

The facility address is detailed below:

Castletownbere Waste Transfer Station and Civic Amenity Site,
Foildarrig,
Castletownbere,
Co. Cork

The National Grid Reference for the site is: **E0680** **N0470**

2 DESCRIPTION OF THE SITE

2.1 Waste Management Activities at the Facility

Waste Activities at the Castletownbere WTS and CA Site are restricted to those outlined below:-

Waste Management Act, 1996: Third Schedule

Class 12: This activity is limited to the compaction of waste deposited in the hopper/compactor unit and its transfer to an enclosed container for storage prior to removal off-site to landfill

Class 13: This activity is limited to the storage of non-recoverable waste received at this facility, prior to disposal at an alternative landfill

Waste Management Act, 1996: Fourth Schedule

Class 2: This activity is limited to the recycling/reclamation of timber, cardboard, paper, composting of garden waste and waste oils at the facility

Class 3: This activity is limited to the acceptance of aluminium cans, white goods, end of life vehicles and other metals at the facility. It may also include treatment of end of life vehicles at the facility

Class 4: This activity is limited to the acceptance of glass, textiles and plastic at the facility. It also relates to future shredding of farm plastics and baling of packaging waste

Class 13: This activity is limited to the storage of waste types authorised by the licence at the facility prior to recovery at an alternative appropriate facility

In accordance with Schedule A of the Waste Licence the waste categories and quantities acceptable at the facility are as shown in Table 1.

Table 1 : Waste Categories and Quantities Acceptable at the Facility

Waste Type	Maximum Tonnes Per Annum
Household	2,500 ^(Note 1)
Commercial	1,500
End of life vehicles	300
Total	4,300

Note 1: This figure includes three tonnes per annum of hazardous waste accepted at this civic waste facility

2.2. Management and Staffing Structure of the Facility.

The site employs two full-time staff:-

- 1 Facility Manager
- 1 Deputy Facility Manager

Table 2 : Managerial Staff

Senior Executive Engineer Mr. Jerome O'Brien BE MIEI	Cork County Council, Rossmore Landfill 021/4883936
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Table 3 : Operational Staff (On-site)

Employee	Position	Duties and Responsibilities
Mr. Noel O'Grady	Facility Manager	Designated as the person in charge for the day-to-day operation of the facility and maintenance of on-site records and implementation of waste acceptance procedures
Mr. Donal O'Sullivan	Deputy Facility Manager	Responsible for the operation of the waste compaction unit at the site and shall be responsible at all times for the recyclable waste deposited in the civic amenity area. Responsible for the site when the facility manager is away

2.3. Waste Quantities and Composition

The quantity and composition of the waste received during the reporting period, at the facility is recorded below.

Table 4: Quantities of Municipal Waste Received During the Reporting Period Dec2010 to Dec 2011.

Waste Type	(Tonnes)
Household	166.36
Commercial	N/A
Total	166.36

Table 7.2 : Quantities of Materials Sent for Recovery During the Period December 2010 – December 2011

Paper/Plastic/Cardboard Total out	20 01 01/ 20 01 39/ 15 01 01	18	15.5	14.55	24.24	10.14	13.2	17.92	30.84	16.22	15.52	15.74	26.78	Total 218.65
Paper/Plastic/Card/ C. collected	20 01 01/ 20 01 39/ 15 01 01													
Paper/Plastic/Cardboard C.A	20 01 01/ 20 01 39/ 15 01 01													
Glass Bottles	20 01 02	7.7	2.84	9.74	6.52	6.34	6.6	8.34	9.04	10.36	4.98	4.62	5.48	82.56
Beverage Tins/Food Tins	20 01 40	1.02		0.6	0.64	0.74	0.82	0.72	0.68	0.76	0.76	0.16	0.56	7.46
Waste Engine Oil	13 02													
Lead Acid Batteries	20 01 33						1.64					1.42	0.36	3.42
Aerosols	16 05 04		0.27				0.22		0.18					0.67
Fluorescent Tubes	20 01 22													
W.E.E.E	20 01 35/ 20 01 36		10.2		10.6	12.42			13.38	7.26		9.86	8.26	71.98
Waste Paint	20 01 27		0.75				1.52		0.62					2.89
Cooking Oil	20 01 25						0.86							0.86
Timber	20 01 38			1.58	2.08			1.8			1.9			7.36
Metal	20 01 40						2.56		2.04		3.84			8.44
Textiles	20 01 11	0.34		0.7	0.68	0.42	0.72	0.42	0.92	0.28	0.4	0.36		5.24

