South Dublin County Council

Ballymount Solid Waste
Recycling and Baling Centre and Civic Amenity

Waste Licence Reg. No.W0003-03

Annual Environmental Report
1st January 2011 – 31st December 2011

Comhairle Contae
Átha Cliath Theas
South Dublin County Council

Issued 31st March 2012

BALLYMOUNT SOLID WASTE

RECYCLING AND BALING CENTRE

ANNUAL ENVIRONMENTAL REPORT

1st January 2011 – 31st December 2011

Environmental Services Department,
South Dublin County Council,
PO Box 4122,
Town Centre,
Tallaght,
Dublin 24.

March 2012

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ANNUAL ENVIRONMENTAL REPORT

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REVISION CONTROL TABLE

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5	1st Draft	P.G				5
6	1st Draft	G.M.			04/01/07	5
7	1st Draft	G.M.	LM		02/04/08	5
8	1st Draft	E.B.	LM		23/03/09	5
9	1st Draft	E.B.	LM		25/03/10	5
10	1st Draft	E.B.	LM		25/03/11	5
11	1st Draft	E.B.	LM		16/03/12	5

TABLE OF CONTENTS

Appendix

1. INTRODUCTION

South Dublin County Council (the Council) holds a Waste Licence (Reg. No. 0003-03) to operate Ballymount Solid Waste Recycling and Baling Centre and Civic Amenity Facility at Ballymount Avenue, Walkinstown, Dublin 12. In accordance with the requirements of Condition 11.5 of the Waste Licence, an Annual Environmental Report (AER) for the facility must be submitted to the Environmental Protection Agency (EPA).

This is the eleventh AER, covering the reporting period 1st January 2011 – 31st December 2011 as agreed with the Agency.

The facility is operated on the basis of a joint venture agreement between the Council and Greenstar Ltd. The facility is located at: -

Ballymount Solid Waste Recycling and Baling Centre,
Ballymount Avenue,
Walkinstown,
Dublin 12

Tel. (01) 4621251 Fax: (01) 4525145

National Grid co-ordinates for the location of the facility are: E 3103 N 2302.

1.1. South Dublin County Council/Greenstar Policy

The Council and Greenstar have developed an Environmental Policy for the facility, which is committed to conducting all activities such that they have a minimal effect on the environment.

All levels of management are committed to implementing and maintaining an environmental management programme in compliance with the requirements of the Environmental Protection Agency.

The key objectives of the Council and Greenstar's joint venture management committee are: -

1. A commitment to compliance with the Waste Licence and all pertinent environmental legislation and approved codes of practice. To this end, the joint venture management committee will co-operate fully with all regulatory authorities.

2. To continually develop and modify all procedures to reduce environmental impacts.

3. To train and educate all employees in the skills and understanding necessary to minimise any risk to the environment.

4. To ensure that all management and employees are familiar with the conditions of the Waste Licence and the content of the Environmental Management Plan (EMP).

2. DESCRIPTION OF THE SITE

The Recycling and Baling Centre is located at Ballymount Avenue, Walkinstown, Dublin 12, within an area zoned for industrial development. The site location plan is shown in Figure 1. The facility is surrounded in the industrial park by various warehouses and industrial buildings and is adjacent to the N81 (Greenhills Road) on its eastern boundary.

Waste handling activities at the facility consist of baling/compaction municipal/household waste for transfer to Ballnagran (Greenstar) and Drehid (Bord na Mona) Landfill in 2011, and the acceptance of certain recyclable waste types at the Civic Amenity Facility. The main activity is the Compaction/baling and transfer of waste to Ballnagran and Drehid Landfill.

In February 2011 the process of the baling of waste ceased and operations changed to a static compaction system, where waste is compacted by a static compaction unit and is transferred into enclosed bespoke trailers and is then sent to landfill.

The licensed waste activities are listed below.

Licensed waste disposal activities, in accordance with the Third Schedule of the Waste Management Act 1996 include: -

Class 12:	Repackaging prior to submission to any activity referred to in this Schedule.
Class 13:	Storage prior to submission to any activity referred to in this Schedule, other than temporary storage, pending collection, on the premises, where the waste concerned is produced.

Licensed waste recovery activities, in accordance with the Fourth Schedule of the Waste Management Act, 1996 include: -

Class 3:	Recycling or reclamation of metals and metal compounds.
Class 4:	Recycling or reclamation of other inorganic materials.
Class 13:	Storage of waste intended for submission to any activity referred to in a preceding paragraph of this schedule, other than the temporary storage, pending collection, on the premises where such waste is produced.

It is considered that the activities carried out at the waste transfer station do not have an adversely significant impact upon local environmental conditions due to the fully enclosed nature of the facility. While the Civic Amenity Facility is not enclosed, there are no activities carried out which affect local environmental conditions.

Local environmental conditions do not significantly influence the facility. Rainfall records for the area indicate an average rainfall of 731mm in 2011. The surface water drainage system is designed with an adequate capacity for high rainfall events at the site. Average prevailing winds are from a south westerly direction.

There are approximately 12 people employed on a full-time basis at the facility.

Figure 2.1 Site Location Map

3. MONITORING AND EMISSIONS SUMMARY

Environmental monitoring results for the reporting period are outlined in the following sections. An interpretation of the results and impacts on the environment are also presented. A site plan showing the position of each monitoring location is included in the Appendix.

3.1. Monitoring of Surface Water

Condition 8.1 of Waste Management Licence W0003-03 requires that quarterly monitoring be undertaken at three points on the partially culverted stream to the Northwest of the facility. Two of the monitoring points (S1 and S2) are upstream (us) of the site, while the other point (S3) is downstream (ds) of the site. Surface water parameters are measured quarterly in accordance with Schedule D.4 of the Licence. The surface water monitoring results are summarised in Table 3.1, which can be found in the Appendix and in Figures 3.1 to 3.5. The results are compared where applicable to the limits for the A3 water quality class as set out in the EU Quality of Surface Water Intended for the Abstraction of Drinking Water Regulations (SI No. 294 of 1989).

The surface water monitoring results for grab samples taken at S1, S2 and S3 during the reporting period 1st January to 31st December 2011 were fully compliant.

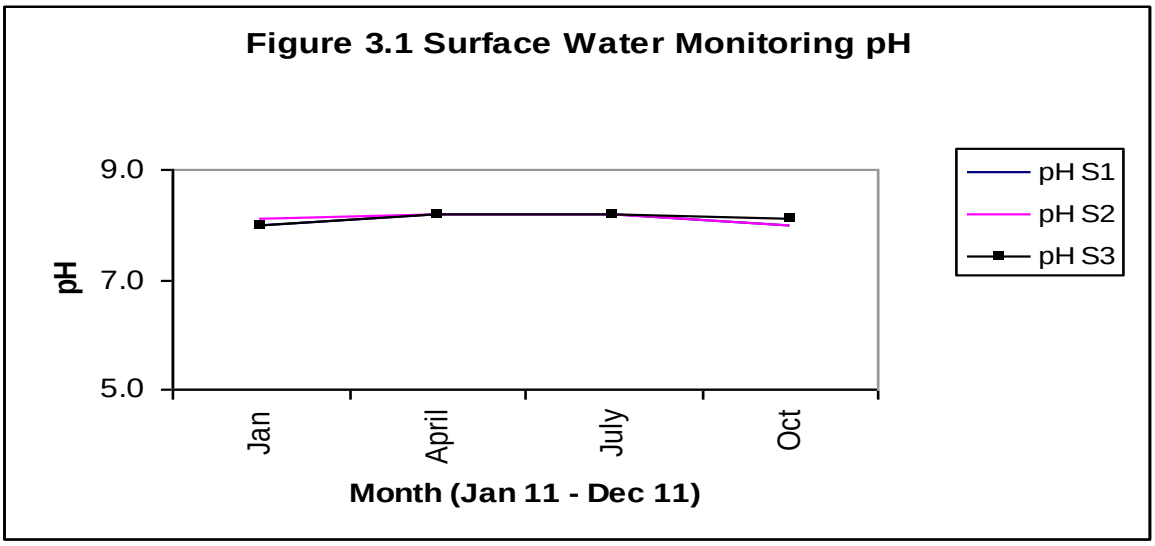

Figure 3.1 Surface Water Monitoring - pH

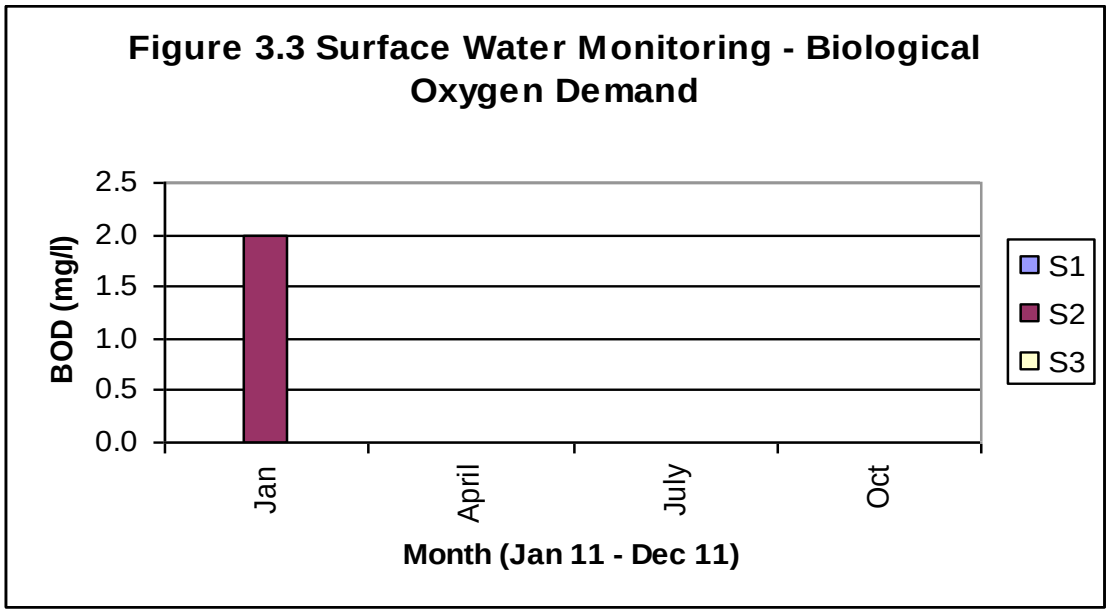

Figure 3.2 Surface Water Monitoring - Biological Oxygen Demand (ELV 25mg/l)

(BOD detectable limit: <2mg/l)

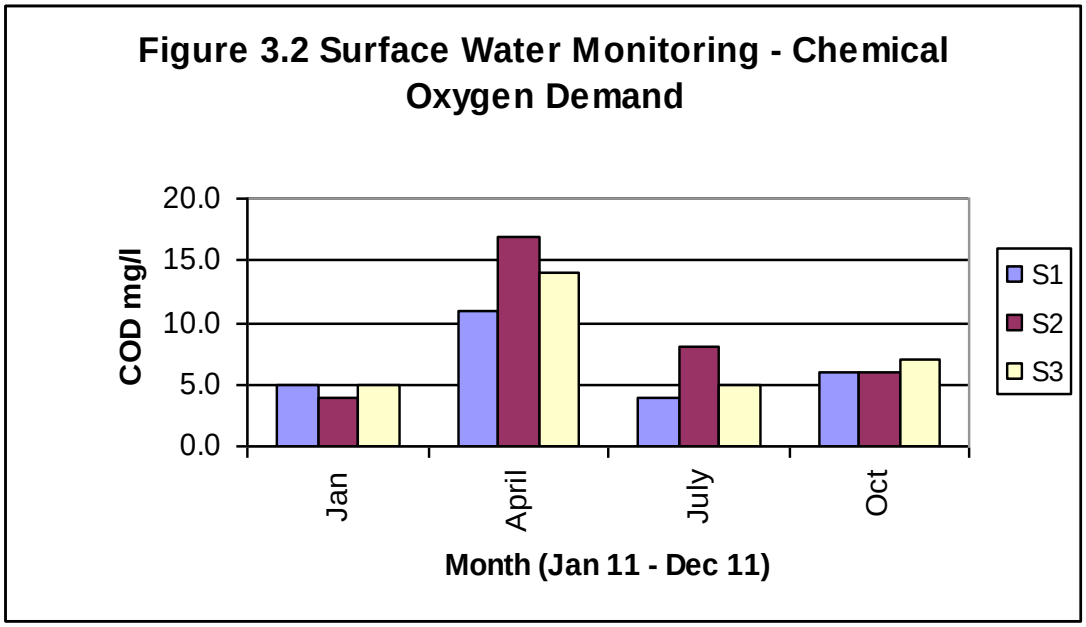

Figure 3.3 Surface Water Monitoring - Chemical Oxygen Demand (ELV 150mg/l)

(COD detectable limit: <4mg/l)

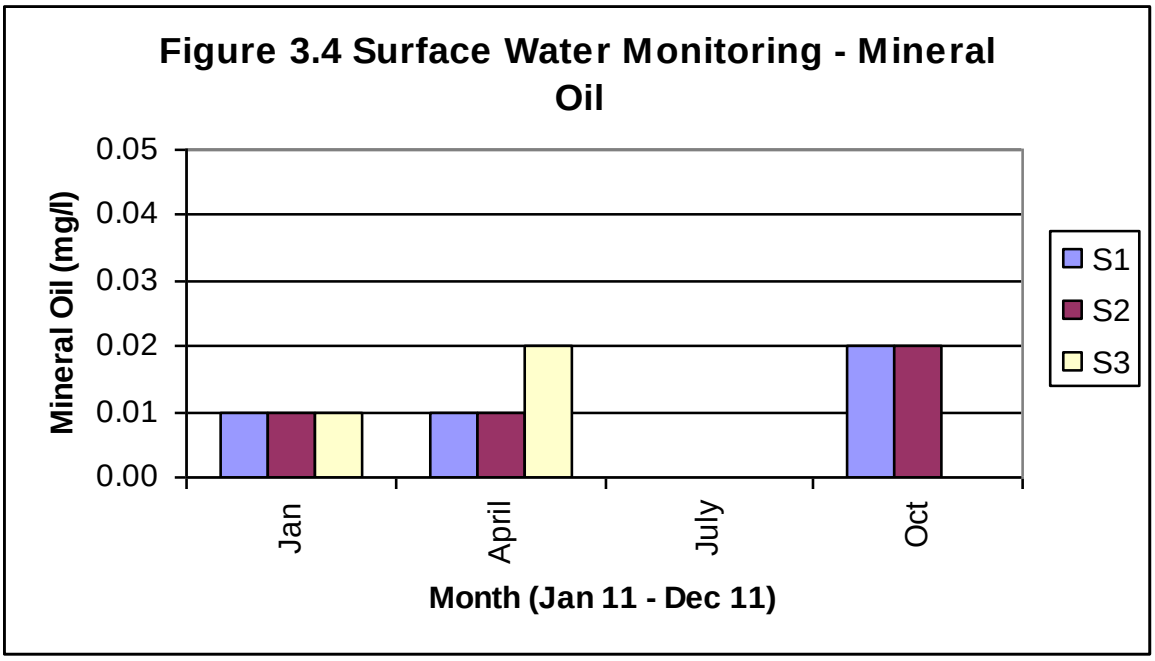

Figure 3.4 Surface Water Monitoring - Mineral Oil (ELV 10mg/l)

