

CLONAKILTY WASTE AND RECYCLING CENTRE

WASTE LICENCE 8-1

ANNUAL ENVIRONMENTAL REPORT 2008 1st January 2008 – 31st December 2008

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January 2009

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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. 8-1) for Clonakilty Waste and Recycling Centre on 20th September 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 third AER to be submitted under Condition 11.5 of the licence and covers the reporting period 1st January 2008 – 31st December 2008.

1.3. Site Location

The facility address is detailed below: Clonakilty Waste and Recycling Centre, Clogheen, Clonakilty, Co. Cork

The National Grid Reference for the site is: **E1376 N0408**

2 DESCRIPTION OF THE SITE

2.1 Waste Management Activities at the Facility

Waste Activities at the Clonakilty Waste and Recycling Centre are restricted to those outlined below:-

Waste Management Act, 1996: Third Schedule

Class 12:

Principal

Activity Repackaging prior to submission to any activity referred to in a preceding paragraph of this Schedule.

This activity is limited to the bulking and transfer of waste at the facility.

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

This activity is limited to the storage of wastes at the facility prior to disposal off-site.

Waste Management Act, 1996: Fourth Schedule

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

This activity is limited to the recovery of paper, cardboard, wood and plastic at the facility.

Class 3: Recycling or reclamation of metals and metal compounds:

This activity is limited to the recovery of metals and metal compounds including white goods at the facility.

Class 4: Recycling or reclamation of other inorganic materials:

This activity is limited to the recovery of inert wastes (e.g. construction and demolition wastes) at the facility.

Class 13. Storage of waste intended for submission to any activity referred to in a preceding paragraph of this Schedule,

other than temporary storage, pending collection, on the premises where such waste is produced:

This activity is limited to the storage of wastes at the facility prior to recovery.

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	9000(^{Note 1)}
Commercial	5000
Total	14000

Note 1: includes 3 tonnes of hazardous domestic quantities

2.2. Management and Staffing Structure of the Facility.

The site employs four full-time staff:-

- 1 Facility Manager
- 1 Deputy Facility Manager
- 2 General Operatives

Table 2: Managerial Staff

Position	Employee Contact Details
Senior Executive Officer	Cork County Council,
Ms. Grainne O' Mahony	Hume House, Wolfe Tone Street, Clonakilty, Co. Cork. Telephone No: 023-58812 Fax No: 023-58814
Senior Executive Engineer	Cork County Council,
Mr. Paudie Hegarty	Hume House, Wolfe Tone Street, Clonakilty, Co. Cork. Telephone No: 023-58812 Fax No: 023-58814

Table 3: Operational Staff (On-site)

Employee	Position	Duties and Responsibilities
Mr. Patrick Duggan	Facility Manager	Designated as the person in charge for the day-today operation of the facility and maintenance of on-site records and implementation of waste acceptance procedures
Mr. John O'Donovan	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
Mr. Michael O'Sullivan	General Operative	Will assist in the day-to-day operations of the site
Mr. Jerome O'Neill	General Operative	Will assist in the day-to-day operations of the site

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 January – December 2008.

Month	Municipal Waste (tonnes)
January	203.94
February	176.36
March	160.26
April	166.03
May	174.45
June	179.91
July	215.22
August	214.72
September	170.17
October	151.06
November	155.1
December	189.05
Total	2156.27

Table 5: Quantities of Municipal Waste Received During the Reporting Period January – December 2007.

Month	Municipal Waste (tonnes)
January	203.04
February	204.27
March	235.71
April	219.03
May	235
June	240.8
July	240.48
August	296.43
September	160.5
October	158.06
November	163.98
December	185.34
Total	2542.61

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

Table 6: Quantities of Materials Sent for Recovery During the Period January – December 2008

Recyclable	EWC	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Total
Material	Code				-					1				
(tonnes)														
Paper	200101	26.52	26.42	29.96	30.6	28.02	19.1	34.82	32.88	29.08	29.76	25.26	23.56	335.98
Cardboard	150101	19.84	20.04	19.9	0	0	0	58.44	19.92	19.66	0	19.78	20.14	197.72
Plastic	200139	6.12	2.92	19.12	3.2	4.26	3.54	20.5	5.52	5.38	19.24	3.92	3.18	96.9
Hard Plastics	200139	0.46	2.32	0	3.4	0	0	7.42	0	0	4.34	4.04	0	21.98
Beverage Tins	150104	0.58	0.36	0.5	0.26	0.6	0.5	0.44	0.46	0.6	0.26	0.46	0.28	5.3
Glass Bottles	200102													
	150107	26.18	21.78	17.46	17.8	20.14	21.16	25.96	21.68	17.02	22.1	18.46	16.46	246.2
Food Tins	150104	1.62	1.6	1.56	1.14	2.34	1.28	1.94	1.32	1.08	1.56	1.3	1.6	18.34
Lead Acid	200133													
/Household	/16060													
Batteries/	1/													
Aerosols	160504	1.4	0	1.46	0	1.62	1.36	1.68	0	0.4	1.34	1.68	0.22	11.16
Timber	200122	13.26	16.08	12.86	13.08	18.66	20.16	15.5	19.84	15.48	13.78	11.94	12.46	183.1
Scrap Metal	200140	12.94	16.92	10.64	12.06	14.14	14.94	14.86	18.68	10.04	18.36	10.88	8.84	163.3
Fluorescent	200121													
Tubes		0	0.28	0	0.24	0.12	0.18	0	0	0.28	0	0	0.34	1.44
Green Waste	200201	7.9	14.84	19.2	19.6	59.5	44.24	59.42	50.3	44.88	23.48	16.92	9.4	369.68
Waste Engine	130208													
Oil		0	1.14	0.84	0	0.88	0.78	0	0.98	0.7	0.46	0	0	5.78
WEEE incl	200135													
Fridges/Freeze														
rs		15.58	10.72	7.44	9.64	10.94	14.88	14.16	10.7	13.26	14.12	10.86	10.68	142.98
Cooking Oil	200125	0.88	0	0	0	1.02	0	0.76	0	0	0.7	0	0	3.36
Paint	200127	0	3.14	0.54	1.6	0	0	5.94	1.72	0	3.38	1	0.58	17.9
Textiles	200111	2.26	0.66	1.1	1	1.92	1.02	1.9	1.94	1.9	1.08	1.14	1.06	16.98
Total		135.5	139.2											
	1	4	2	142.6	113.6	164.2	143.14	263.74	185.94	159.76	153.96	127.64	108.8	1838.1

The quantity and composition of the waste sent for recovery during the reporting period January – December 2007, at the facility is recorded below.