Table: 8 List of Service Providers for Recovery of Recyclable Materials

Service Provider	Material	Permit No.	Waste Collection Permit.
Glyntown Recycling	Paper/Plastic/ Cardboard	CK (S) 182/04	Cork Co. Co Delivers this material
Green dragon	Aluminium Cans	CK (s)372/06	CK WMC 183/03
Enva	Lead Acid Batteries	CK.WMC 016/01	CK.WMC 016/01
Enva	Lead Acid Batteries	CK.WMC 016/01	CK.WMC 016/01
Green star	Municipal waste	CK WMC 323-05	CK (S) 182/04
WEEE Ireland	WEEE Fridges/Freezers	CK WMC231/04	CK WMC231/04
WEEE Ireland	WEEE	CK WMC 84/01	CK WMC 84/01
Enva	Paint	CK.WMC 016/01	CK.WMC 016/01
Enva	Engine oil Cooking Oil	CK.WMC 016/01	CK.WMC 016/01
Enva	Aerosols	CK.WMC 016/01	CK.WMC 016/01
Cork Oil Company	Cooking Oil	CK. WMC 230/04	CK (S) 410/07
Mr. Binman	Glass	CK WMC 45/01	CK WMC 45/01
Eco Environmental	Clothes	WCP/KK/08 /0488/01	WCP/KK/08 /0488/01

2.4 Waste Handling Equipment

Domestic waste will no longer be compacted into the ejector trailers for onward shipment, but will instead be placed in 1,100 litre closed (and lockable) wheel bins. The bins will be stored within the Transfer Station Building and will be removed from site for onward shipment by the Cork County Council Waste collection Vehicle at the end of the working day. A covered skip will be placed on site for accepting bulky and inert household items not suitable for placement in wheel bins. The compaction and ejector trailer system will continue to be used for the acceptance of recyclable paper, cardboard and plastic. Reference our letter dated 2nd September 2005

2.5 Liquid Storage Areas

A reinforced concrete bunded area has been constructed to facilitate in the acceptance of waste paint, waste cooking oil and waste engine oil. The bund is to be retested every 3 years and results forwarded to the Agency. The test was carried out in 2009 and will be retested in 2012.

INTRODUCTION

Cork County Council carried out the testing of the Reinforced Concrete bund for the receptacle for waste oils and paint at the Castletownbere Waste Transfer and Civic Amenity site. Copy of test attached to this report.

ASSESSMENT

BS 8007 Design of Liquid Retaining Structures is a standard for the design of reinforced concrete to be used in the construction, inspecting and testing of bunds. The standard includes a test procedure requiring the bund to be filled with water for a period of 7 days (Stabilizing period). After the stabilizing period the level of the liquid surface should be recorded at 24 hr intervals for a test period of 7 days. During the 7-day test period the total permissible drop in level after allowing for evaporation and rainfall should not exceed 1/500th of the average water depth of the full tank, 10mm or another specified amount.

BUND DETAIL

The bund contains of 3 sections as stated below:

1. Bund for oil Tank (1.95M X 2.65M X 0.7M)
2. Bund for Paint (2.30M X 2.650M X 0.7M)
3. Bund for Cooking Oil (1.5M X 1.5M X 0.7M)

BUND INSPECTIONS

The structure was cleaned and filled to its maximum level with water. The level was maintained by adding further water for a stabilizing period of 7 days. Following this, the level was recorded at approximate 24 hr intervals for a further 7 days.

23/11/2009 Initial filling of bund structure.

23/11/2009 to 30/11/2009 Stabilization period.

30/11/2009 to 07/12/2009 recording period.

The overall drop of 10mm was recorded. A visual inspection showed no evidence of seepage of the water to the outside faces of the bund walls.

CERTIFICATION

The liquid retention test was completed satisfactorily and the bund deemed fit for its purpose.

3 EMISSIONS AND ENVIRONMENTAL MONITORING DATA

In compliance with Condition 8 and Schedule D of the waste licence the following monitoring is to be carried out on site:

- ◆ Surface Water
- ◆ Foul water
- ◆ Noise
- ◆ Dust

All monitoring locations are identified on Drawing No. J.1.1.

3.1 Surface water

Table D1.1 of Schedule D of licence WL/160-1 specifies that monitoring of surface water quality is to be undertaken at four locations: ST1, ST2, ST3 and ST4. ST1 is located at the final discharge point from the facility. ST2 is located at a point on the Aghakista River upstream of the surface water discharge point from the facility and ST3 is located on the Aghakista River downstream of the surface water discharge from the facility. ST4 is located at the entry point to the facility.

Table D.4.1 of Schedule D provides a list of parameters, which are to be monitored at quarterly intervals at all surface water stations. These parameters are biochemical oxygen demand (BOD), pH, Suspended Solids, Mineral Oils and Fats, Oils, Grease.