(Mineral Oil detectable limit: 0.04mg/l)

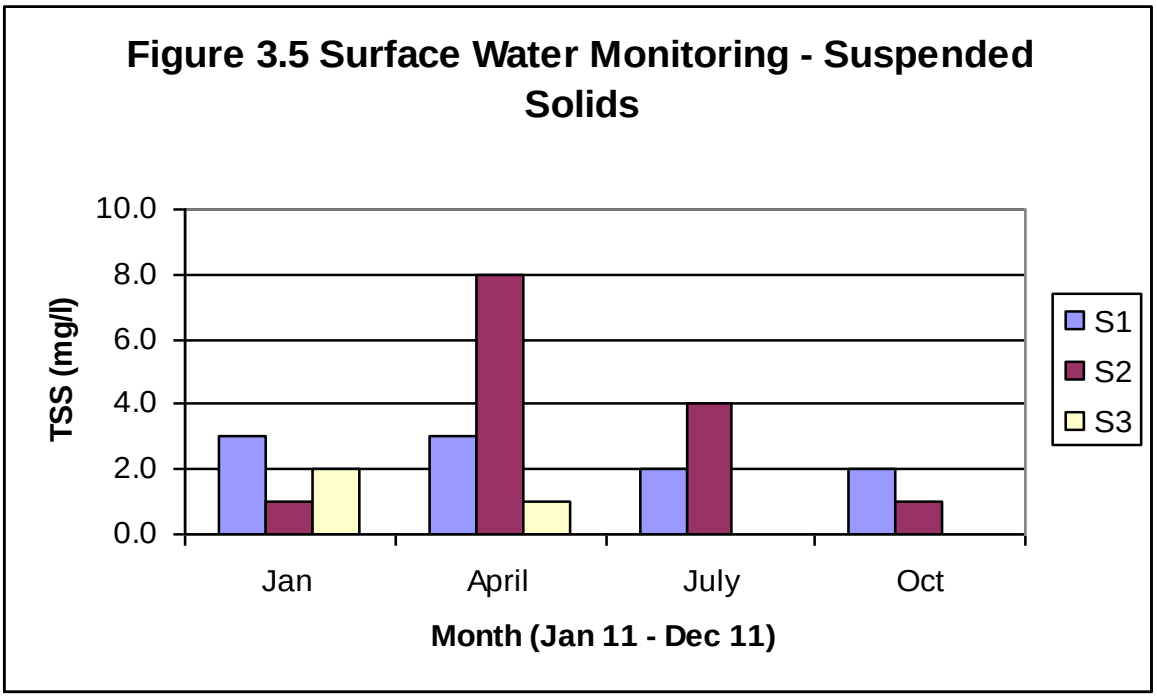

Figure 3.5 Surface Water Monitoring - Suspended Solids (ELV 35mg/l)

3.2. Emissions to Surface Water

The Licence requires that emissions to surface water be measured quarterly (subject to rainfall events) at SWE1A and SWE1B. Schedule C.3 sets out Emission Limit Values for Chemical Oxygen Demand (COD) and Oils, Fats, Greases (OFG). Condition 6.6.2 sets out the trigger levels for Biological Oxygen Demand (BOD) and Suspended Solids (SS).

Table 3.2 Due to insufficient sampling volumes at rainfall events no sample was obtained during the reporting period.

Monitoring Point	SWE1A				SWE1B			
	COD mg/l	OFG mg/l	BOD mg/l	SS mg/l	COD mg/l	OFG mg/l	BOD mg/l	SS mg/l
ELV*	**150**	**10**	**25**	**35**	**150**	**10**	**25**	**35**
January	No flow	No flow	No flow	No flow	No flow	No flow	No flow	No flow
April	No flow	No flow	No flow	No flow	No flow	No flow	No flow	No flow
July	No flow	No flow	No flow	No flow	No flow	No flow	No flow	No flow
November	No flow	No flow	No flow	No flow	No flow	No flow	No flow	No flow

Table 3-1 Emissions to Surface Waters

3.3. Emissions to Foul Sewer

Condition 8.1 requires that emissions to foul sewer (at F6) be monitored on a quarterly basis. No exceedence of the Emission Limit Values as set out in Schedule C.4 of the Waste Licence was recorded for any emissions to the sewer over 4 sampling events. The results are illustrated in Figures 3.6 to 3.12. A table of monitoring results is included in the Appendix.

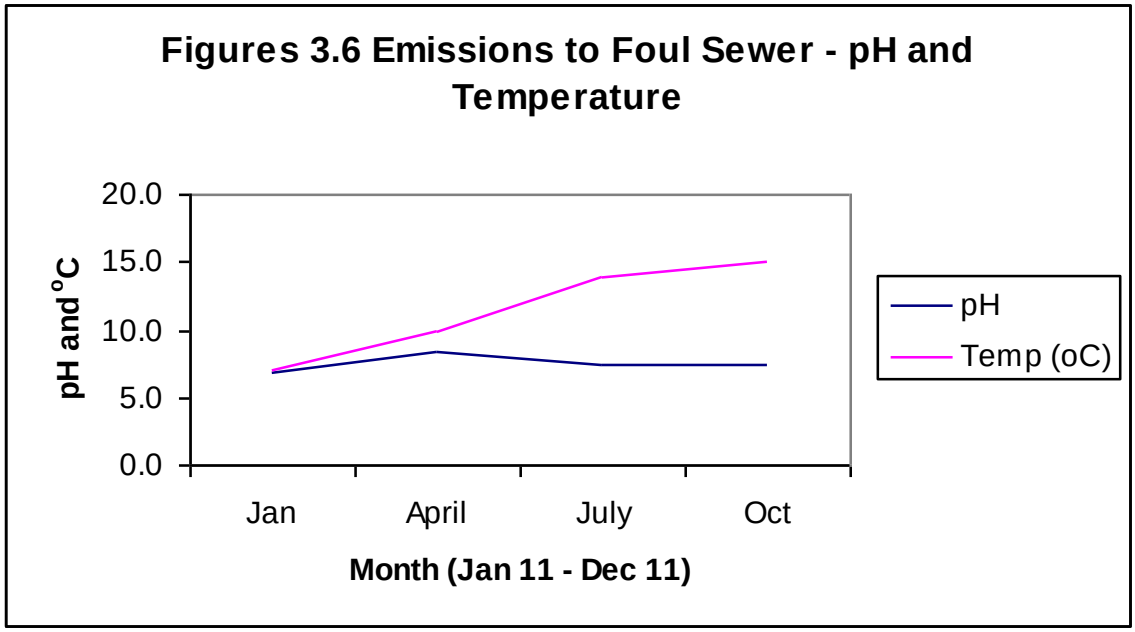

Figure 3.6 Emissions to Foul Sewer - pH and Temperature (ELV 5-10 & 42^{O}C)

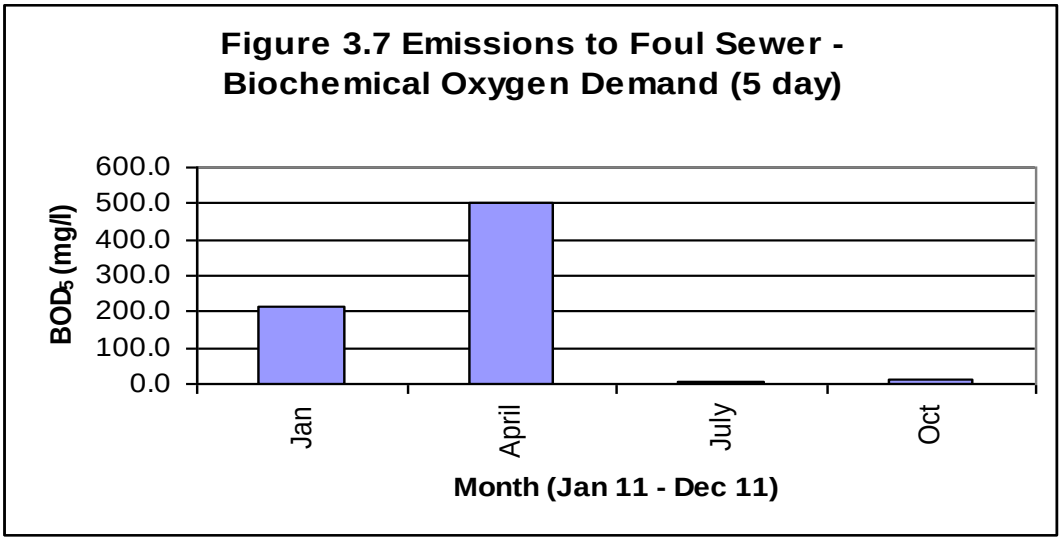

Figure 3.7 Emissions to Foul Sewer - Biochemical Oxygen Demand (5 day) (ELV 10,000mg/l)

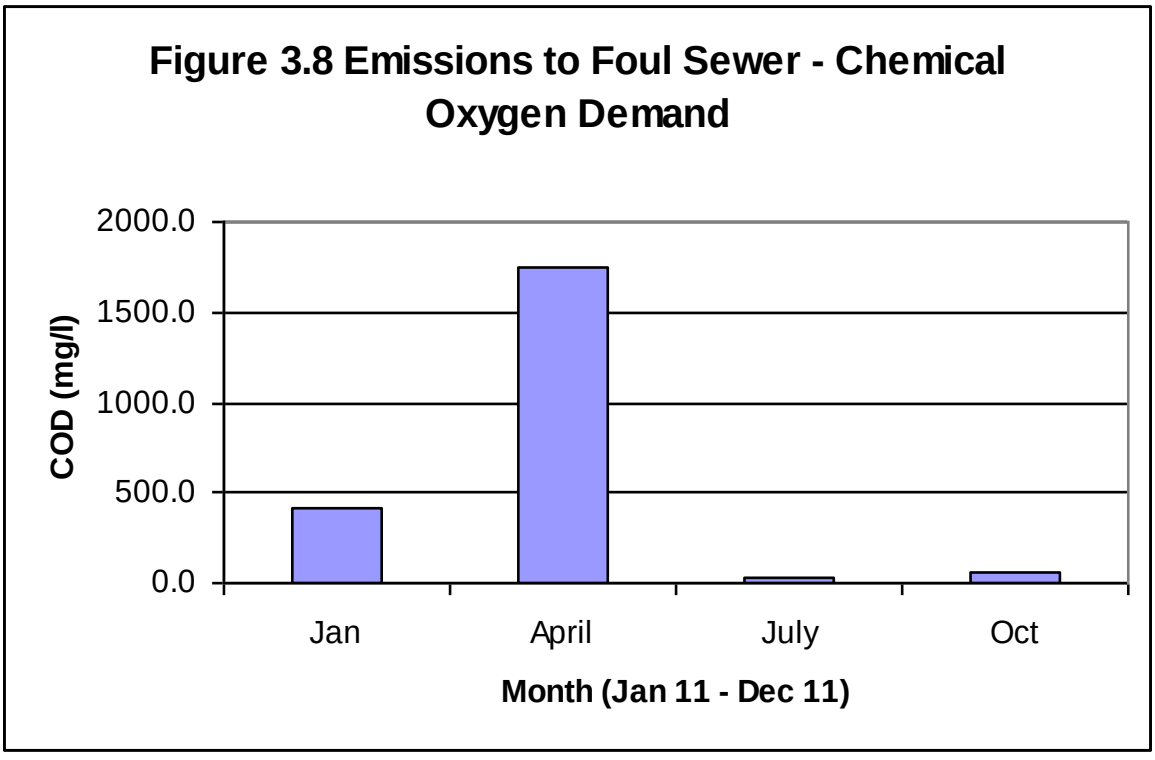

Figure 3.8 Emissions to Foul Sewer - Chemical Oxygen Demand (ELV 30,000mg/l)

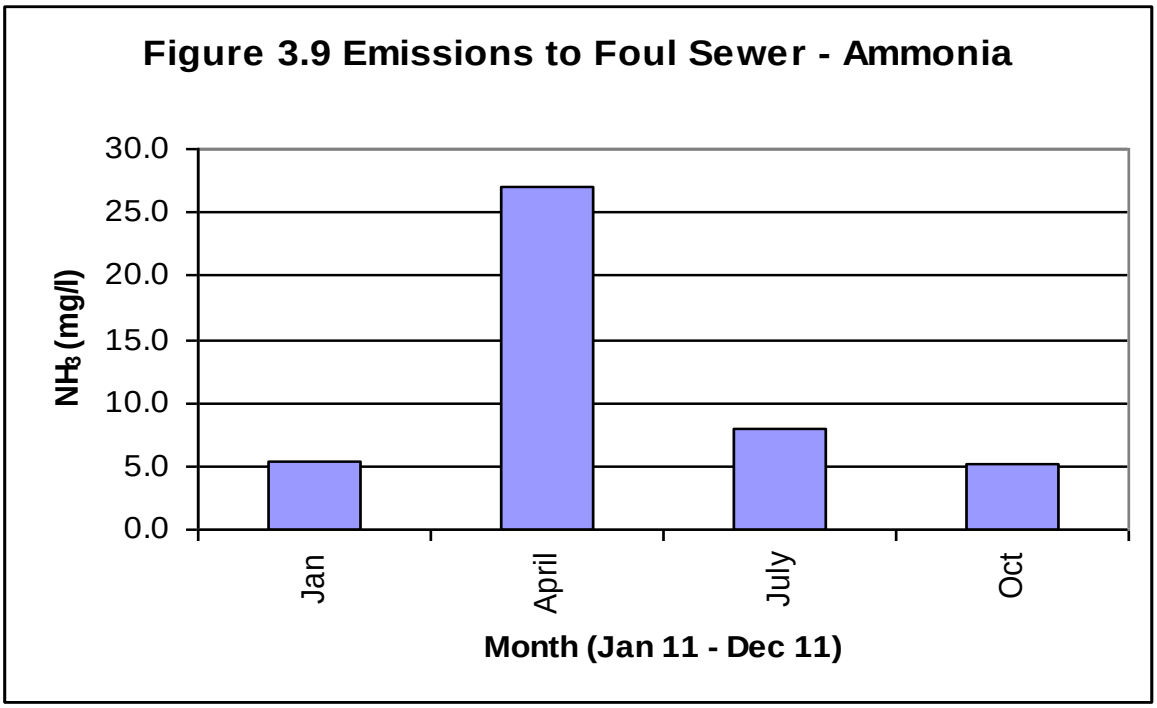

Figure 3.9 Emissions to Foul Sewer – Ammonia (ELV 50mg/l)