Table 7: Quantities of Materials Sent for Recovery During the Period January – December 2007

Recyclable	EWC	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Total
Material	Code				_					_				
(tonnes)														
Paper	200101	32.38	31.36	38.4	33.06	31.72	45.18	34.58	43	17.2	22.4	37.1	26.02	392.4
Cardboard	150101	20.5	0	20	39.42	0	19.2	19.88	20.48	19.34	19.84	19.58	0	198.24
Plastic	200139	19.8	0	2.24	15.26	22.3	6.6	5.34	6.68	2.84	20.84	10.4	3.14	115.44
Beverage Tins	150104	0.64	0.46	0.66	0.58	0.38	0.68	0.66	0.9	0.3	0.5	0.32	0.38	6.46
Glass Bottles	200102													
	150107	22.5	14.6	16.3	16.72	20	18.36	20.66	24.8	16.18	14.16	20.78	12.78	217.84
Food Tins	150104	1.86	1.62	1.6	1.6	1.72	2.06	1.48	2.48	0.96	1.02	1.54	1.42	19.36
Lead Acid	200133													
/Household	/16060													
Batteries/	1/													
Aerosols	160504	1.44	0	2.54	0	2.44	1.36	0	2.52	2.18	0	2.84	1.36	16.68
Timber	200122	10.5	14.86	16.66	12.8	10.9	16.5	23.66	20.82	12.44	13.24	15.96	11.36	179.7
Scrap Metal	200140	12.6	12.7	9.92	12.62	11.4	16.9	13.12	15.02	11.48	14.94	16.1	11.74	158.54
Fluorescent	200121													
Tubes		0	0.32	0.12	0	0.22	0	0.22	0	0.22	0	0.24	0.16	1.5
Green Waste	200201	14.74	10.92	15.44	27.96	38.1	55.62	54.16	52.52	38.24	34.64	21.98	12.12	376.44
Waste Engine	130208													
Oil		0	0	1.02	0	0.9	0	1.48	0	0.86	0.78	0	0.54	5.58
WEEE incl	200135													
Fridges/Freeze														
rs		11.18	11.02	17.86	11.32	18.5	10.88	15	15.04	8.34	13.82	13.82	8.24	155.02
Cooking Oil	200125	1.02	0	0	1.06	0	0	0.78	0	0.92	0	0	0	3.78
Paint	200127	0.94	1.48	1.56	0.56	2.32	0.98	1.82	1.18	0.5	1.98	1.16	0.48	14.96
Textiles	200111	0	0	0	0	0	3.88	0	0	5.04	1.82	0	2.5	13.24
Total		150.1	99.34	144.3	173	160.9	198.2	192.84	205.44	137.04	159.98	161.82	92.24	1874.7

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

Service Provider	Material
Veolia	Paper
Veolia	Cardboard
Veolia	Plastic Packaging
Leinster	Plastic Bottles
Environmentals	
Rehab	Glass and Aluminium
	Cans
Green Dragon	Food tins
Enva/KMK	Lead Acid/Household
	Batteries/Aerosols
Ballineen Skip	Timber
Hire Ltd	
Bantry Skip Hire	Scrap Metal
Bantry Skip Hire	Green Waste
Irish Lamb	Fluorescent Tubes
Recycling	
Ltd/KMK	
Cedar Resource	WEEE
Management/	
KMK Metals	
Clothes Recycling	Textiles
Ireland	
Enva	Waste Engine Oil
Enva	Cooking Oil
Indaver	Paint

2.4. Waste Handling Equipment

The Waste Licence requires a total waste acceptance capacity of 14000 tonnes per annum. This is equivalent to an average of 44 tonnes per operating day, which represents the 100% duty capacity.

The installed static compactor is a Loughman Static Compactor with 25m³ loading hopper capacity. The compactor is designed to process up to 2430 tonnes/day. The compaction system therefore has a capacity of over 500% of allowable inputs.

Three ejector trailers are on site at all times. These can hold approximately 22 tonnes of waste each based on allowable axle loads. This represents a capacity of 150% based on maximum waste intake of 44 tonnes per operating day. Please note that the daily waste inputs are far less than the licensed 44 tonnes per day.

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 integrity and water tightness of the bunded area and the entire underground drainage system was tested and verified to the Agency by letter dated 22nd July 2008 (Our Ref: CLONEPA/COR73ld). The inspection report is included in the Appendix of this report.

3 SITE DEVELOPMENT WORKS

3.1 Works During 2008

There was no major construction work undertaken during the reporting period.

4 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
- ♦ Wastewater
- ♦ Noise
- ◆ Dust

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

4.1 Surface water

Table D1.1 of Schedule D of licence WL/8-1 specifies that monitoring of surface water quality is to be undertaken at four locations: SW1, SW2, SW3 and SMH1. SW1 is located at the final discharge point from the facility. SW2 is located at a point upstream of the surface water discharge point from the facility and SW3 is located downstream of the surface water discharge from the facility. SMH1 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 bi-annually at all surface water stations. These parameters are biochemical oxygen demand (BOD), pH, Suspended Solids, Mineral Oils and Ammoniacal Nitrogen.

Licence WL/8-1 specifies an emission limit value for Mineral Oils, which is 5mg/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, 1989 (S.I. No. 294 of 1989). 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:

- 31st March 2008 SW1, SW2, SW3, SMH1 (Sampling Point Dry)
- 26th September 2008 SW1, SW2, SW3, SMH1 (sample taken on 5th November due to point being dry on 26th September)

Table 9: Surface Water Monitoring Results for Period January 2008 – June 2008

Parameter	SMH1	SW1	SW2	SW3	WL limits	SW Reg's ^s
рН		7.9	8.0	8.0	-	5.5 8.5 for A1 Waters
Ammonical Nitrogen as N (mg/l)		<0.009	0.244	0.230	-	-
Biological oxygen demand (mg/l)	Sampling Point Dry	3.0	<3.0	<3.0	-	5
Mineral Oil (μg/l)		<0.15	<0.15	<0.15	5 mg/l for SMH1	1
Suspended solids (mg/l)		57	33	12	-	50

sSurface Water Regulations, 1989 (S.I. No. 294 of 1989)