Licence WL/160-1 specifies an emission limit value for Mineral Oils, which is 5mg/l. The other emission limit values specified are BOD (25 mg/l) and Suspended Solids (35 mg/l). The licence does not specify maximum concentrations for the other parameters listed and accordingly, data presented below are discussed with reference to relevant legislation:

(i) Council Directive 75/440/EEC of 16 June 1975 concerning the quality of surface water intended for the abstraction of drinking water, incorporated into Irish law by the European Communities (Quality of Surface Water Intended for the Abstraction of Drinking Water) Regulations, 2009 (S.I. No. 272 of 2009). The directive divides waters into three categories - A1, A2 and A3 – depending on the increasing level of treatment required.

Water samples were taken on the following dates:

- 08^h Feb 2011– SW1, SW2, SW3-SW4 Sampling Point Dry.
- April 2011 SW1,
- July 2011-SW1,
- October 2011 SW1,

Table 9 Surface Water Monitoring Results for Period October 2010– Feb 2011

Parameter	ST1	ST2	ST3	ST4*	SW Reg's ^s
PH	7.2	6.8	6.8	Sampling Point Dry	5.5 8.5 for A1 Waters
Biochemical Oxygen Demand (mg/l)	<2	<2	<2		5
Suspended Solids (mg/l)	<10	<10	<10		50
Mineral Oils (mg/l)	<0.01	<0.01	<0.01		-
Oils, Fats & Greases (mg/l)	<1	<1	<1		-

*Additional monitoring location not required by WL 160-1

Table 10 Surface Water Monitoring Results for Period April 2011 July 2011

Parameter	ST1	ST4*	SW Reg's ^s
pH	7.52	Sampling Point Dry	5.5 8.5 for A1 Waters
Biochemical Oxygen Demand (mg/l)	<1		5
Suspended Solids (mg/l)	<8		50
Mineral Oils (mg/l)	<0.01		-
Oils, Fats & Greases (mg/l)	1.8		-

*Additional monitoring location not required by WL 160-1

Table 12 Surface Water Monitoring Results for Period July 2011– Oct 2011

Parameter	ST1	ST2	ST3	ST4*	SW Reg's ^s
pH	7.5	7.3	7.4	Sampling Point Dry	5.5 8.5 for A1 Waters
Biochemical Oxygen Demand (mg/l)	<2	<2	<2		5
Suspended Solids (mg/l)	10	<6	<6		50
Mineral Oils (mg/l)	<0.01	<0.01	<0.01		-
Oils, Fats & Greases (mg/l)	<1	<1	<1		-

*Additional monitoring location not required by WL 160-1

Interpretation of Results

Results of the surface water-monitoring programme indicate that the water quality at all stations was generally very satisfactory and no breaches of the limits specified under the relevant directives were noted. The emission limit values for Mineral oils, BOD and Suspended Solids were not exceeded at any stage during the reporting period. The remaining surface water discharge parameters measured did not exceed the limits set out in the Surface Water Regulations, 1989.

3.2 Foul water

Under schedule D of licence WL/160-1, monitoring of foul water quality is to be undertaken at one location at the Treatment Effluent Monitoring Chamber.

Under the conditions of WL 160-1 Foul water monitoring was to be undertaken biannually.

Foul water samples were taken on the following dates:

- Feb 2011 FW1
- October 2011-FW1

The parameters to be measured and the emission limit values for Foul water are specified in Table C.3 of Licence WL/160-1

Table C.3 of Schedule C of WL160-1 provides a list of parameters and emission limit values, which are to be monitored at the foul water monitoring location FW1. They are shown below.

Table 13: Parameters and emission limit values, which are to be monitored at the foul water monitoring location FW1

Parameter	Emission Limit Value
Biological Oxygen Demand	25 mg/l
Suspended Solids	35 mg/l
pH	6-9
Oils, Fats, Grease	10 mg/l
Ammonical Nitrogen	10 mg/l
Mineral Oils	5 mg/l

The results of the Foul water monitoring for Castletownbere WTS and CA Site for period Feb 2011– Dec 2011 are listed in the Tables below.

Table 14: Monitoring Results for FW1, Feb 2011

Parameter	FW1 (mg/l)	WL limits* (mg/l)
Biological Oxygen Demand	<2	25 mg/l
Suspended Solids	6	35 mg/l
pH	6.9	6-9
Oils, Fats, Grease	<1	10 mg/l
Ammonical Nitrogen	<0.2	10 mg/l
Mineral Oils	<0.01	5 mg/l

*WL 160-1, Table C.3 (emission limit value)

Table 15: Monitoring Results for FW1, October 2011

Parameter	FW1 (mg/l)	WL limits* (mg/l)
Biological Oxygen Demand	3.47	25 mg/l
Suspended Solids	13	35 mg/l
pH	7.01	6-9
Oils, Fats, Grease	<1	10 mg/l
Ammonical Nitrogen	0.2	10 mg/l
Mineral Oils	<0.01	5 mg/l

*WL 160-1, Table C.3 (emission limit value)

Interpretation of Results

Results of the Foul water water-monitoring programme indicate that the water quality at all stations was generally very satisfactory and no breaches of the limits specified under the relevant directives were noted. The emission limit values for any of the listed parameters were not exceeded at any stage during the reporting period.