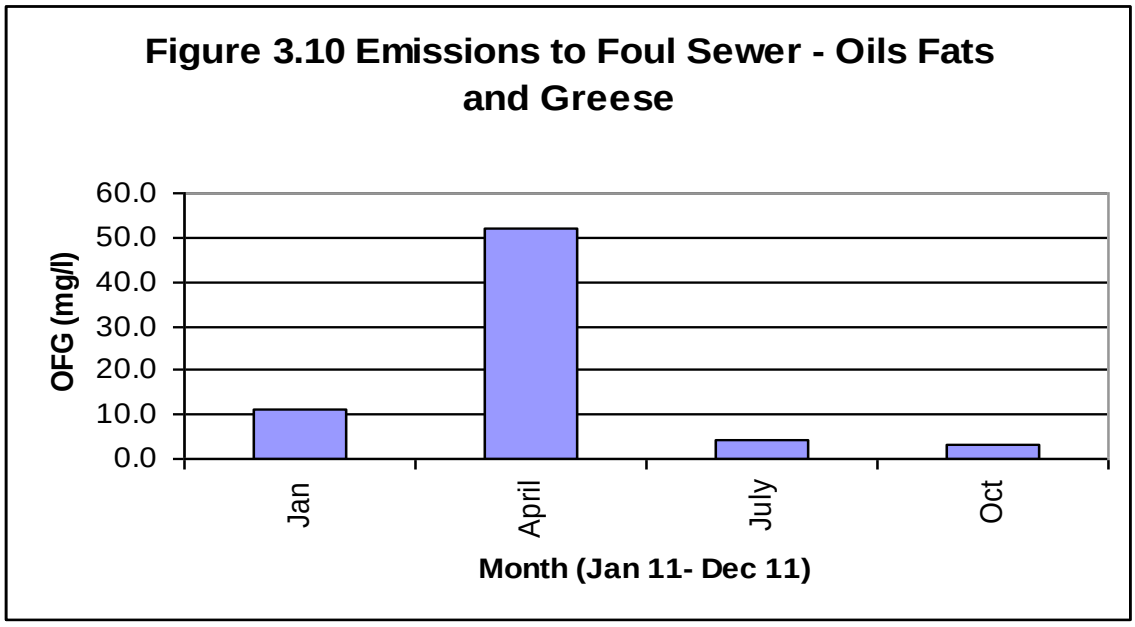

Figure 3.10 Emissions to Foul Sewer - Oils Fats and Grease (ELV 100mg/l)

(OFG detectable limit: <2mg/l)

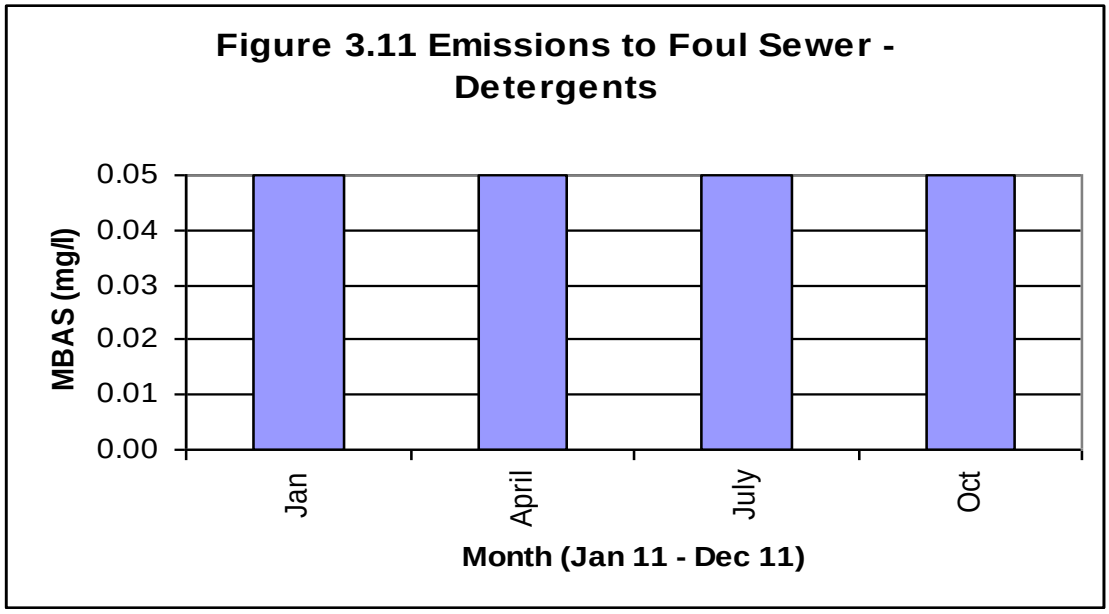

Figure 3.11 Emissions to Foul Sewer – Detergents (ELV 100mg/l)

(Detergents detectable limit: <0.05mg/l)

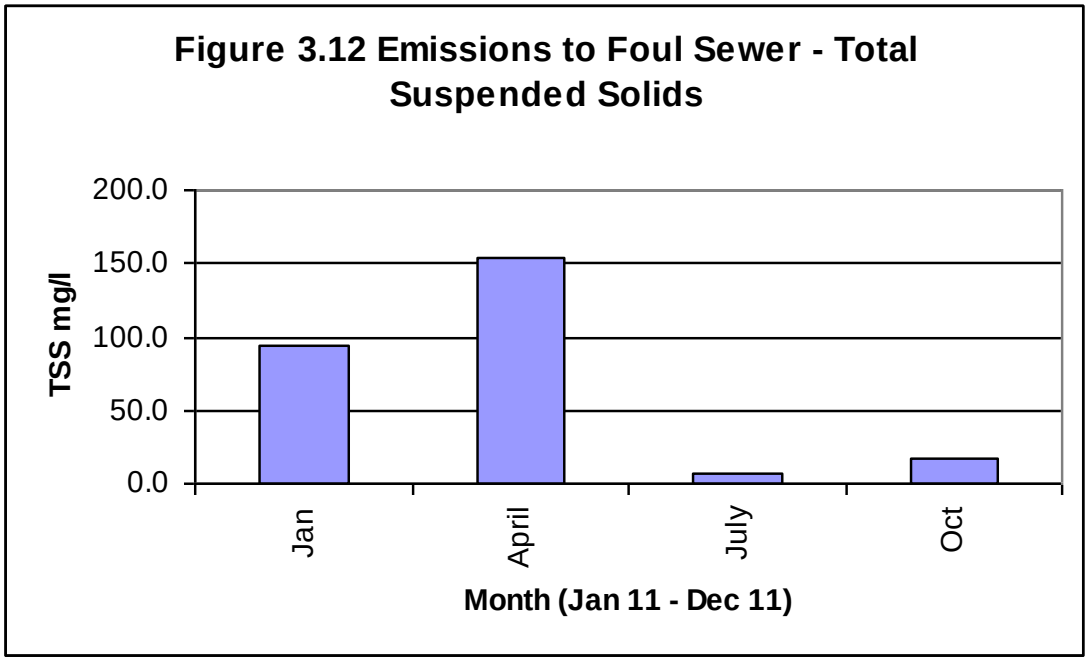

Figure 3.12 Emissions to Foul Sewer - Total Suspended Solids (ELV 2,000mg/l)

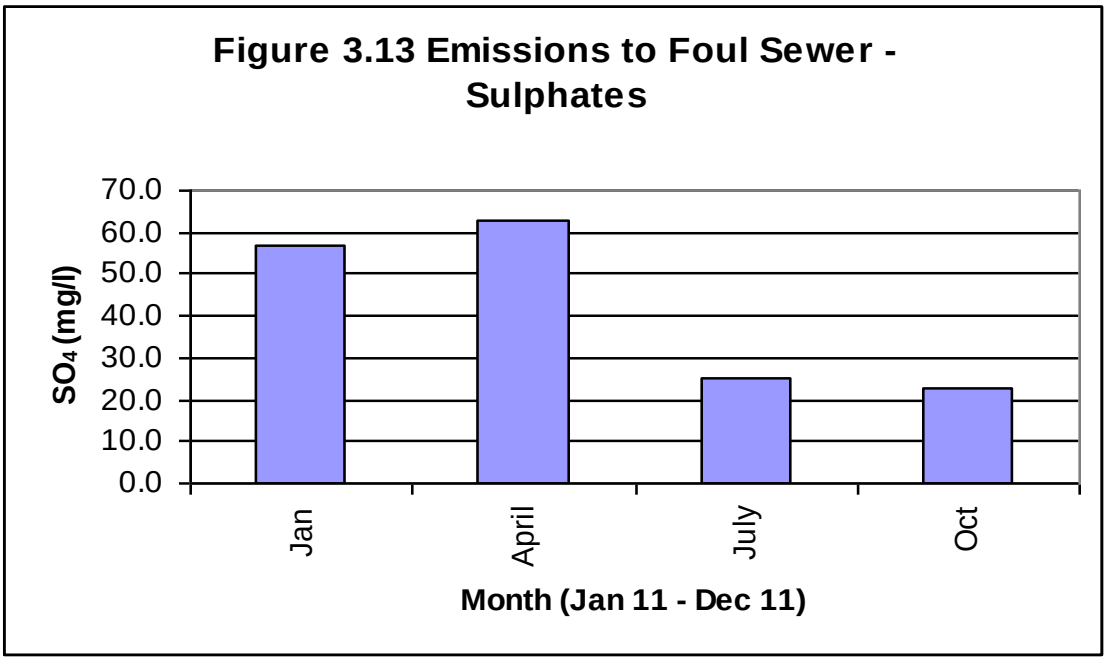

Figure 3.13 Emissions to Foul Sewer – Sulphates (ELV 500mg/l)

3.4. Noise

Noise Monitoring was carried out on 31st of August 2011 and 1st of September 2012. Monitoring was done for both night and day. Noise monitoring results are presented below in Table 3.2.

Location	Point Location NG Ref.	Sound Pressure dB(A) $L(A)_{EQ}$	$L(A)_{10}$	$L(A)_{90}$
Daytime				
N1				
	Boundary	60	62	53
N2	Boundary	60	55	52
N3	Boundary	66	54	50
N4	Boundary	66	59	46
N5	Nearest NSL	63	66	55
Night-time				
N1				
	Boundary	47	42	32
N2	Boundary	46	36	32
N3	Boundary	46	35	29
N4	Boundary	42	33	30
N5	Boundary	51	43	30

Table 3-2 Noise Monitoring Results Summary

NSL = Nearest Noise Sensitive Location.

The site boundary noise limits specified in the licence are that of 55dB(A) daytime and 45dB(A) night-time.
The results presented in Table 3.2 indicate that these limits were exceeded at nine of the monitoring points during daytime and night-time monitoring.
Levels of noise attributed to neighbouring industrial facilities and Road traffic from the Greenhills road. This road is busy both during the day and night.
The noise levels recorded ranged from 59.5dB(A) at N2 to 65.7dB(A) at N3 during the day time and from 41.9dB(A) at N4 to 51.5dB(A) at N5 during the night time.
During the day and night-time survey elevated noise levels from high volumes of traffic on the Greenhills and Ballymount Roads contributed to the readings recorded at N2, N3, N4, N5 and to a certain degree at N1. General background sources from the surrounding industrial sites also contributed to the noise levels recorded.
During the day-time survey the former (now vacant) Rehab Glass Recycling facility did not contribute to any elevated noise levels unlike in previous surveys when the Rehab Glass Recycling facility was active.
The recorded noise levels indicate a breach of the limits as set-out in the waste licence. However due to the relatively close proximity of monitoring locations to the Greenhills and Ballymount Roads the noise levels exceed the day-time 55dB(A) limit at all properties. The night time limit of 45dB(A) was exceeded at location N1, N2, N3 and N5. This suggests that the site does not exceed limits due to on-site activities but exceeds rather as a result of the existing noise climate that already exists at sensitive locations. It must also be noted that the site is located within a busy industrial estate and the existing ambient noise climate is already above the threshold limits.

3.5. Dust and Air Quality Monitoring (PM10)

Dust monitoring was carried out during March to August 2011. PM_{10} monitoring was carried out during August 2011. Monitoring occurred at three locations during the reporting period and was in full compliance with Condition 8.1. The monitoring established the impact of site operations on localised Air Quality. Results of this monitoring are presented in Table 3.5. The Dust results for D1, D2 and D3 are in compliance with guideline limits values (TA Luft Dust- 350 mg/m^2/day). PM_{10} results are also in compliance with guideline limits (EC/1999/30 PM_{10}- 50 ug/m^3).

Monitoring Location	Dust March (mg/m^2/ day)	Dust June. (mg/m^2/ day)	Dust Aug. (mg/m^2/ day)	PM10 (ug/m3) Aug 2008
D1	110	91	76	39
D2	71	142	68	36
D3	134	89	102	35

Table 3-3 Dust and PM10 Monitoring Results

3.6. Odour Monitoring

Table 3.4 sets out the results for odour concentrations from direct stack monitoring of the odour control system.
Direct monitoring of the odour abatement stack allows for the assessment of the performance of the odour control system. The system is monitored for mechanical performance, volumetric airflow rate (EN13248-1:2002), static pressures (ISO10780:1994), odour threshold concentration (EN13725:2003) and PID VOC's (USEPA TM21A) to assurances to that the odour control system is achieving adequate performance to prevent odours causing impact beyond the site boundary. The gathered odour is inputted into a dispersion model (AERMOD Prime 07026) with 10 years of meteorological data (Dublin 1997 to 2006 inclusive), which allows for the assessment of the odour control system in accordance with Irish and UK EPA requirements and guidelines (odour isopleths of less than or equal to 3.0 Ou_E/m^3 at the 98^{th} percentile of hourly averages for 10 years of meteorological data).