Table 10: Surface Water Monitoring Results for Period July 2008 – December 2008

Parameter	SMH1	SW1	SW2	SW3	WL limits	SW Reg's ^s
рН	7.69	7.74	7.38	7.4	-	5.5 8.5 for A1 Waters
Ammonical Nitrogen as N (mg/l)	0.221	<0.038	0.072	0.063	-	-
Biological oxygen demand (mg/l)	3	<2.0	<2.0	<2.0	-	5
Mineral Oil (μg/l)	<0.50	<0.50	<0.50	<0.50	5 mg/l for SMH1	-
Suspended solids (mg/l)	95	5	1	1	-	50

⁸Surface Water Regulations, 1989 (S.I. No. 294 of 1989)

Interpretation of Results

Results of the surface water-monitoring programme indicate that the water quality at all stations was generally very satisfactory. The emission limit values for Mineral oils was not exceeded at any stage during the reporting period. The biological oxygen demand was generally satisfactory. The Suspended Solids were also generally satisfactory except at monitoring point SMH1 for the period July – December 2008. This result is not deemed as very significant as the results at monitoring points SW2 and SW3 for the same reporting period are below the limits set out in the Surface Water Regulations, 1989. The reason for this high result may be due to the fact that there was very low water flow from this point at the time of sampling. This is a regular problem with SMH1 as even with heavy rainfall the flow rate from the sampling point is still low. The remaining surface water discharge parameters measured did not exceed the limits set out in the Surface Water Regulations, 1989.

4.2 Wastewater

Under schedule D of licence WL/8-1, monitoring of wastewater quality is to be undertaken at one location at the final discharge point from the facility

Under the conditions of WL 8-1 wastewater monitoring was to be undertaken quarterly.

Wastewater samples were taken on the following dates:

- 31st March 2008 FMH1
- 30th June 2008 FMH1
- 26th September 2008 FMH1
- 10th December 2008 FMH1

The parameters to be measured are specified in Table D.5 of Licence WL/8-1

They are shown below in Table 11.

Table 11: Parameters and emission limit values which are to be monitored at the wastewater monitoring location FMH1

Parameter
Biological Oxygen Demand
Suspended Solids
рН
Chemical Oxygen Demand
Ammonical Nitrogen
Temperature
Flow

The results of the wastewater monitoring for the facility for period January – December 2008 are listed in the Table below.

Table 12: Monitoring Results for FMH1

Parameter	31/03/08	30/06/08	26/09/08	10/12/08
pH	7.8	6.8	6.8	7.26
Ammonical Nitrogen as N (mg/l)	2.94	8.39	26.9	4.14
Biological oxygen demand (mg/l)	9.0	111	25	16
Chemical Oxygen Demand (mg/l)	446	148	57	50
Suspended solids (mg/l)	116	48	116	149
⁺ Flow (m ³ per day)	0.54	0.41	0.58	0.33

Interpretation of Results

Results of the foul 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.

Volume of Foul Water

The volume of foul water produced on-site during the reporting period was 173m³.

4.3 EPA Monitoring

Surface Water

The results of the surface water monitoring conducted by The Agency during the period January – December 2008 are listed in the Table below

Table 13: Surface Water Monitoring as Sampled on 15/01/2008

Parameter	SW1	SW2	SW3	WL limits	SW Reg's ^S
рН	7.31	7.24	7.59	-	5.5 8.5 for A1 Waters
Ammonia (mg/l) N	0.047	0.121	0.057	-	-
BOD5 (No inhibition) (mg/l)	1.5	<1.0	<1.0	-	5
Mineral Oil (mg/l)	<0.01	<0.01	<0.01	5 mg/l for SMH1	-
Diesel Range Organics (GC) (mg/l)	<0.01	<0.01	<0.01		
Suspended solids (mg/l)	5.2	4.0	20	-	50
Chemical Oxygen Demand (mg/l)	<10	<10	<10		

^{*}Surface Water Regulations, 1989 (S.I. No. 294 of 1989)

Table 14: Surface Water Monitoring as Sampled on 26/11/2008

Parameter	SW1	SW2	SW3	WL limits	SW Reg's ^s
рН		7.46	7.47	-	5.5 8.5 for A1 Waters
Ammonia (mg/l) N		0.063	0.099	-	-
BOD5 (No inhibition) (mg/l)	Sampling Point Dry	<1.0	>7*	-	5
Mineral Oil (mg/l)	- Tomic Dry	<0.01	<0.01	5 mg/l for SMH1	-
Suspended solids (mg/l)		2.0	3.6	-	50
Chemical Oxygen Demand (mg/l)		<10	21		

Surface Water Regulations, 1989 (S.I. No. 294 of 1989)

Interpretation of Results

Results of the EPA surface water-monitoring programme indicate that the water quality at all stations was generally very satisfactory. The emission limit values for Mineral oils was not exceeded at any stage during the reporting period. These results compare favourably with the results of self-monitoring carried out on site. The surface water discharge parameters measured did not exceed the limits set out in the Surface Water Regulations, 1989.

^{*}BOD failed to meet laboratory criteria due to underdilution

Waste Water

The results of the wastewater monitoring conducted by The Agency during the period January – December 2008 are listed in the Table below.

Table 15: Monitoring Results for FMH1

Parameter	15/01/08
рН	7.13
BOD5 (No inhibition) (mg/l)	>7.0
Chemical Oxygen Demand (mg/l)	27
Suspended solids (mg/l)	37.6

Interpretation of Results

Results of The Agency foul 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.

4.4 Noise

An annual noise survey is specified in Schedule D.3 of licence WL/8-1. The schedule specifies that monitoring of noise levels is to be undertaken at four locations on and adjacent to the facility: N1, N2, S1 and S2.

Table D.3.1 of licence WL/8-1 specifies that a 30-minute noise interval is to be used at each monitoring location. From data recorded, the LA_{EQ}, 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 2008. Onsite noise levels were 49dB at the rear of the site and 56dB near the entrance. The 56dB recorded was influenced chiefly by local and distant traffic. The site noise limits do not apply to these measurement locations. Emissions from the waste transfer station site were not audible at the offsite measurement stations and thus offsite noise levels were satisfactory. No audible tones were noted during the survey. Frequency analysis confirmed the absence of tones at all four measurement-stations.

4.5 Dust

The results from the Dust Deposition monitoring can be viewed in the following Table.