3.3 Noise

An annual noise survey is specified in Schedule D.3 of licence WL/160-1. The schedule specifies that monitoring of noise levels is to be undertaken at two locations on and adjacent to the Transfer station site: NS1 and NS2.

Table D.3.1 of licence WL/160-1 specifies that a 30-minute noise interval is to be used at each monitoring location. From data recorded, the LAeq, LA10 and LA90 parameters are to be determined. One-third octave band frequency analysis is also required. Schedule C.1 of the licence specifies maximum noise levels, which are applicable to the noise sensitive locations. The limits specified are 55dB during daytime periods and 45dB at night-time. The Environmental Protection Agency's Integrated Pollution Control Licensing – Guidance note for noise in relation to scheduled activities (1995) states that daytime hours are those between 0800 and 2200 hours.

Noise monitoring was conducted on 3rd December 2011. Daytime average noise levels (LAeq) were well below the 55 Db (A) LAeq limit stipulated by the Waste Licence. Background noise levels (LAF90) recorded for NS1 and NS2 were 38B (A) and 40B (A) respectively. These levels are low and typical of quiet rural countryside.

There were no tonal components measured at either of the noise sensitive locations.

3.4 Dust

According to Table C.3 of WL 160-1 Dust monitoring is to be carried once per annum. Dust Pots were exposed on the 26th Oct 2011 for 31 days A dust level of <5 mg/m²/day was calculated for the dust sampling period commencing on 25th Nov 2011. This result does not exceed the 350-mg/m²/day limit outlined in the licence.

4.0 ENERGY CONSUMPTION

4.1 General

During the reporting period the site machinery comprising of a slave vehicle and 1ejector trailers, used approx. 70 litres of fuel. Electricity usage at the site during the reporting period Dec 09- Dec 2010 was 19,809 units which averaged out at approximately 15 kWh per day.

5 ENVIRONMENTAL INCIDENTS, NON-COMPLIANCES AND COMPLAINTS

5.1 Incidents

There were no environmental incidents during the reporting period December 2010 to December 2011

5.1.1 Non-Compliances

There were no non-compliances during the reporting period December 2010 to December 2011

5.2 Complaints

No complaints were received by the Facility during the reporting period.

5.3 Nuisance Controls

5.3.1 Litter

Regular litter checks are undertaken each day to minimise the amount of wind blown litter on and around the site.

5.3.2 Vermin & Flies

Vermin and fly control is carried out under contract with Arrest A Pest Ltd. as required.

5.4 Programme for Public Information

5.4.1 Information Available to the Public

The site notice at the entrance states that:-

Environmental monitoring information relating to the facility can be obtained at the waste transfer station and by contacting the Cork County Council, Western Division. Hume house Wolfe Tone Street Clonakilty Co. Cork during normal working hours, Monday to Friday.

Personnel associated with the facility are also available by appointment to meet with members of the public and answer queries regarding the facility if requested. The following information is held in a public file at these offices available for the public to inspect:-

- A copy of the waste licence application.
- A copy of the waste licence.
- All correspondence from the Agency relating to the facility.
- All correspondence from Cork County Council (West) to the Agency relating to the facility.
- Copies of quarterly monitoring reports.

6.0 ENVIRONMENTAL MANAGEMENT PROGRAMME REPORT.

Schedule of Objectives and Targets for Year 2010-2015

Targets	Objective	Status	Progress To date
Target 1	Due to the current economy and recycling climate try to maintain the same level of service which have been provided in the past	On going	Will be reviewed on a monthly bases throughout 2011 and there after
Target. 2	Provide cloths bank for the general public	Done	In place and working well
Target 3	Investigate & implement new outlets for recyclable material.	done	Timber is now accepted
Target 4	-Investigate ways to improve Public parking on site/ Traffic flow	On going	Awaiting approval to have site marked with traffic management plan
Target 5	Increase public awareness about recycling	On going	Have started an advertising campaign
Target 6	Water Metering at site in stall flow meter	On going	Investigate types of meters and costs

**** Due to the current economic climate the above schedule has remained unchanged.**

6.3 Financial Provision

Cork County Council has the ability to meet any financial commitments or liabilities incurred by the maintenance of Castletownbere WTS and CA Site. These commitments include compliance with the waste management licence (No. 160-1) and aftercare of the site as specified in Condition 8 of the licence.

Cork County Council annually, in the preparation of the 'Book of Estimates' and the passing of these estimates, shall make provision for any capital works required to fulfil conditions of the waste licence for Castletownbere WTS and CA Site.