Outlet 1 & 2 Sample Average Period	Outlet Threshold Concentration $Ou_E m^{-3}$	Volumetric Air Flow Rate (m^3s^{-1})	Odour Emission Rate From Carbon Filtration System $Ou_E s^{-1}$
March	335	23.10	7,742
June	195	24.57	4,803
September	211	25.33	5,349
December	246	25.56	6,296

Table 3-4 Odour Concentrations.

3.6.1. Interpretation of Monitoring Results

3.7.1 Surface Water Background Monitoring and Emissions to Surface Water

The background surface water monitoring results indicate that the levels of analyses detected downstream of the facility did not exceed the values detected upstream in 2011.

Sample collection and analysis of surface water emissions was not carried out during the reporting period due to a lack of rainfall events. Analysis of SWE1B was not undertaken for the period due to a lack of rainfall events. Future samples of surface water will be taken by council staff during adequate rainfall events to insure complete analysis.

3.7.2 Emissions to Foul Sewer

There was no exceedence of the ELVs recorded in Schedule C.4 of the Waste Licence over 4 sampling events in 2011.

3.7.2.1 pH

pH results were typically neutral to alkaline during the reporting period, with results in January reporting slightly acidic levels..

3.7.2.2 Temperature

Temperature was recorded on all four occasions during the reported period. The temperatures recorded were within the specified limits as set out in Schedule C.4 of the Waste Management Licence. The temperature recorded for this reporting period ranged between 5 and 14.0^{o}C .

3.7.2.3 Biochemical Oxygen Demand

No exceedence occurred during the monitoring period. The maximum and minimum BOD levels were recorded at 504 mg/l and 7 mg/l respectively. The average BOD level was 185 mg/l, down on last years figure of 490mg/l.

3.7.2.4 Chemical Oxygen Demand

All levels measured during the reporting period were compliant with the Emission Limit Value as set out in the Waste Licence W0003-03. The levels ranged from 26 mg/l to 1742 mg/l.

3.7.2.5 Ammonia

No exceedence was reported during the previous reporting period. The Average level was 11.4 mg/l. The maximum level was measured at 27 mg/l.

3.7.2.6 Total Suspended Solids (TSS)

No exceedence was reported during the previous reporting period. Average levels were 68 mg/l which was lower than last years figure of 230 mg/l.

3.7.2.7 Oils Fats and Grease (OFG)

All recorded values during the reporting period were compliant with the Emission Limit Value as set out in the Waste Licence 0003-03. The average level recorded for the year was 19.7 mg/l.

3.7.2.8 Detergents

As with the previous reporting year, all samples for this period indicate compliance with the ELV for detergent emissions to foul sewer. The levels throughout the period recorded less than 0.05 mg/l.

3.7.2.9 Sulphates

All samples for this period indicate compliance with the ELV for detergent emissions to foul sewer. The average levels recorded for this reporting year was 42mg/l, which is up on last year which recorded an average of 28mg/l respectively.

3.7.3 Noise

The results presented in Table 3.2 indicate that daytime and night-time noise levels recorded limits that were exceeded at nine of the monitoring points during daytime and night-time monitoring.

Road traffic was the dominant source of noise ($L(A)_{10}$) at all of the locations, which primarily emanates from the busy Greenhills Road which adjoins the site.

These results indicate that the facility has no significant impact on the surrounding environment. There was no complaints received at the baling station for noise nuisance.

3.7.4 Dust and Air Quality Monitoring (PM_{10})

The results presented in Table 3.3 indicate that the TA Luft limit for dust deposition (350mg/m^2/d) was not exceeded during the reporting period at monitoring locations (D1-D3).

One set of monitoring results was obtained for PM_{10} levels at locations D1-D3. None of the results for PM_{10} exceeded the Emission Limit Value as set out in the Waste Licence 0003-03

3.7.5 Odour Monitoring

Direct Odour monitoring of the abatement stack was carried out on a quarterly basis during the reporting period.
To support daily odour inspections carried out by the Environmental Manager or suitably qualified person, quarterly odour monitoring was initiated. Independent monitoring consultants conduct monitoring at the facility. On completion of the monitoring, a report is issued assessing the impact of the operation on its environs. The assessments are presented in the form of odour concentration contours produced using US EPA approved dispersion modelling techniques.
All direct stack odour threshold concentrations had an average range between 195 OU_E/m^3 335 OU_E/m^3 for the reporting period 2011.

One complaint was received at the facility during the reporting period. No distinct odours were detected within the vicinity of the period throughout the year. All ambient air concentrations of TVOC represented characteristics of traffic based emissions.

4. SITE DEVELOPMENT WORKS

Works undertaken to, at a minimum, comply with the Licence conditions during the reporting period are summarised in Table 4.1.

Requirement	Time Scale
Erect storage facility for WEEE	Not Achieved
Installation and investment to a waste compaction system	Achieved.
Resurface WRA floor	Not Achieved
Divert surface water to foul	Not Achieved

Table 4-1 Site Development Works during Reporting Year

Requirement	Time Scale
Erect storage facility for WEEE	December 2012
Expand acceptance of recyclables in the Civic Amenity	December 2012 .

Table 4-2 Site Development Works for the Forthcoming Year

5. WASTE RECEIVED BY AND CONSIGNED FROM THE FACILITY

5.1. Wastes Baled and Compacted

5.1.1 Waste Composition

Waste accepted at the Waste transfer station is Municipal Solid Waste (MSW) and cleansing waste from Dublin Corporation, South Dublin County Council, as well as non-recyclable waste from the Civic Amenity Facility. South Dublin County Council ceased collecting MSW waste on 31st March 2011. The quantities of waste accepted at the Waste transfer station are summarised in Table 5.1.

Sources of MSW	Tonnes 11	Tonnes 10	Tonnes 09	Tonnes 08	Tonnes 07	Tonnes 06	Tonnes 05	Tonnes 04
Dublin Corporation (DCC)	62,172	89,340	103,236	119,988	135,605	139,629	141,582	144,463
South Dublin County Council (SDCC)	8,498	44,283	54,396	57,509	61,534	60,559	61,353	63,411
Civic Amenity	10,065	9,731	10,738	11,187	7,407	4,189	3,360	2,495
Other	2,199	4,685	5617	8,946	43,617	62,847	72,518	65,694
Total	82,934	148,039	173,987	197,632	249,986	267,225	278,814	276,063

Table 5-1 MSW Quantities into Facility

5.1.2 Baled and Compacted Waste Quantities

Monthly quantities of baled and compacted waste sent to Landfill are shown in Figure 5.1.

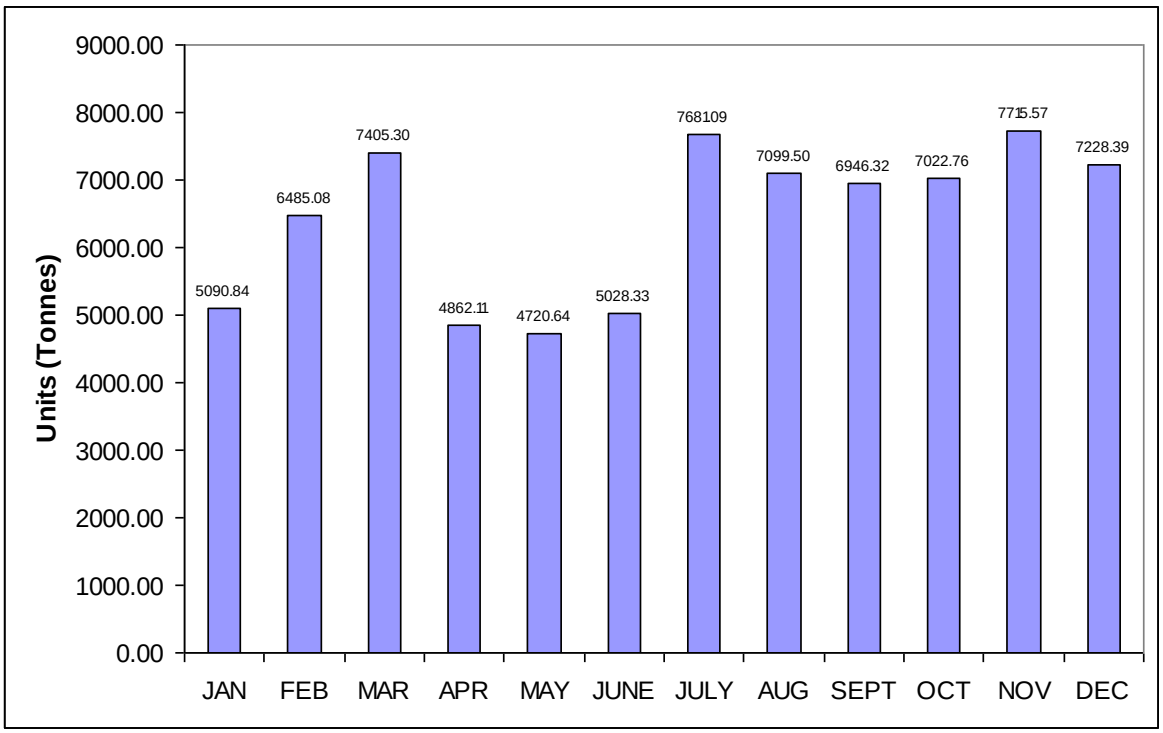

Figure 5.1 Monthly Waste Quantities to Landfill 2011

5.2. Civic Amenity

5.1.2 Waste Composition to Civic Amenity

The Civic Amenity Facility is a waste deposit facility for recyclable and non-recyclable waste delivered by members of the general public. Receptacles are provided for the deposit of glass, textiles, plasterboard, rubble, household hazardous, waste oil, paper, green waste, waste oil, batteries, beverage cans, plastics, scrap metal and white goods/ electrical items. Quantities of each of these wastes received are shown in Table 5.2 and Figure 5.2.

Bulky waste referred to in Table 5.2 consists of waste, which due to its bulky nature is unsuitable for baling/compaction. This waste typically is consists of furniture, timber and mattresses, in general, materials that cannot be compacted to produce physically stable bales.
Bulky waste was collected in bins at the Civic Amenity and was shredded prior to being added to waste for baling/compaction and referred to in table 5.2.
On 18th of July, the operation of shredding bulky waste for land filling ceased. From July 18th this waste stream was sent off site for recovery.

Description	Tonnes 2011	Tonnes 2010	Tonnes 2009	Tonnes 2008	Tonnes 2007	Tonnes 2006	Tonnes 2005	Tonnes 2004	Tonnes 2003
Glass	99.12	103.94	118.54	135.81	168.08	149.84	105.55	71.04	23.05
Paper	52.70	51.62	51.68	68.67	117.06	104.54	138.78	155.59	94.37
Textiles	25.63	29.62	40.18	37.73	41.66	52.45	25.32	21.85	0.66
WEEE	781.04	855.38	873.90	882.53	662.25	740.20	590.9	289.96	165.49
Plastic	11.30	18.04	9.64	33.66	80.31	46.00	48.62	23.73	8.33
Waste Oil	43.56	36.72	26.86	47.9	32.30	35.82	34.7	38.06	29.22
Green waste	1,940.86	2,307.12	1850.06	1,454.58	1384.91	889.22	801.21	759.48	539.2
Batteries	14.14	21.06	23.72	27.36	57.02	66.16	36.46	25.04	12.16
Beverage cans	1.64	1.41	1.31	2.85	2.82	5.49	4.71	7.52	1.37
Metal	343.32	440.55	447.20	513.64	502.42	392.41	431.68	459.50	333.76
Black bag Waste to baling station for baling	2446.3	3653.84	3238.16	3722.62	7407.09	4189.2	3,360.2	2,492.0	1,694.6
Bulky waste	4057.91	6,077.04	7499.35	7464.49	1365.3	8310.6	5,549.2	3,016.0	2,410
CA Black bag for Recovery	1136								
Bulky Waste for Recovery	2425.21								
Household Hazardous	33.66	24.9	29.32	45.2	85.00	43.66	28.57	N/A	N/A
Polystyrene					0.98				
Plasterboard	8.54	41.76	46.16	61.55	31.23				
Rubble	789.08	724.66	655.48	777.57	781.31				
Cardboard		230.2	232.49						
Waste Edible Oil	0.94	.60	0.74						
Wood	66.02	140.06	336.76						
Ink Cartridges	0.28	0.36	0.20						
Gas Cylinders	3.54	4.46	5.82						
Metal Packaging	.20	0.92							
Total Civic Amenity	14,487.57	14,764.08	15,487.57	15,276.1	12,719.7	14,973	11,156	7,359	6,173

Table 5-2 Composition of Waste Received at the Civic Amenity Facility

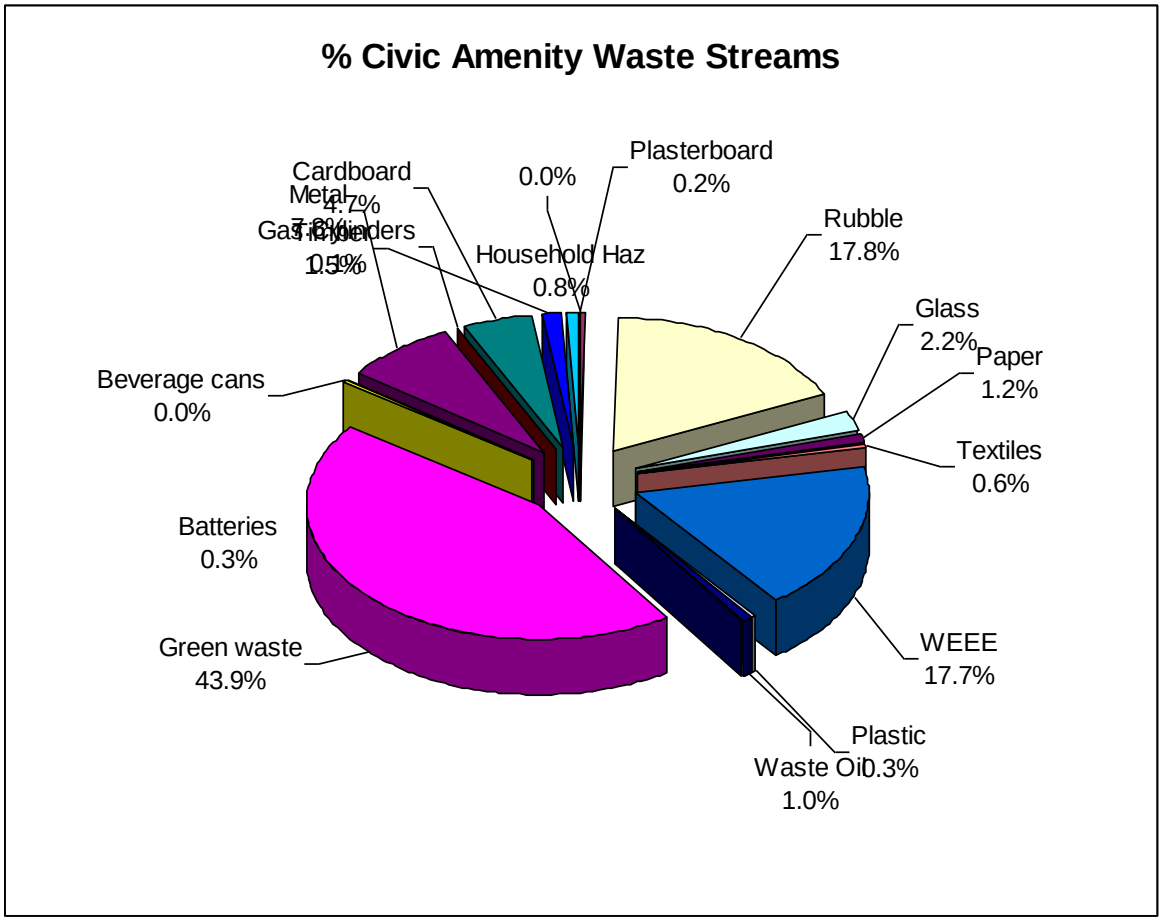

Figure 5.2 Recyclable Waste Types Received at the Civic Amenity Facility

5.3 Waste Received and handled

Waste received at the baling facility during the reporting period amounted to 82,933.96 tonnes, which is 241,546.04 tonnes below the Licence limit of 324,480 tonnes per annum

The following figure is a summary of the waste movements to and from the facility. Small differences in quantities entering and leaving the site are due to the 4% allowed tolerance error on the weighbridge (Class III accuracy: Source EN45501: 1992).