Table 16: Dust Deposition Levels

Date	DM1	DM2	DM3	DM4
30/05/08 – 30/06/08	16.0	31.5	35.8	5.8
20/08/08 – 20/09/08	30.2	15.04	1.26	0.96

The results above indicate that the dust levels recorded during the reporting period were below the emission limit value of $350 \text{ mg/m}^2/\text{day}$ (30 day composite sample).

5.0 ENERGY CONSUMPTION

5.1 General

During the reporting period the site machinery comprising of 2 slave vehicles, a fork truck and 3 ejector trailers, used approx. 2500 litres of fuel. Electricity usage at the site during the reporting period was estimated at approximately 25 kWh per day. This is a reduction on the previous years usage due to the implementation of new site procedures. These procedures involved only using machinery when necessary and only turning on the compactor when the hopper bin is full.

6 ENVIRONMENTAL INCIDENTS, NON-COMPLIANCES AND COMPLAINTS

6.1 Incidents

There were no environmental incidents during the reporting period January – December 2008.

6.2 Non-Compliances

The Agency conducted a site inspection on 21st October 2008 and following on from this Clonakilty Waste and Recycling Centre was informed of the following non-compliances.

No monitoring results from SMH1 for 2007 and to-date in 2008

Discharge levels from SMH1 are very low and it can be difficult to get a representative sample from this discharge point due to the low flow. The licensee will endeavour to get a representative sample in all future sampling. However, this can be very dependent on weather conditions as even with heavy rainfall the discharge levels are low as the majority of the drainage system on-site is direction towards the foul-water system.

SW1 was nominated as a monitoring point by the Agency and does represent surface water discharges from Clonakilty Recycling Centre and other units in the vicinity of the facility.

Recording the name of the person checking the load

The weighbridge system records the name of the person who checks the load but it is not configured to print this on the weighbridge docket. Cork County Council undertakes to ensure that each weighbridge docket will include the name of the person checking the load.

6.3 Complaints

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

6.4 Nuisance Controls

6.4.1 Litter

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

6.4.2 Vermin & Flies

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

6.5 Programme for Public Information

6.5.1 Information Available to the Public

The site notice at the landfill entrance states that:-

Environmental monitoring information relating to the facility can be obtained 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.

7. ENVIRONMENTAL MANAGEMENT PROGRAMME REPORT

7.1 Schedule of Objectives and Targets for Year 2009

Objective 1

Review the Environmental Management System to fulfil the obligation of the Waste Licence (No. 8-1).

- **Target 1.1** Preparation and submission of an Environmental Management System (EMS) to the Environmental Protection Agency by February 10th 2009.
- **Target 1.2** Annual review of EMS submitted to the Agency annually.
- **Target 1.3** Corrective action procedures to be submitted to the Agency by February 10th 2009 and reviewed annually thereafter.
- **Target 1.4** Review the management structure for Clonakilty Waste Transfer Station.
- **Target 1.5** Annual Environmental Report (AER) submitted to the Agency by February 10th 2009.
- **Target 1.6** Review of Environmental Management Plan (EMP) by February 10th 2009.

Objective 2

Review the notification and record keeping system to ensure continued compliance with the requirements of the Waste Licence.

- **Target 2.1** Ongoing maintenance of waste records as per Condition 10 of WL 8-1
- **Target 2.2** Review of site procedures by January 31st 2009 and reviewed as necessary but at least once per annum

Maintain existing site infrastructure in accordance with the standards outlined in Condition 3 of the Waste Licence.

- **Target 3.1** Maintenance of a site notice board in accordance with Condition 3.3.
- **Target 3.2** Maintenance of site security fencing in accordance with Condition 3.4.
- **Target 3.3** Maintenance of site security including closed circuit television.
- **Target 3.4** Maintenance of the waste quarantine and inspection areas in accordance with Condition 3.7.
- **Target 3.5** Maintenance and upkeep of the foul water treatment system for the treatment of foul water arising on-site.
- **Target 3.6** Maintenance of all silt traps and oil interceptors at the facility according to Condition 3.12 of the Licence, to ensure that all surface water discharges from the facility pass through a silt trap and oil interceptor prior to discharge
- **Target 3.7** Maintain the site offices in accordance with Condition 3.6 of the Waste Licence and the proper maintenance of said offices.
- **Target 3.8** Maintain the Civic Amenity facility in accordance with Condition 3.15 of the Waste Licence.
- **Target 3.9** Maintenance of the waste transfer building in accordance with Condition 3.9 of the Waste Licence, including the compactor, containers and associated infrastructure.

Review of the Waste Acceptance and Handling procedures to ensure continued compliance with the requirements of Condition 5 of the Waste Licence.

- **Target 4.1** Ongoing implementation of Waste Acceptance Procedures in accordance with Condition 5.2 of the Waste Licence.
- **Target 4.2** Review of Waste Acceptance Procedures by January 31st 2009 and annually thereafter or as necessary.
- **Target 4.3** Maintain records and prepare reports on the recycling rate and identify any further waste streams that may be recycled.

Objective 5

Continuing minimisation of Environmental Nuisances associated with the Facility

Target 5.1 Ongoing compliance with the requirements set out in Condition 7 of the Waste Licence.

Objective 6

Full compliance with requirements set out in Condition 6 of the Waste Licence regarding emissions and environmental impact of activities associated with the facility.

Target 6.1 Ongoing compliance with Condition 6.1 of the Waste Licence, by ensuring that any emission from the facility shall not exceed the emission limit values set out in *Schedule C: Emission Limits* of the Licence.

Establishment of a monitoring programme as outlined in Condition 8 and Schedule D of the Waste Licence.

- **Target 7.1** Ensure in accordance with Condition 8.3 of the Waste Licence that all monitoring and analysis equipment shall be operated and maintained in accordance with the manufacturers' instructions (if any) so that all monitoring results accurately reflect any emission, discharge or environmental discharge.
- **Target 7.2** Ensure that all monitoring of emissions occurs within the time limits and that all results and reports are submitted to the Agency within the appropriate timeframe.