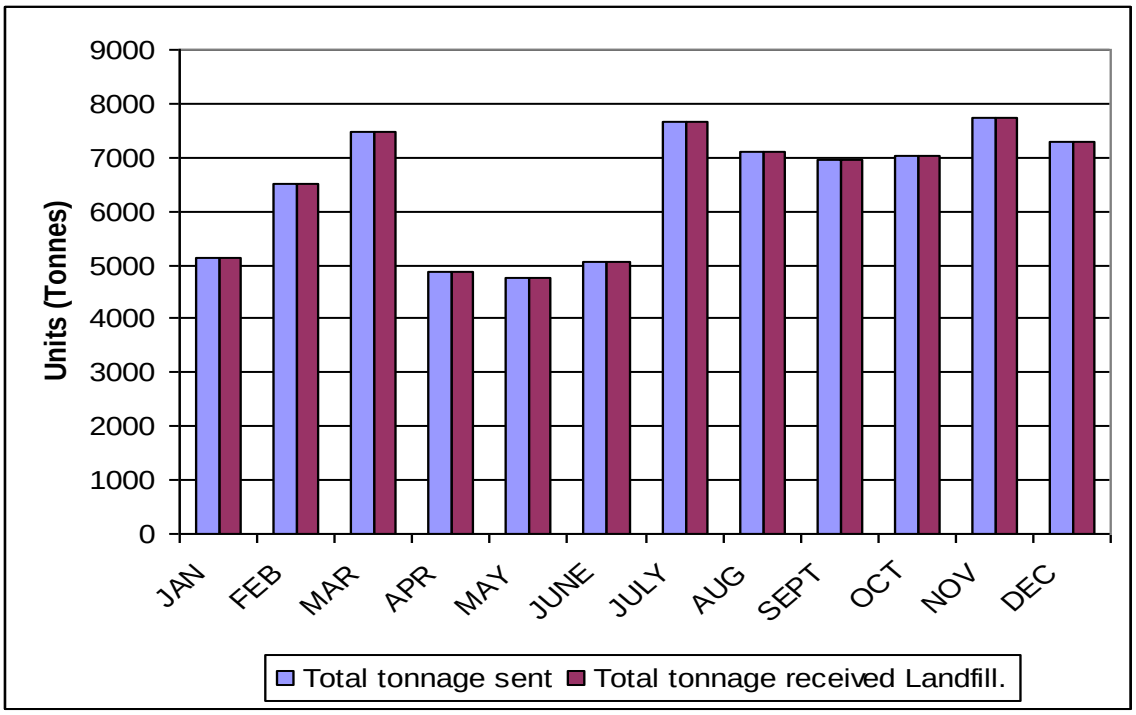

Figure 5.3 Tonnage Received and Sent in 2011 to the Baling Station and to Landfill

6. NUISANCE CONTROL

6.1. Odour Control

Historically odour was the largest source of nuisance for the facility resulting in 100% of all complaints received at the facility.

6.3 Daily Odour monitoring

In compliance with Condition 10.3 of the Waste Licence, a daily odour inspection of the facility environs is carried out and staff of the Council's Environmental Services Department keeps a written and electronic record.

6.3 Quarterly Odour Monitoring

In Compliance with Schedule D.6 of the Waste Licence, an independent contractor carries out quarterly odour monitoring.

6.3 Odour Emission control system

The in-situ odour emission control system is a dry dust filtration and annular bed carbon filtration system. The annular carbon filtration unit provides improved guaranteed odour removal efficiencies and also provide an increase in treatment capacity for the facility.

- Increased design treatment capacity of approximately 25,000 m3/hr and a maximum increased treatment capacity of up to 30,000 m3/hr.
- Increased odour threshold concentration performance to 300 OuE/m3.
- Continuous performance independent of cyclic odour loading.
- Elimination of dust and particulate plugging of the bed medium through the use of a regenerative self-cleaning dust filtration plant.

6.2. Litter Control

In compliance with Condition 7.4 of the Waste Licence, the licensee removes any litter in or around the facility immediately. An Iveco 130E15 watering/sweeping machine is present on site at all times. No complaints were received at the baling station for litter nuisance.

6.3. Dust Control

In compliance with Condition 7.6 of the Waste Licence, in dry weather the roads and hard standing areas are sprayed with water as and when required. No complaints were received at the baling station for dust nuisance.

6.3.1. Dust Monitoring

In Compliance with Schedule D.6 of the Waste Licence, an independent contractor carries out dust monitoring three times a year.

7. ENVIRONMENTAL INCIDENTS AND COMPLAINTS

7.1 Incidents Summary

Condition 11.2 of the Waste Licence requires that the licensee shall make written records of the environmental incidents. No incidents were recorded during the reporting period.

7.1. Complaints Summary

There was one complaints received from local residents or commercial interests during the reporting period.

7.2. Corrective Action

7.2.1. Surface/Foul water emission non compliance

- All interceptors emptied and cleaned when required and at a minimum of every two weeks by licensed contractors. The surface water drainage system is cleaned every quarter.

7.1.1 Fast Acting Doors.

- All 6 doors into the baling shed and waste reception area comprise of fast acting roller shutter doors.
- All doors were serviced in March 2011.
- Air curtains are installed to door at the waste reception to prevent odours escaping when doors are in operation.
- Door contractor is contracted to work on the door on the same day.
- Complete set of spares for both size doors on site.

7.3.3 Odour

- An activated carbon odour control unit is in place to treat malodorous air.
- Daily odour inspections conducted.
- Quarterly Odour monitoring conducted by independent consultants.
- The activated carbon was replaced in May 2011.
- The dust filters were replaced in February 2011.

7.3. Non-Compliance Summary

No non-compliances were received at the facility during the Reporting period:

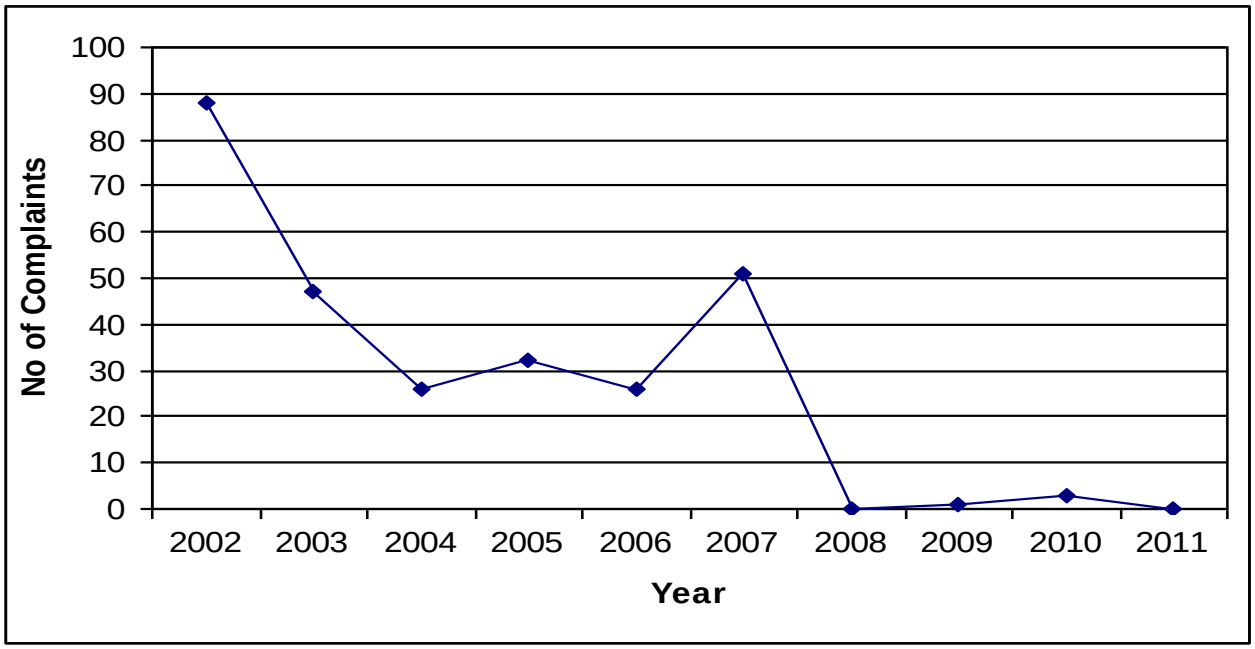

Figure 7.1 Number of Complaints

8. ENVIRONMENTAL MANAGEMENT PROGRAMME

8.1. Report

In compliance with Condition 2.3 of the Waste Licence, a review was carried out of the Environmental Management Plan (EMP); the reviewed EMP was submitted to the Agency for agreement on the 31st March 2012.
Site operational procedures are described in the EMP.
The schedule of Environmental Objectives and Targets for the reporting year, and a proposal for the forthcoming year, are summarised below.

8.1.1. Schedule of Environmental Objectives and Targets

A detailed Schedule of Environmental Objectives and Targets for the reporting period is presented in Table 8.1.

8.1.2. Achievement of Environment Objectives and Targets

In all cases the Council has made significant efforts to achieve all of the targets set by the individual objectives. Not all targets were achieved within the reporting period but corrective measures were put in place when difficulties were encountered. A summary of the targets achieved is presented in Table 8.1.

The overall responsibility for achieving these objectives and targets lies with the Senior Engineer of South Dublin County Council and Managing Director of Greenstar. Items referred to within these objectives are site specific and are the combined responsibility of the Council's Environmental Manager and Greenstar's Facility Manager

Objective/ Target	Description	Status
Objective 1	**To ensure continued implementation of the environmental Policy**	
Target 1.1	Continue to conduct Environmental Training refresher course for all Baling Station Staff.	Achieved- Ongoing.
Target 1.2	Mechanicical Grab Training	Achieved
Target 1.3	Front End Loader Training	Achieved
Objective 2	**To promote public awareness of the facility and encourage use of the civic amenity/recycling facilities**	
Target 2.1	Further expansion of recycling facilities at the Civic Amenity Facility by increasing the number of waste types accepted for recycling.	Achieved
Target 2.2	To hold an open day for the facility where members of the local community will get a guided tour of the facility and its operations	Achieved

Target 2.3 Target 2.4	Provide a specific web site for Ballymount detailing all services, costs & destination sites. Installation of a WEEE Shed/covered area	Not Achieved Not Achieved
Objective 3	**To Continue site development/improvement**	
Target 3.1 Target 3.2 Target 3.3	Develop Tetrapak recycling. Painting of Civic Amenity Develop oil filter recycling	Not Achieved Achieved Achieved
Objective 4	**To minimise the environmental impact arising from nuisance caused by the facility**	
Target 4.1 Target 4.2 Target 4.3 Target 4.4	Reduction of water consumption Decrease in the use of electricity Decease hydraulic oil use Elimination of Baling Wire	Achieved Achieved Achieved Achieved
Objective 5	**To comply with Emission Limit Values in Schedule E of Waste Licence**	
Target 5.1 Target 5.2 Target 5.3 Target 5.4 Target 5.5 Target 5.6	Reinstall Bio-Tubes to all interceptors to reduce OFG levels. To divert all facility surface water to foul drains through a flow attenuation tank. Install new Dust Filter Cartridges in odour control system Replace Activated Carbon in odour control system. Full service on WWTP. Replace floor in Waste Reception Area	Achieved Not achieved- Carry Forward December 2012 Achieved Achieved Achieved Not Achieved
Objective 6	**To successfully control emergencies at the facility**	
Target 6.1	Review and update of site health and safety plan and site risk assessments	Achieved
Target 6.2	Installation of 2 new conveyor lines and static compaction systems	Achieved

Table 8-1 Achievement of Environment Objectives & Target

8.2. Proposal

The Environmental Objectives and Targets proposed for the forthcoming year (listed in Table 8.2) are based on the requirements of the current Waste Licence. However, should the Agency grant a revised licence within this period, the proposed schedule would in turn require revision to reflect any new conditions.

Table 8-2 Proposed Environment Objectives & Targets for 2012

Target Number	Description	Time Frame	Responsibility
Target 1.1	Continue to conduct Environmental Training refresher course for all Baling Station Staff.	Quarterly in 2012	Facil Manager
Target 1.2	Forklift Training	1st May 2012	Facil Manager
Target 1.3	Manual Handling Training	30th May 2012	Facil Manager
Target 2.1	Further expansion of recycling facilities at the Civic Amenity Facility by increasing the number of waste types accepted for recycling.	31st December 2012	Env. Manager
Target 2.2	To hold an open day for the facility where members of the local community will get a guided tour of the facility and its operations	30th April 2012	Env. Manager
Target 2.3	Provide a specific web site for Ballymount detailing all services, costs & destination sites.	31st October 2012	Env. Manager
Target 2.4	Installation of a WEEE Shed/covered area	31st Dec 12	Env. Manager
Target 2.5	New Civic Amenity Signage	31st Dec 12	Env. Manager
Target 3.1	Develop Tetrapak recycling.	31st June 2012	Facil Manager.
Target 3.2	Painting of Civic Amenity	31st Aug 2012	Facil Manager
Target 4.1	Reduction of water consumption	31st Dec 12	Facil Manager
Target 4.2	Decrease in the use of electricity	31st Dec 12	Env. Manager
Target 4.3	Decease hydraulic oil use	31st Dec 12	Facil Manager
Target 4.4	Installation of Rain Water Harvesting	31st Dec 12	Facil Manager
Target 5.1	Reinstall Bio-Tubes to all interceptors to reduce OFG levels.	30th Apr 2012.	Env. Manager.
	To divert all facility surface water to foul drains through a flow attenuation tank.	31st Dec 2012.	Env. Manager
	Install new Dust Filter Cartridges in odour control system	30th Dec 2012.	Env. Manager
	Replace Activated Carbon in odour control system.	31st May 2012.	Env. Manager
	Full service on WWTP.	31st Aug 2012.	Env. Manager
Target 6.1	Review and update of site health and safety plan and site risk assessments	31st Dec 2012	Greenstar Safety Rep.
	Training of site Fire warden	31st Dec 2012	Greenstar Safety Rep.

Operational and Environmental Procedure

Documented operating procedures for the Waste transfer station, which are described in detail in the Environmental Management Plan are sub-divided as follows: -

- Standard Operating Procedures
- Environmental Procedures
- Emergency Response Procedures

A brief summary of these is provided below.

8.1.3. Standard Operating Procedures

Standard Operating Procedures have been developed for each of the routine operations conducted at the facility. The purpose of these is to ensure that routine tasks are carried out in the same manner each time they are undertaken, even if different operators perform them. Their implementation will encourage quality as well as safe work practices. Regard is also had for the site specific Safety Statement when carrying out any operations at the facility.

The routine operations identified are as follows:

- SOP 001- Weighbridge operation
- SOP 002- Waste Acceptance at the Waste transfer and Civic Amenity Facility
- SOP 003- Compaction of waste
- SOP 004- Loading and shunting of containers
- SOP 005- Environmental Monitoring;
- SOP 006- Housekeeping;
- SOP 007- Operation Of Odour Control System
- SOP 008- Operation/Maintenance Of Wastewater Treatment Works
- SOP 009- Opening/Closing Of Waste Reception Shutters
- SOP 010- Weekly Drainage Inspection
- SOP 011- Fuel Storage and Pollution Control Inspection
- SOP 012- Weekly Interceptor Inspection
- SOP 013- Monthly Over ground Inspection Form
- SOP 014- Emergency Generator Operation/Maintenance
- SOP 015- Nuisance Inspection

8.3.2. Environmental Procedures

Environmental procedures have been developed in order to maintain the Environmental Management System and to ensure continued improvement in the operation and management of the facility. Environmental Procedures are subject to change on evaluation.
The Environmental Procedures are as follows:

- EPROC 001- Corrective Action Procedures
- EPROC 002- Awareness and Training Procedures
- EPROC 003- Incident Response and Reporting Procedures
- EPROC 004- Complaints Procedures

8.3.3. Emergency Response Procedures

Condition 10.1 of the Waste Licence requires that a written Emergency Response Procedures (ERP) be submitted. An updated document describing these procedures was submitted to the Agency September 2002 as part of the Environmental Management Plan annual submission. Emergencies have been defined as unexpected events, which prohibit the waste processing operation or reduce waste processing capacity, or any occurrence resulting in non-compliance with the conditions of the Waste Licence. Potential emergencies at the facility can be grouped under the following headings: -

- Inability to process waste.
- Inability to transport waste to Landfill.
- Threats to staff health and safety.
- Threats to the environment.

The ERP document, which is maintained in the facility office, contains detailed procedures and a list of emergency contact numbers to be used in the event of an emergency. A copy of the Council's "Major Emergency Plan" is also maintained in the facility office.

8.3. Management and Staffing Structure

The Council, as the licensee, operates the facility under the terms of a joint venture agreement with Greenstar, a waste management company. The organisational structure for the facility is shown in Figure 8.1.

Operations at the facility are carried out in two distinct areas, namely the Waste transfer station and the Civic Amenity Facility. The Joint Venture Management Committee, the Environmental Manager, the Facility Manager and the Operations Supervisor have delegated responsibilities for operations management and supervision in both areas.

Each of the positions identified in Figure 8.1 are discussed in detail in Section 6 of the Environmental Management Plan for the reporting year. Details of the relevant experience and qualifications for each person named, as well as arrangements for absence in the case of annual leave, illness and other absences, are maintained in the facility office and have also been forwarded to the Agency as required by Condition 2.2.

A file consisting of training records for each employee is also maintained in the facility office.

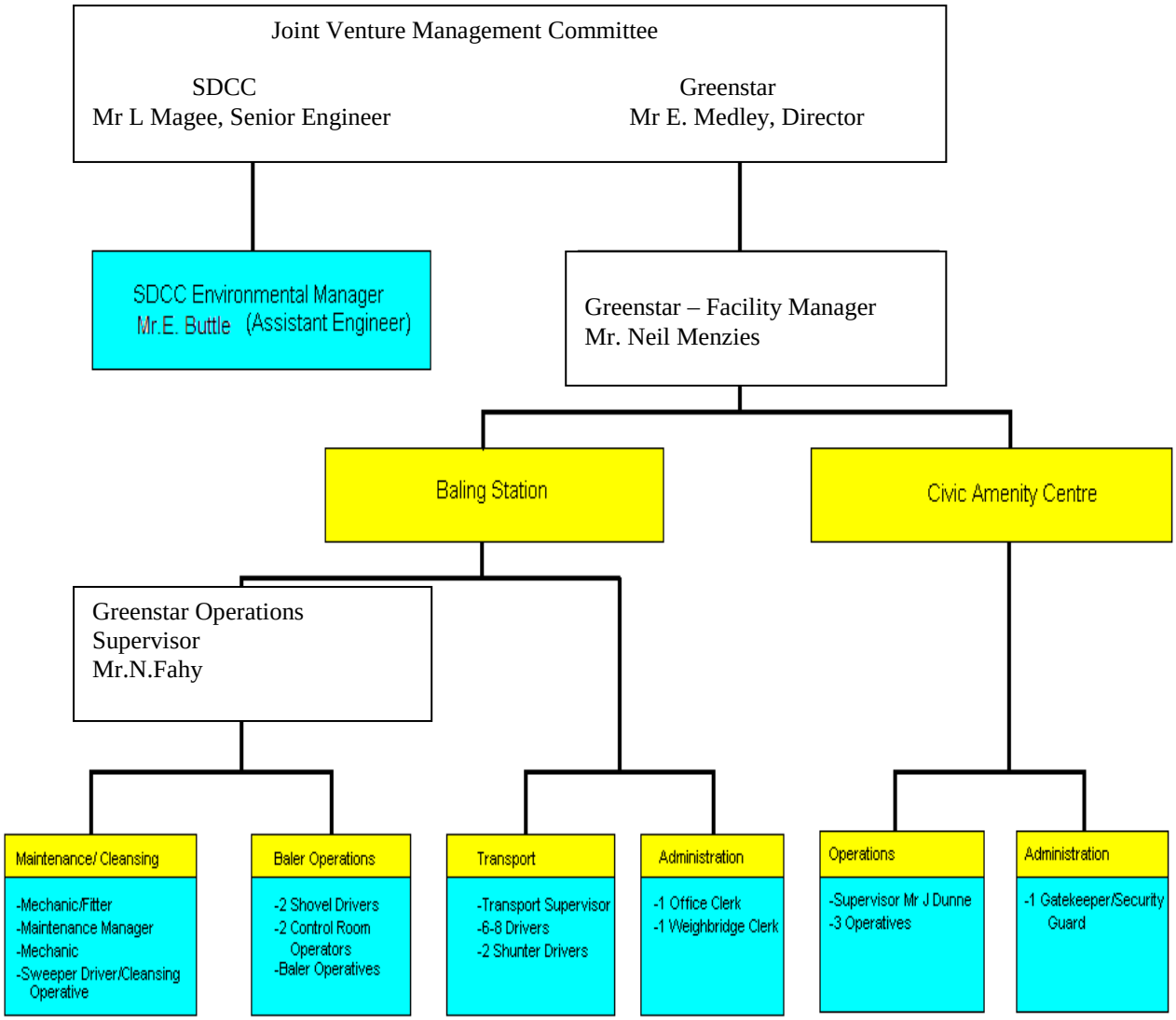

Figure 8.1 Management and Staffing Structure

9. TANK AND BUND TESTING

Condition 3.13.5 of the Waste Licence requires that tank and bund testing be carried out once every three years. All Bunds on-site were tested to BS8007: 1987, in May 2009. At the end of 2011 reporting period all 27 onsite Bunds met the requirements.

10.RESOURCE CONSUMPTION SUMMARY

Resources consumed at the facility include electricity, water, diesel fuel, steel wire, cleaning products, odour products and hydraulic oil. The principle consumers of energy at the facility are summarised in Table 10.1. Resource consumption is also presented in table 10.2 and figures 10.1 - 10.3.

Plant Item	Resource Used
Baling/ Ancillary Equipment Odour Control System Mobile Plant Road Transfer Fleet	Electricity and Hydraulic Oil Electricity and Water Green Diesel and Hydraulic Oil White Diesel

Table 10-1 Principle Resource Consumers

Resource	Quantity Used
Diesel Fuel	310,065 litres
Hydraulic Oil	561 litres
Electricity	669,751 kWh
Water	4,145 m3
Cleaning Agents Grime Away Caustic Soda Clean Air	 14,000 kg 1,800 kg 3,600 kg
Steel Wire	4,005 kg

Table 10-2 Energy and Resources (January 11 – December 11)