Target 7.3 Long term environmental monitoring to continue as set out in the table below:

Report Title	Report Frequency	Report Submission Date
Environmental Management System Updates	Annually	One month after the end of the year reported on
Annual Environment Report (AER)	Annually	Thirteen months from the date of commencement of waste activities and one month after the end of each calendar year thereafter.
Bund, tank and container integrity assessment	Every three years	Six months from the date of licence and one month after end of the three year period being reported on.
Record of Incidents	As they occur	Within 5 days of the incident
Specified Engineering Works reports	As they rise	2 months prior to the works commencing
Monitoring of Foul Water	Quarterly	Ten days after end of the quarter being reported on
Monitoring of Surface Water Quality	Biannually	Ten days after end of the quarter being reported on
Dust Monitoring	3 times annually	One month after end of the year being reported on
Noise Monitoring	Annually	One month after end of the year being reported on
Any other monitoring	As they occur	Within ten days of obtaining results

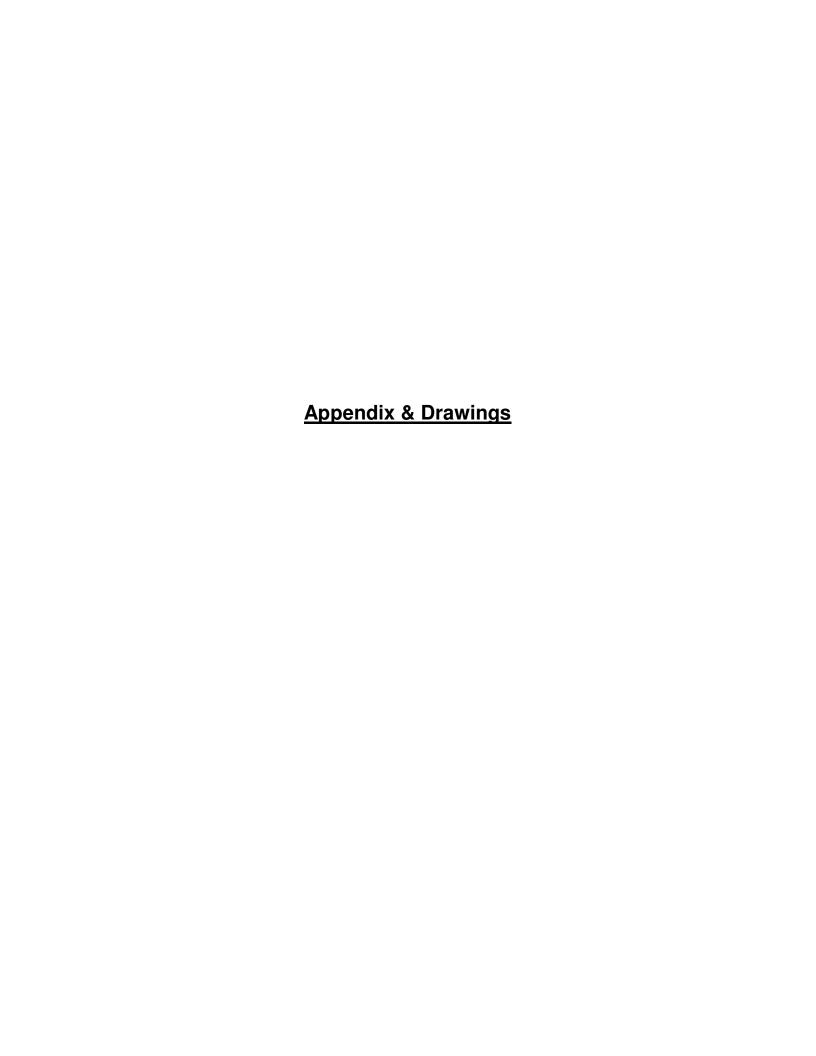
The development of an emergency plan for the site.

Target 8.1 Annual review of the emergency response procedure and submission to the Agency.

7.2 Financial Provision

Cork County Council has the ability to meet any financial commitments or liabilities incurred by the maintenance of Clonakilty Waste Transfer Station. These commitments include compliance with the waste management licence (No. 8-1) and aftercare of the site as specified in 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 Clonakilty Waste Transfer Station.



Appendix 1

Site Procedures



CLONAKILTY WASTE AND RECYCLING CENTRE

SITE PROCEDUDES

JANUARY 2009

Prepared By: -

Patrick Duggan,

Facility Manager

1. Procedure: To Provide for the recording of incidents which may occur on site

Revision E Date: January 2009

Personnel Involved:

Mr. Patrick Duggan Mr. John O'Donovan Mr. Michael O'Sullivan Mr. Jerome O'Neill

Scope of the procedure:

In the event of an Incident occurring at the facility (situations to be regarded as incidents are identified below) a copy of the incident report sheet must be filled in as soon as is practicable. In all cases it is of higher priority to identify and execute measures to minimise any emissions, and the effects thereof, caused by the incident.

The following situations shall be treated as an Incident:

- 1. Any emission, which results in the contravention of any relevant standard, including any standard for an environmental medium, or any relevant emission limit value, prescribed under any enactment.
- 2. Any emission, which does not comply with the requirements of the Waste Licence 8-1.
- 3. Any trigger level specified in the licence or in the EMS, which is attained or exceeded.
- 4. Any malfunction of any environmental control system.
- 5. Any indication that environmental pollution has, or may have, taken place.
- 6. Any occurrence with the potential for environmental pollution.
- 7. Any malfunction or breakdown of the equipment necessary for the operation of the Facility (e.g. Waste compacter and ejector trailers).
- 8. Any emergency.

In the case of an incident occurring, the Facility Manager shall be contacted immediately. Priority and phone numbers are as follows:

- 1. Facility Manager (023 50982 / 086 1725290)
- 2. Deputy Manager (023 50982/ 086 8096614)
- 3. Senior Executive Engineer (023 33328 / 086 6018493)

In the event of any monitoring, sampling or observations indicating that an incident has, or may have taken place, the following steps have to be taken immediately:

- 1. Identify the date, time and place of the incident.
- 2. Carry out an immediate investigation to identify the nature, source and cause of the incident and any emission.
- 3. Isolate the source of the emission.
- 4. Evaluate the environmental pollution, if any caused by the incident.
- 5. Identify and execute measures to minimise the emissions/malfunction and the effects thereof.
- 6. Identify and put in place measures to avoid recurrence of the incident.
- 7. Identify and put in place any other appropriate remedial action

Related Documentation:

Waste Licence 8-1 Corrective Action Procedures Site Inspection and Recording Procedure Complaints Procedure

Date of procedure review (and revision where necessary):

January 2009 and annually thereafter.