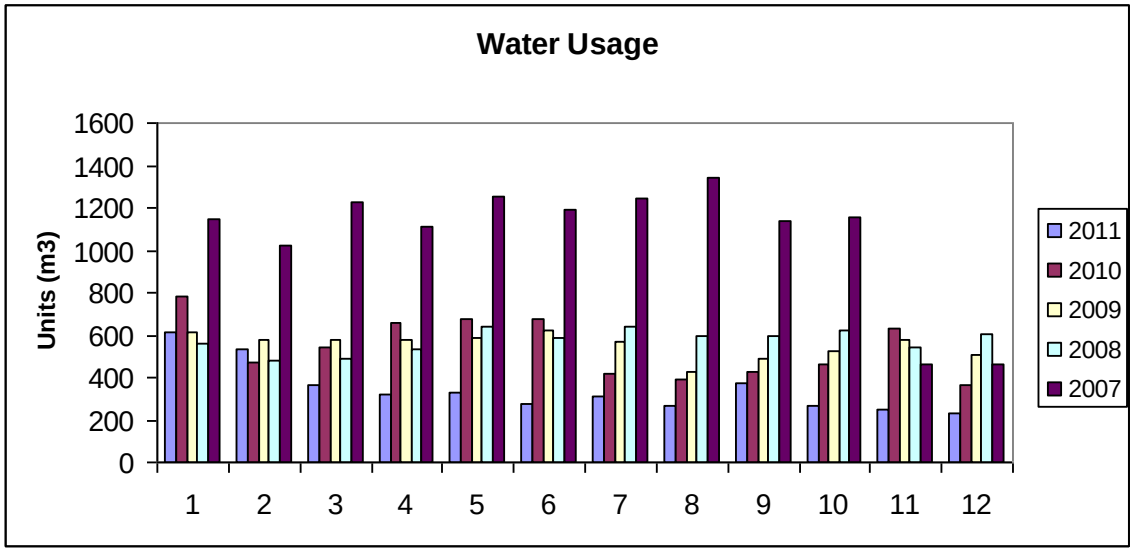

Figure 10.1 Water Use

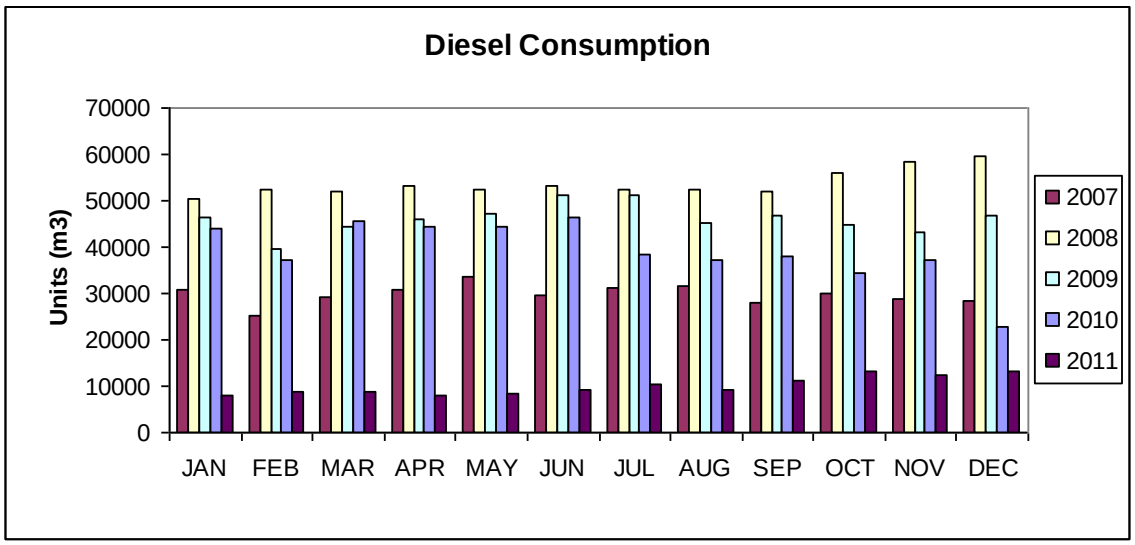

Figure 10.2 Diesel Consumption

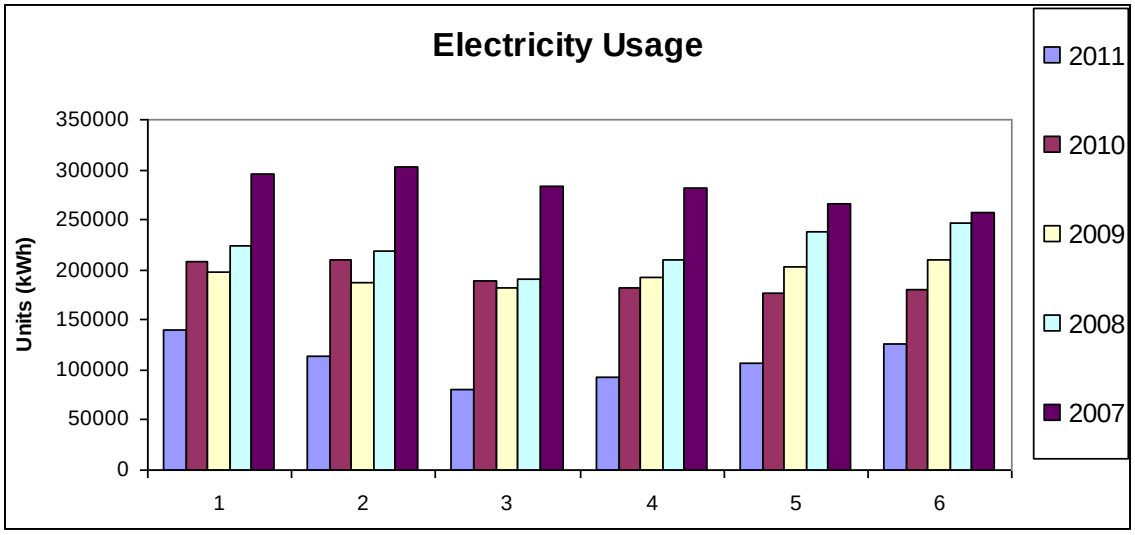

Figure 10.3 Electricity Consumption

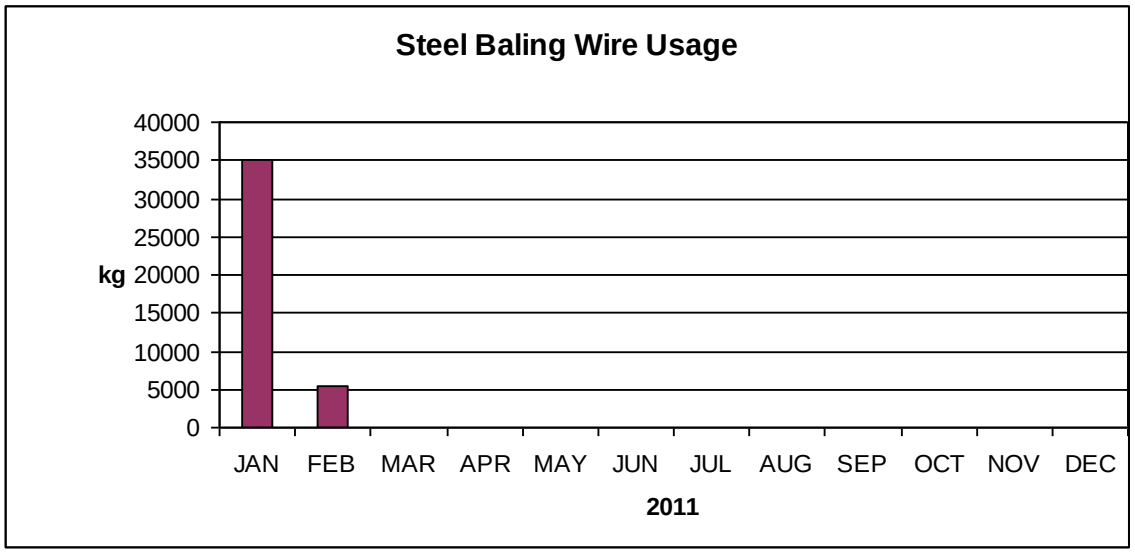

Figure 10.4 Steel wire Consumption

11.REPORT ON PUBLIC INFORMATION FILE

During the 2011 reporting period there was no application received to see the public inspection file.

Pertinent documentation available for public inspection include:

1. Environmental Record File
2. Environmental Monitoring Reports File (Volumes 1-4)
3. Complaints Register
4. Waste Licence
5. Environmental Management Plan
6. Emergency Response Procedures

Members of the public, who wish to view information describing environmental performance of the facility in 2011, can do so by phoning the facility. The facility contact numbers are posted on the main facility entrance sign. The names of the appropriate personnel are as follows:

Mr. Neil Menzies
Greenstar
Facility Manager

Mr. Eoin Buttle
South Dublin County Council
Environmental Manager

12. SITE OPERATIONS

12.1. Duty and Standby Capacity of Waste Handling Plant

With the introduction of licence W0003-03 the maximum quantity of municipal waste to be accepted at the facility has decreased to 324,480 tonnes. In compliance with condition 1.7 of the waste licence the hours of operation has been increased 6:30a.m. to 9:00 p.m. Monday to Saturday inclusive.

The compaction process capacity of the machines is 90 tonnes/hr each, which suggests an annual 100% uptime capacity of 555, 672 tonnes. During this reporting period the facility was closed for 1 day at Christmas, 10 days for annual maintenance of compactors, 1% time loss due to inclement weather, industrial action, accidents etc and a monthly average of less than 4% operational downtime. The quantity of municipal waste baled/compacted for landfilling at the facility for the reporting period was 77,263.59tonnes.

This suggests the Duty Capacity of the waste handling equipment was 523,644tonnes and the Standby Capacity was 446,381 tonnes (85%) for this reporting period.

12.2. Ventilation plant capacity and Spares

The Odour emissions control system was installed 10th December 2007 on the receiving and waste areas of the facility. The unit was installed to the following performance design:

- Volume Flow Rate *100,000 m^3/hr*
- Inlet Odour Capacity *5,000 OU_E/m3*
- Outlet Odour Concentration *150 OU_E/m3*
- Temperature *Ambient*
- Relative Humidity *50-100 %*
- Stack Height *12m*
- Stack Diameter *1.6m*

Spares for the odour and emissions control system are kept on site in the western storage area, these include:

Fan Spares:

Component	No. off
Bearing set for fans	2 No.

Dustfilter Spares:

Filter Cartridge	6 No.
Diaphragms	15 No.
Solonoids	15No.

Carbon Spares: 3 Tonnes

APPENDIX

Parameter	Sample Point	SI294: 1989	Jan	April	July	Oct
pH	1(us)	5.5 - 9.0	8.0	8.2	8.2	8.0
	2(us)		8.1	8.2	8.2	8.0
	3(ds)		8.0	8.2	8.2	8.1
BOD	1(us)	7.0	<2	<2	<2	<2
(mg/l)	2(us)		2.0	<2	<2	<2
	3(ds)		<2	<2	<2	<2
COD	1(us)	40.0	5.0	11.0	4.0	6.0
(mg/l)	2(us)		4.0	17.0	8.0	6.0
	3(ds)		5.0	14.0	5.0	7.0
Suspended Solids	1(us)	50.0	3.0	3.0	2.0	2.0
(mg/l)	2(us)		1.0	8.0	4.0	1.0
	3(ds)		2.0	1.0	<1	<1
Mineral Oil	1(us)	0.01	0.01	0.01	<0.01	0.02
	2(us)		0.01	0.01	<0.01	0.02
	3(ds)		0.01	0.02	<0.01	<0.01

Table 12-1 Surface Water Monitoring Results

*us – upstream of baling centre
ds – downstream of baling centre

Parameter	ELV	Jan	April	July	Oct
pH	5 - 10	6.8	8.3	7.4	7.4
Temp (^{o}C)	<42oC	7.0	10.0	14.0	5.0
BOD5 (mg/l)	10,000	214.0	504.0	7.0	15.0
COD (mg/l)	30,000	412.0	1742.0	26.0	63.0
Ammonia-NH4 (mg/l)	50	5.4	27.0	7.9	5.2
TSS* (mg/l)	2,000	94.0	154.0	7.0	17.0
OFG **(mg/l)	100	11.0	52.0	4.0	3.0
Detergents (MBAS)(mg/l)	100	<0.05	<0.05	<0.05	<0.05
Sulphates (SO4) (mg/l)	500	57.0	63.0	25.0	23.0

Table 12-2 Emissions to Foul Sewer

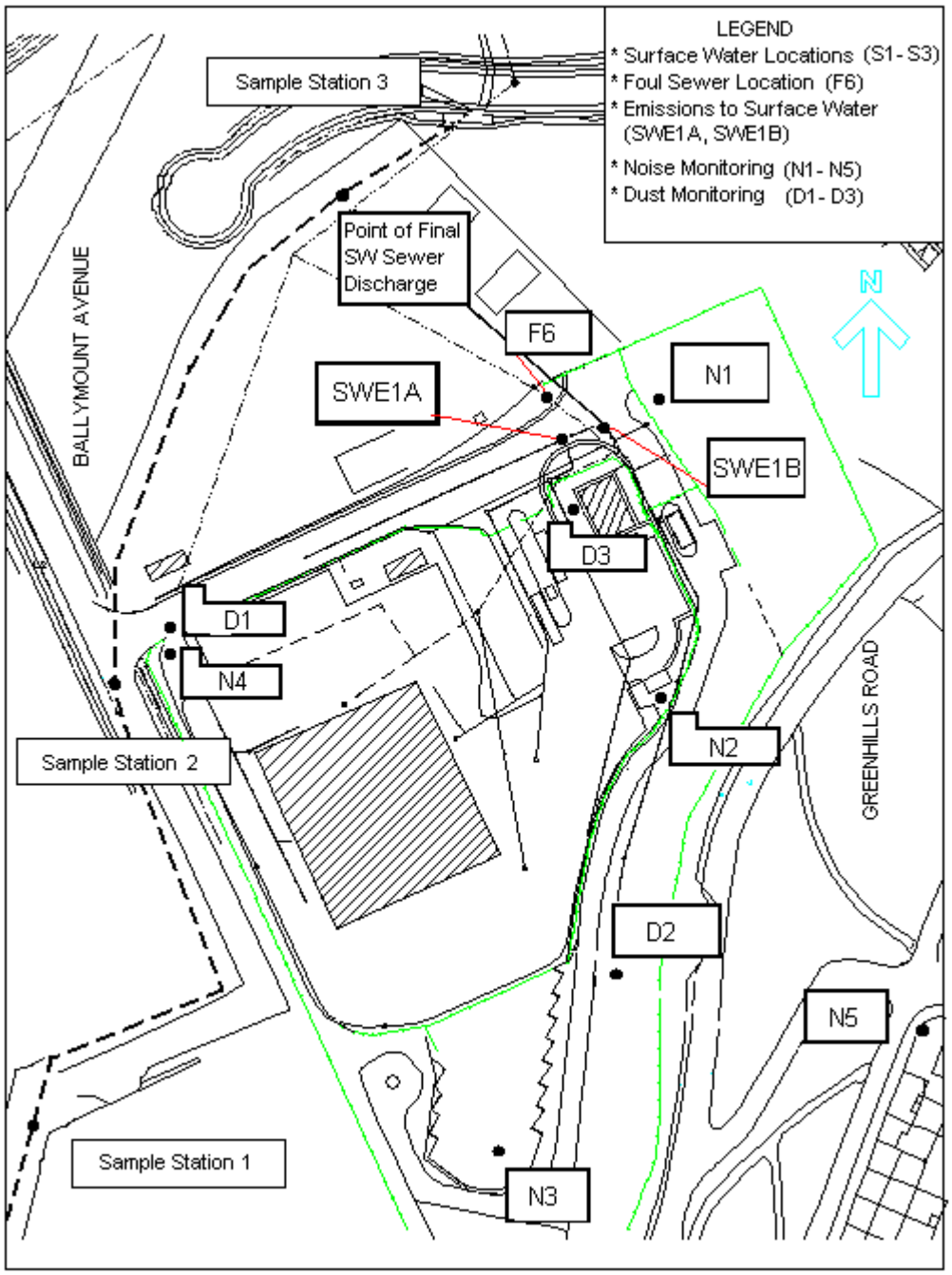

Figure 12.1 Monitoring Location Map

Environmental Protection Agency

Guidance to completing the PRTR workbook

AER Returns Workbook

Version 1.1.13

REFERENCE YEAR	2011

1. FACILITY IDENTIFICATION

Parent Company Name	South Dublin County Council
Facility Name	Ballymount Baling Station
PRTR Identification Number	W0003
Licence Number	W0003-03

Waste or IPPC Classes of Activity

No.	class_name
3.12	Repackaging prior to submission to any activity referred to in a preceding paragraph of this Schedule.
3.13	Storage prior to submission to any activity referred to in a preceding paragraph of this Schedule, other than temporary storage, pending collection, on the premises where the waste concerned is produced.
4.13	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.
4.2	Recycling or reclamation of organic substances which are not used as solvents (including composting and other biological transformation processes).
4.3	Recycling or reclamation of metals and metal compounds.
4.4	Recycling or reclamation of other inorganic materials.