Persons responsible for updating & amending this Procedure:

Mr. Patrick Duggan

2. Procedure: To Provide for site security against unauthorised access

Revision E Date: January 2009

Personnel Involved:

Mr. Patrick Duggan Mr. John O'Donovan Mr. Michael O'Sullivan Mr. Jerome O'Neill

Purpose of Procedure:

To comply with Condition 3.4 of the Waste Licence for Clonakilty Waste and Recycling Centre

To ensure the site and its operations are secure from unauthorised access.

To visually inspect the site perimeter, noting any defects in the gates or the perimeter fencing/boundaries.

Scope of the procedure:

This procedure applies to all daily inspections of the entrance gates and the site perimeter fencing/ boundaries, in order to comply with the terms and conditions of the waste licence.

The gates to the facility shall be locked when the facility is not open.

Description of the tasks involved with this procedure:

- 1. The site perimeter fencing, boundaries, on-site litter fencing and entrance gates shall be inspected for defects on a daily and weekly basis.
- 2. In the event of a defect being located, the licensee shall instigate a temporary repair by the end of the working day.
- 3. A permanent repair shall be made as soon as possible but no later than 3 working days or as may otherwise be agreed in writing with the Agency.
- 4. Gates to the facility shall be locked shut when the facility is unsupervised.

Expected results & action in light of departure from this procedure:

Failure to implement this procedure is non-compliance in accordance with the conditions of the waste licence.

Failure to repair defects in the fencing/ gates may lead to vandalism on site.

It may also lead to the creation of environmental nuisance by means of litter to adjoining landowners

Related Documentation:

Waste Licence 8-1 Corrective Action Procedures Site Inspection and Recording Procedure Complaints Procedure

Date of procedure review (and revision where necessary):

January 2009 and annually thereafter.

Persons responsible for updating & amending this Procedure:

Mr. Patrick Duggan

3. Procedure: To Provide for the handling of complaints

Revision F Date: January 2009

Personnel Involved:

Mr. Patrick Duggan Mr. John O'Donovan Mr. Michael O'Sullivan Mr. Jerome O'Neill

Purpose of Procedure:

To comply with Condition 10.4 of the Waste Licence for Clonakilty Waste and Recycling Centre

To provide for the keeping of records and update of information for the facility

Scope of the procedure:

The licensee shall maintain a written record of all complaints of an environmental nature related to the operation of the facility.

Description of the tasks involved with this procedure:

- 1. On receipt of a written or verbal complaint, the licensee through the facility manager shall determine whether further investigation is required.
- 2. Actions taken shall be recorded and reported to the Agency and the public.
- 3. The licensee shall complete a Complaints Report form. This shall give details of the following:

name of complainant; date and time of complaint; details of the nature of the complaint; actions taken on foot of the complaint and the outcome; the response made to each complainant of such outcomes; response to the Agency when complete

- 4. Monitor complaint causes during subsequent site inspections.
- 5. Details of all complaints to be recorded and held on site.
- 6. Details of all complaints to be submitted to the Agency.
- Complaints can be categorised in the following manner as being either one of nuisance in relation to odour; noise; dust; water pollution; procedural or miscellaneous.

Expected results & action in light of departure from this procedure:

Failure to implement this procedure is non-compliance in accordance with the conditions of the waste licence. This may result in significant impairment of amenities or the environment beyond the facility boundary.

All incidents of complaint from the public etc. will be investigated and corrected in an efficient and effective manner. Operational procedures at the site will be modified accordingly in order to prevent a reoccurrence.

Related Documentation:

Waste Licence 8-1 Corrective Action Procedures Site Inspection and Recording Procedure Complaints Record Incidents Procedure Corrective Action Procedures

Date of procedure review (and revision where necessary):

January 2009 and annually thereafter.

Persons responsible for updating & amending this Procedure:

Mr. Patrick Duggan

4. Procedure: To Provide for the inspection and recording of site inspection

Revision E Date: January 2009

Personnel Involved:

Mr. Patrick Duggan Mr. John O'Donovan Mr. Michael O'Sullivan Mr. Jerome O'Neill

Purpose of Procedure:

To comply with the Conditions of the Waste Licence – Reference No. 8-1.

To ensure that the site and its associated infrastructure are inspected at the intervals specified in accordance with the above conditions.

Scope of the procedure:

This procedure applies to all inspections that must be carried out in order to fully implement and comply with the terms and conditions of the waste permit.

Description of the tasks involved with this procedure:

- 1. The facility manager or deputy manager shall undertake a daily inspection of the entire facility. A more detailed inspection of the infrastructure shall also be undertaken weekly by the facility manager or deputy manager.
- 2. These inspections shall be recorded on site inspection report sheets. Sample inspection report sheets are attached to this procedure. A copy of each inspection shall be retained in the appropriate file on site.
- 3. A site inspection shall examine and inspect those areas of infrastructure and their status as detailed in the attached site inspection report sheets.
- 4. If the inspection status of a particular area of the facility is unsatisfactory, a follow up corrective actions plan to improve status will be completed and implemented. The response to the corrective action plan will be reviewed during the next site inspection.

Expected results & action in light of departure from this procedure:

Failure to implement this procedure will result in poor environmental and operational performance and the possible creation of environmental nuisances.

Failure to implement this procedure is a non-compliance in accordance with the conditions of the waste permit.

Related Documentation:

Waste Licence 8-1 Corrective Action Procedures Complaints Procedures Site Inspection Report Forms

Date of procedure review (and revision where necessary):

January 2009 and annually thereafter.

Persons responsible for updating & amending this Procedure:

Mr. Patrick Duggan

5. Procedure: To Provide a methodology to control environmental nuisance arising at

the facility

Revision E Date: January 2009

Personnel Involved:

Mr. Patrick Duggan Mr. John O'Donovan Mr. Michael O'Sullivan Mr. Jerome O'Neill

Purpose of Procedure:

To comply with Condition 7 of the Waste Licence 8-1

To minimise the possibility of environmental nuisances being generated at the facility and to provide procedures to control nuisances

Scope of the procedure:

This procedure shall endeavour to ensure that activities are carried out so that emissions including odours do not result in significant impairment of amenities or the environment beyond the facility boundary.

Description of the tasks involved with this procedure:

- 1. Inspect the facility and immediate surrounds at least once per day for nuisances caused by vermin and odour.
- 2. Make written records of inspection and actions taken.
- 3. Keep the road network in the vicinity free from debris. Remove debris and deposited materials immediately.
- 4. Remove and dispose of all loose litter around the facility and its environs on a daily basis.
- 5. Remove waste placed on or in the vicinity other than in accordance with the requirements of the licence immediately and in any case by 10am the next morning.
- 6. Ensure that all waste being delivered to the site is appropriately covered.
- 7. Spray water onto site roads, access roads, and other areas used by vehicles in dry weather to minimise airborne dust.

Expected results & action in light of departure from this procedure:

Failure to implement this procedure will result in poor environmental and operational performance on site. This in turn will lead to the creation of environmental nuisances, which may lead to complaints from the general public.

Failure to implement this procedure is non-compliance in accordance with the conditions of the waste licence.

Failure to implement this procedure may also result in significant impairment of amenities or the environment beyond the facility boundary.

Related Documentation:

Waste Licence 8-1 Corrective Action Procedures Site Inspection and Recording Procedure Complaints Procedure

Date of procedure review (and revision where necessary):

January 2009 and annually thereafter.

Persons responsible for updating & amending this Procedure:

Mr. Patrick Duggan

6. Procedure: Corrective Action Procedures

Revision F Date: January 2009

Personnel Involved:

Mr. Patrick Duggan Mr. John O'Donovan Mr. Michael O'Sullivan Mr. Jerome O'Neill

Purpose of Procedure:

To ensure that all non compliance's with the waste licence / public complaints etc. are investigated, corrected and that effective preventative measures or modifications to the operational procedures of the facility are put in place and implemented so that non-compliance does not re-occur.

Scope of the procedure:

This procedure applies to all non-compliances with the waste licence applicable to Clonakilty Waste and Recycling Centre – Waste Licence 8-1. It also applies to internal / external complaints. It also applies to all non-compliances with site procedures.

Description of the tasks involved with this procedure:

- 1. Ongoing monitoring and management programmes at the facility are designed to identify any non-compliances with the conditions set out in the licence.
- 2. On discovery of such a non-conformance, the incident should be recorded and assigned a reference number. This reference number should be quoted on all documentation associated with this particular non-conformance.
- 3. The incident should be reported immediately to The Agency if it is relevant to the waste licence.
- 4. The reason why the specified requirements were not met must be determined.
- 5. A step-by-step action plan must be prepared in order to correct the non-compliance, including assignment of responsibilities for each task involved. A folder containing templates for these action plans is located in the site office.
- 6. The corrective action plan shall include, as its final task, a verification on the corrective action to ensure that it has been effective (sampling, inspection of monitoring records etc.). Reasonable and effective preventative actions shall be implemented in order to prevent a reoccurrence of the non-compliance.
- 7. Responsibility must be assigned for control and implementation of the corrective actions in order to ensure that they are taken and that they are effective.

- Operational procedures may need to be modified as a result of the corrective action. Should this be required, the responsible party should consult the documentation procedures for guidelines on how best to modify established documents.
- 9. Feedback in the form of a letter / report summarising actions taken for example, should be provided to the complainant / Agency on completion and verification of the corrective action. A copy of this letter / report shall be filed with a copy of the corrective action plan drawn up and the Corrective Action Report Sheet.
- 10. Training / retraining of certain site personnel may be required.
- 11. A Corrective Action Report Sheet shall be completed for all incidents of non-compliance / public complaint etc.

Expected results & action in light of departure from this procedure:

All incidents of non-compliances with the waste licence / complaints from the public etc., will be investigated and corrected in an efficient and effective manner. Operational procedures at the site will be modified accordingly in order to prevent a reoccurrence.

Repeated non-compliances with legislative requirements and poor environmental performance will result from ineffective implementation of corrective action procedures.

Related Documentation:

Waste Licence 8-1 Corrective Action Report Sheet Site Inspection and Recording Procedure Complaints Procedure

Date of procedure review (and revision where necessary):

January 2009 and annually thereafter.

Persons responsible for updating & amending this Procedure:

Mr. Patrick Duggan

7. Procedure: Communications Programme

Revision E Date: January 2009

Personnel Involved:

Mr. Patrick Duggan, Facility Manager. Senior Executive Officer, Waste Management (West)

Purpose of Procedure:

To comply with Condition 2.4 of the Waste Licence 8-1

To ensure that members of the public can obtain information concerning the environmental and operational performance of the facility at all reasonable times.

Scope of the procedure:

This procedure applies to all management personnel working at Clonakilty Waste and Recycling Centre, relevant waste management staff and all members of the general public interested in the environmental and operational performances of the facility.

This procedure applies to all information regarding environmental aspects, environmental and operational performance.

Description of the tasks involved with this procedure:

- 1. It is the responsibility of the Senior Executive Officer, Waste Management, Western Division, to ensure that information on the facility is available to the public.
- 2. The site notice board contains general information on the facility, including emergency contact numbers. It also informs the public where and when environmental monitoring information can be obtained. It is the responsibility of the Facility Manager to maintain this notice board in accordance with the conditions of the Waste Licence, and keep information up to date at all times.
- 3. Cork County Council (Western Division) shall make available all correspondence with the Environmental Protection Agency regarding the facility. This information shall be available for viewing in the Cork County Council offices at Hume House, Wolfe Tone St, Clonakilty, Co. Cork. Administrative staff shall offer assistance to any member of the general public if so required.
- 4. All monitoring results for the facility, including quarterly and annual reports are available for inspection by the general public at all reasonable times on request.
- 5. There is a complaints record kept at the facility, which contains records off all complaints associated with the operations at the site received from the general public. All communications of this type are dealt with as quickly and effectively as possible. All complaints / incidents, details thereof, and details of the response of Cork County Council to them are available for public inspection.

6. A copy of all reports sent to the Environmental Protection Agency are available at the Cork County Council offices, Hume House, Wolfe Tone St, Clonakilty, Co. Cork, for viewing and examination by the public.

Expected results from this Programme:

Open Lines of communication shall be maintained with all interested parties.

Expected results & action in light of departure from this procedure:

Failure to properly implement this programme will result in a lack of communication with the general public leading to public unhappiness.

Failure to implement this programme may result, in information, which is not up to date, being made available to the public.