Address 1	Ballymount Road
Address 2	Walkinstown
Address 3	Dublin 12
Address 4	
	Dublin
Country	Ireland
Coordinates of Location	-6.34625 53.3105
River Basin District	IEEA
NACE Code	3821
Main Economic Activity	Treatment and disposal of non-hazardous waste
AER Returns Contact Name	Leo Magee
AER Returns Contact Email Address	lmagee@sdublincoco.ie
AER Returns Contact Position	Senior Engineer
AER Returns Contact Telephone Number	01-4149000
AER Returns Contact Mobile Phone Number	
AER Returns Contact Fax Number	
Production Volume	0.0
Production Volume Units	
Number of Installations	0
Number of Operating Hours in Year	0
Number of Employees	0
User Feedback/Comments	
Web Address	

2. PRTR CLASS ACTIVITIES

Activity Number	Activity Name
5(c)	Installations for the disposal of non-hazardous waste
5(c)	Installations for the disposal of non-hazardous waste
50.1	General

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

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

SECTION A : SECTOR SPECIFIC PRTR POLLUTANTS

RELEASES TO AIR					Please enter all quantities in this section in KGs					
POLLUTANT		METHOD						QUANTITY		
			Method Used		`PM10 Poin 1	PM10 Point 2	PM10 Point 3			
No. Annex II	Name	M/C/E	Method Code	Designation or Description	Emission Point 1	Emission Point 2	Emission Point 3	T (Total) KG/Year	A (Accidental) KG/Year	F (Fugitive) KG/Year
86	Particulate matter (PM10)	M	OTH	EN12341	0.00001423	0.0000134	0.00001277	0.0000404	0.0	0.0

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

SECTION B : REMAINING PRTR POLLUTANTS

RELEASES TO AIR					Please enter all quantities in this section in KGs			
POLLUTANT		METHOD			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 AIR					Please enter all quantities in this section in KGs					
POLLUTANT		METHOD						QUANTITY		
			Method Used		D1 Kg/M2/Yr	D2 Kg/M2/Yr	D3 Kg/M2/Yr			
Pollutant No.	Name	M/C/E	Method Code	Designation or Description	Emission Point 1	Emission Point 2	Emission Point 3	T (Total) KG/Year	A (Accidental) KG/Year	F (Fugitive) KG/Year
210	Dust	M	OTH	Dustfall using Bergerhoff Instrument VDI2119	0.03358	0.03431	0.03942	0.10731	0.0	0.0

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

Additional Data Requested from Landfill operators

For the purposes of the National Inventory on Greenhouse Gases, landfill operators are requested to provide summary data on landfill gas (Methane) flared or utilised on their facilities to accompany the figures for total methane generated. Operators should only report their Net methane (CH4) emission to the environment under T(total) KG/yr for Section A: Sector specific PRTR pollutants above. Please complete the table below:

Landfill: Ballymount Baling Station

Please enter summary data on the quantities of methane flared and / or utilised			Method Used			
	T (Total) kg/Year	**M/C/E**	**Method Code**	**Designation or Description**	**Facility Total Capacity m3 per hour**	
Total estimated methane generation (as per site model)	0.0				N/A	
Methane flared	0.0				0.0	(Total Flaring Capacity)
Methane utilised in engine/s	0.0				0.0	(Total Utilising Capacity)
Net methane emission (as reported in Section A above)	0.0				N/A	

4.2 RELEASES TO WATERS

Link to previous years emissions data

SECTION A : SECTOR SPECIFIC PRTR POLLUTANTS

Data on ambient monitoring of storm/surface water or groundwater, conducted as part of your licence requirements, should NOT be submitted under AER / PRTR Reporting as this only concerns Releases from your facility

RELEASES TO WATERS					Please enter all quantities in this section in KGs			
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 B : REMAINING PRTR POLLUTANTS

RELEASES TO WATERS					Please enter all quantities in this section in KGs			
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					Please enter all quantities in this section in KGs					
POLLUTANT					S3			QUANTITY		
			Method Used							
Pollutant No.	Name	M/C/E	Method Code	Designation or Description	Emission Point 1	Emission Point 2	Emission Point 3	T (Total) KG/Year	A (Accidental) KG/Year	F (Fugitive) KG/Year
303	**BOD**	C	OTH	D O Probe, Electrometry, SMEWW 5210B	38.07	0.0	0.0	38.07	0.0	0.0
306	COD	C	OTH	Digestion/Colorimetry	147.51	0.0	0.0	147.51	0.0	0.0
324	Mineral oils	C	OTH	GC FID	0.19	0.0	0.0	0.19	0.0	0.0
240	Suspended Solids	C	OTH	Gravimetric SMEWW 2540B	19.03	0.0	0.0	19.03	0.0	0.0

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

4.3 RELEASES TO WASTEWATER OR SEWER

Link to previous years emissions data

SECTION A : PRTR POLLUTANTS

OFFSITE TRANSFER OF POLLUTANTS DESTINED FOR WASTE-WATER TREATMENT OR SEWER					Please enter all quantities in this section in KGs			
POLLUTANT		METHOD			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 B : REMAINING POLLUTANT EMISSIONS (as required in your Licence)

OFFSITE TRANSFER OF POLLUTANTS DESTINED FOR WASTE-WATER TREATMENT OR SEWER					Please enter all quantities in this section in KGs					
POLLUTANT		METHOD						QUANTITY		
			Method Used		F6					
Pollutant No.	Name	M/C/E	Method Code	Designation or Description	Emission Point 1	Emission Point 2	Emission Point 3	T (Total) KG/Year	A (Accidental) KG/Year	F (Fugitive) KG/Year
303	BOD	C	OTH	DO Probe, Electrometry, SMEWW 5210B	1519.19	0.0	0.0	1519.19	0.0	0.0
306	COD	C	OTH	Digestion/Colorimetry	4606.84	0.0	0.0	4606.84	0.0	0.0
238	Ammonia (as N)	C	OTH	Colourimetric, SMEWW 4500F	90.33	0.0	0.0	90.33	0.0	0.0
314	Fats, Oils and Greases	C	OTH	Partition Gravimetric, SMEWW5520B	164.24	0.0	0.0	164.24	0.0	0.0
308	Detergents (as MBAS)	C	OTH	Colourimetry, SMEWW 5540C	4.105	0.0	0.0	4.105	0.0	0.0
343	Sulphate	C	OTH	Ion Chromotography	344.89	0.0	0.0	344.89	0.0	0.0
240	**Suspended Solids**	C	OTH	Gravemetric SMEWW 2540D	558.41	0.0	0.0	558.41	0.0	0.0

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

4.4 RELEASES TO LAND

Link to previous years emissions data

SECTION A : PRTR POLLUTANTS

RELEASES TO LAND					Please enter all quantities in this section in KGs		
POLLUTANT		METHOD			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
					0.0	0.0	0.0

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

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

RELEASES TO LAND					Please enter all quantities in this section in KGs		
POLLUTANT		METHOD			QUANTITY		
			Method Used				
Pollutant No.	Name	M/C/E	Method Code	Designation or Description	Emission Point 1	T (Total) KG/Year	A (Accidental) KG/Year
					0.0	0.0	0.0

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

5. ONSITE TREATMENT & OFFSITE TRANSFERS OF WASTE

Please enter all quantities on this sheet in Tonnes

0

Transfer Destination	European Waste Code	Hazardous	Quantity (Tonnes per Year)	Description of Waste	Waste Treatment Operation	Method Used		Location of Treatment	Haz Waste : Name and Licence/Permit No of Next Destination Facility Non Haz Waste: Name and Licence/Permit No of Recover/Disposer	Haz Waste : Address of Next Destination Facility Non Haz Waste: Address of Recover/Disposer	Name and License / Permit No. and Address of Final Recoverer / Disposer (HAZARDOUS WASTE ONLY)	Actual Address of Final Destination i.e. Final Recovery / Disposal Site (HAZARDOUS WASTE ONLY)
						M/C/E	Method Used					
Within the Country	20 03 01	No	61836.45	mixed municipal waste	D5	M	Weighed	Offsite in Ireland	Bord na Mona Drehid Landfill,W0201-3	Aleenwood,,,,,Kildare,Ireland		
Within the Country	20 03 01	No	15449.48	mixed municipal waste	D5	M	Weighed	Offsite in Ireland	Greenstar Balnagran Landfill,W165-02	,,,,,,Wicklow,Ireland		
Within the Country	20 03 03	No	15.08	street-cleaning residues	R3	M	Weighed	Offsite in Ireland	Greenstar Millenium Park,W0183	Cappagh Rd Grange,Ballycoolin,Finglas, Dublin,Ireland		
Within the Country	20 03 07	No	2425.21	bulky waste	R3	M	Weighed	Offsite in Ireland	Greenstar Millenium Park,W0183	Cappagh Rd Grange,Ballycoolin,Finglas, Dublin,Ireland		
Within the Country	20 03 07	No	1194.62	bulky waste	R3	M	Weighed	Offsite in Ireland	Greenstar Millenium Park,W0183	Cappagh Rd Grange,Ballycoolin,Finglas, Dublin,Ireland		
Within the Country	20 03 99	No	988.74	municipal wastes not otherwise specified	R3	M	Weighed	Offsite in Ireland	Greenstar Millenium Park,W0183	Cappagh Rd Grange,Ballycoolin,Finglas, Dublin,Ireland		
Within the Country	20 01 11	No	17.64	textiles	R3	M	Weighed	Offsite in Ireland	Enable Ireland,WPR060	Unit D1C,Bluebell Ind Est,Kylemore Rd,D12,Ireland		
Within the Country	20 01 11	No	4.56	textiles	R3	M	Weighed	Offsite in Ireland	Liberties Recycling,WPT 125	32F,Rosemount Park Drive,Ballycoolin,D11,Ireland		
Within the Country	20 01 11	No	3.43	textiles	R3	M	Weighed	Offsite in Ireland	Textile Recycling Ltd,0	Greenogue Ind Est,Greenogue Business Park,D24,.,Ireland		
Within the Country	20 01 25	No	0.94	edible oil and fat	R9	M	Weighed	Offsite in Ireland	Frylite,WFP-DS-10-009-01	Ballymount Ave,Ballymount Ind Est,D12,.,Ireland		
Within the Country	20 01 38	No	45.72	wood other than that mentioned in 20 01 37	R3	M	Weighed	Offsite in Ireland	Greenstar Fassaroe,W0053-03	Fassaroe,Bray,Wicklow,.,Ireland		
Within the Country	20 01 38	No	20.3	wood other than that mentioned in 20 01 37	R3	M	Weighed	Offsite in Ireland	Enrich,WFP/MH/08/001/01	Kilcock,Kildare,,,,Ireland		
Within the Country	20 02 01	No	1940.86	biodegradable waste	R3	M	Weighed	Offsite in Ireland	Bord na Mona,W0198-01	Kilberry,Athy,Co.Kildare,.,Ireland		
Within the Country	15 01 01	No	206.78	paper and cardboard packaging	R3	M	Weighed	Offsite in Ireland	Greenstar Fassaroe,W0053-03	Fassaroe,Bray,Wicklow,.,Ireland		
Within the Country	15 01 02	No	11.3	plastic packaging	R3	M	Weighed	Offsite in Ireland	Greenstar Fassaroe,W0053-03	Fassaroe,Bray,Wicklow,.,Ireland		
Within the Country	15 01 04	No	0.2	metallic packaging	R4	M	Weighed	Offsite in Ireland	Multimetals Ltd,ESS/15/8121319	Bollarney,The Morrough,Co. Wicklow,.,Ireland		
Within the Country	15 01 07	No	99.12	glass packaging	R5	M	Weighed	Offsite in Ireland	Glassco/Rehab,WP004	Ballymount Ave upper,Ballymount Ind Est,Ballmount ,D12,Ireland		
Within the Country	20 01 40	No	343.32	metals	R4	M	Weighed	Offsite in Ireland	Multimetals Ltd,ESS/15/8121319	Bollarney,The Morrough,Co. Wicklow,.,Ireland		
To Other Countries	20 01 21	Yes	1.74	fluorescent tubes and other mercury-containing waste	R4	M	Weighed	Abroad	KMK Metals,W0113-03	Tullamore,Offaly,.,.,Ireland	Remondis Electrocycling SAS,01-2452A,Zac des Marots,BP03,10800 Saint Thibault,.,France	Zac des Marots,BP03,10800 Saint Thibault,.,France
To Other Countries	16 02 11	Yes	79.04	discarded equipment containing chlorofluorocarbons, HCFC, HFC	R4	M	Weighed	Abroad	Techrec Ltd,LN/08/122	Dungannon,Tyrone,.,.,Ireland	Techrec Ltd,LN/08/122	Dungannon,Tyrone,.,.,Ireland
To Other Countries	16 02 14	No	188.63	discarded equipment other than those mentioned in 16 02 09 to 16 02 13	R4	M	Weighed	Abroad	NWP,WML03/04	Portadown,Armagh,.,.,Ireland		

To Other Countries	20 01 35	Yes	178.58	discarded electrical and electronic equipment other than those mentioned in 20 01 21 and and 20 01 23 containing hazardous components	R4	M	Weighed	Abroad	NWP,WML03/04	Portadown,Armagh,.,.,Ireland	NWP,WML03/04	Portadown,Armagh,.,.,Ireland
To Other Countries	16 02 14	No	333.05	discarded equipment other than those mentioned in 16 02 09 to 16 02 13	R4	M	Weighed	Abroad	NWP,WML03/04	Portadown,Armagh,.,.,Ireland		
To Other Countries	16 06 01	Yes	14.14	lead batteries	R4	M	Weighed	Abroad	Returnbatt/Rilta,W0192-3	Greenogue Business Park,Rathcoole,Dublin,.,Ireland	HJ Enthoven,BL5598,Derbyshire,.,.,.,United Kingdom	Derbyshire,.,.,.,United Kingdom
Within the Country	16 05 05	No	3.54	gases in pressure containers other than those mentioned in 16 05 04	R5	M	Weighed	Offsite in Ireland	Calor Gas,.	Lond Mile Road,Dublin,.,.,Ireland		
Within the Country	17 08 02	No	8.54	gypsum-based construction materials other than those mentioned in 17 08 01	R5	M	Weighed	Offsite in Ireland	Recycleworks,WPT112	Maynooth ,.,.,Kildare,Ireland		
Within the Country	17 09 04	No	789.08	mixed construction and demolition wastes other than those mentioned in 17 09 01, 17 09 02 and 17 09 03	R5	M	Weighed	Offsite in Ireland	Greenstar Fassaroe,W0053-03	Fassaroe,Bray,Wicklow,.,Ireland		
Within the Country	13 02 08	Yes	43.56	other engine, gear and lubricating oils	R9	M	Weighed	Offsite in Ireland	Atlas Oil,W0184	Clonminum Ind Est,Portlaoise,Laois,.,Ireland	Atlas Oil,W0184	Clonminum Ind Est,Portlaoise,Laois,.,Ireland
To Other Countries	20 01 27	Yes	33.66	paint, inks, adhesives and resins containing dangerous substances	R2	M	Weighed	Abroad	Ecosafe,W054-02	Unit 1,Allied Ind Est,Kylemore Rd,Dublin ,Ireland	Accurec GMB and HJ Enthoven,BL5598,Wehagan 2-14 D45472 Mulunheim Germany,.,Matlock Debyshire UK,.,Germany	Wehagan 2-14 D45472 Mulunheim Germany,.,Matlock Debyshire UK,.,Germany
Within the Country	08 03 18	No	0.28	waste printing toner other than those mentioned in 08 03 17	R3	M	Weighed	Offsite in Ireland	Jack and Jill,Charity No. 12045	Dublin,.,.,.,Ireland		
Within the Country	20 01 08	No	1722.77	biodegradable kitchen and canteen waste	R3	M	Weighed	Offsite in Ireland	O'Toole Composting,WFP-CW10-003-01	Ballintrane,.,.,Carlow,Ireland		
Within the Country	15 01 04	No	1.64	metallic packaging	R4	M	Weighed	Offsite in Ireland	Glassco/Rehab,WFP-KE-08-0357-01	.,.,.,Kildare,Ireland		
Within the Country	20 03 01	No	1136.0	mixed municipal waste	D10	M	Weighed	Offsite in Ireland	Indaver Ireland,W0167-02	Carranstown,Duleek,Co.Meath,.,Ireland		

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

Link to previous years waste data
Link to previous years waste summary data & percentage change