Related Documentation:

Waste Licence 8-1 Complaints Procedure Monitoring and Sampling records Quarterly & Annual reports Operational procedures

Persons responsible for updating & amending this Procedure:

Mr. Patrick Duggan

Appendix 2

Pipe and Bund Integrity Tests

Client:

Cork County Council

Clonakilty Amenity Centre

Site:

Clonakilty Amenity Centre

Site Address:

Clonakilty

Contact Name:

Pat Duggan

Contact No:

086 1725290

Dalinaral by transl

OC Drain Services, Lissarda, Co. Cork VAT No: 7223653D
Tel: 021 733 6331 Mobile: 086 2215317 / 086 881 3049 Email: ocdrainservices@yahoo.ie www.ocdrainservices.com



Storm Line Integrity Test

M.H SW A1 to M.H SW A2

Pass

Pipe was pressurized to a pressure of 0.5barr for a period of 15 minutes

M.H SW A2 to M.H SW A3

Pass

Pipe was pressurized to a pressure of 0.5barr for a period of 15 minutes

M.H SW A3 to M.H SW A4

Pass

Pipe was pressurized to a pressure of 0.5barr for a period of 15 minutes

M.H SW A4 to M.H SW A5

Pass

Pipe was pressurized to a pressure of 0.5barr for a period of 15 minutes

M.H SW A5 Tank to M.H SW A6

Pass

Pipe was pressurized to a pressure of 0.5barr for a period of 15 minutes

M.H SW A6 to M.H SW A6.1

Pass

Pipe was pressurized to a pressure of 0.5barr for a period of 15 minutes

M.H SW A6.1 to M.H SW A6.2

Pass

Pipe was pressurized to a pressure of 0.5barr for a period of 15 minutes

OC Drain Services, Lissarda, Co. Cork VAT No: 7223653D
Tel: 021 733 6331 Mobile: 086 2215317 / 086 881 3049 Email: ocdrainservices@yahoo.ie www.ocdrainservices.com



Storm Continued

M.H SW A6 to M.H SW A7

Pass

Pipe was pressurized to a pressure of 0.5barr for a period of 15 minutes

M.H SW A7 to M.H SW 7.1

Pass

Pipe was pressurized to a pressure of 0.5barr for a period of 15 minutes

M.H SW 7.1 to M.H SW.8.1

Pass

Pipe was pressurized to a pressure of 0.5barr for a period of 15 minutes

M.H SW 8.1 to M.H SW A8

Pass

Pipe was pressurized to a pressure of 0.5barr for a period of 15 minutes

M.H SW A8 to M.H SW A9

Pass

Pipe was pressurized to a pressure of 0.5barr for a period of 15 minutes

M.H SW A9 to M.H SW A10

Pass

Pipe was pressurized to a pressure of 0.5barr for a period of 15 minutes

M.H SW B1 to M.H SW B1.1

Pass

Pipe was pressurized to a pressure of 0.5barr for a period of 15 minutes.

OC Drain Services, Lissarda, Co. Cork VAT No: 7223653D

Tel: 021 733 6331 Mobile: 086 2215317 / 086 881 3049 Email: ocdrainservices@yahoo.ie www.ocdrainservices.com



Storm Continued

M.H SW A6 to M.H SW A7

Pass

Pipe was pressurized to a pressure of 0.5barr for a period of 15 minutes

M.H SW A7 to M.H SW 7.1

Pass

Pipe was pressurized to a pressure of 0.5barr for a period of 15 minutes

M.H SW 7.1 to M.H SW.8.1

Pass

Pipe was pressurized to a pressure of 0.5barr for a period of 15 minutes

M.H SW 8.1 to M.H SW A8

Pass

Pipe was pressurized to a pressure of 0.5barr for a period of 15 minutes

M.H SW A8 to M.H SW A9

Pass

Pipe was pressurized to a pressure of 0.5barr for a period of 15 minutes

M.H SW A9 to M.H SW A10

Pass

Pipe was pressurized to a pressure of 0.5barr for a period of 15 minutes

M.H SW B1 to M.H SW B1.1

Pass

Pipe was pressurized to a pressure of 0.5barr for a period of 15 minutes.

OC Drain Services, Lissarda, Co. Cork VAT No: 7223653D

Tel: 021 733 6331 Mobile: 086 2215317 / 086 881 3049 Email: ocdrainservices@yahoo.ie www.occtrainservices.com



Storm Continued

M.H SW B1.1 to M.H SW B1.2

Pass

Pipe was pressurized to a pressure of 0.5barr for a period of 15 minutes

M.H SW B1.2 to M.H SW B1.3

12.

Pass

Pipe was pressurized to a pressure of 0.5barr for a period of 15 minutes

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Foul Line Integrity Test

M.H FW1 to M.H FW2

Pass

Pipe was pressurized to a pressure of 0.5barr for a period of 15 minutes

M.H FW2 to M.H FW3

Pass

Pipe was pressurized to a pressure of 0.5barr for a period of 15 minutes

M.H FW3 to M.H FW4

Pass

Pipe was pressurized to a pressure of 0.5barr for a period of 15 minutes

M.H FW4 to M.H FW5

Pass

Pipe was pressurized to a pressure of 0.5barr for a period of 15 minutes

M.H FW5 to M.H FW6

Pass

Pipe was pressurized to a pressure of 0.5barr for a period of 15 minutes

M.H FW6 to M.H FW7

Pass

Pipe was pressurized to a pressure of 0.5barr for a period of 15 minutes

M.H FW7 to M.H FW8

Pass

Pipe was pressurized to a pressure of 0.5barr for a period of 15 minutes

OC Drain Services, Lissarda, Co. Cork VAT No; 7223653D

Tel: 021 733 6331 Mobile: 086 2235317 / 086 881 3049 Email: ocdrainservices@yahoo.ie www.ocdrainservices.com



Foul Continues

M.H FW8 to M.H FW8.1

Pass

Pipe was pressurized to a pressure of 0.5barr for a period of 15 minutes

M.H FW8.1 to M.H FW8.2

Pass

Pipe was pressurized to a pressure of 0.5barr for a period of 15 minutes

M.H FW8 to M.H FW9

Pass

Pipe was pressurized to a pressure of 0.5barr for a period of 15 minutes

M.H FW9 to M.H FW9.1

Pass

Pipe was pressurized to a pressure of 0.5barr for a period of 15 minutes $\overset{\circ}{\underset{\circ}{\cdot}}$

M.H FW9 to M.H FW10

Pass

Pipe was pressurized to a pressure of 0.5barr for a period of 15 minutes

M.H FW10 to M.H FW11

Pass

Pipe was pressurized to a pressure of 0.5barr for a period of 15 minutes

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