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 2017 – 31st December 2017



Issued May 2017

BALLYMOUNT SOLID WASTE RECYCLING AND BALING CENTRE ANNUAL ENVIRONMENTAL REPORT

1st January 2017 – 31st December 2017

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

May 2017

BALLYMOUNT SOLID WASTE

RECYCLING AND BALING CENTRE

ANNUAL ENVIRONMENTAL REPORT

1st January 2017 – 31st December 2017

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1. INTRODUCTION

South Dublin Council (the Council) holds a Industrial Emissions 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 seventeenth AER, covering the reporting period 1^{st} January $2017 - 31^{st}$ December 2071 as agreed with the Agency.

The Civic Amenity and Recycling Centre was operated on the basis of a joint venture agreement between the Council and Greenstar Ltd. up until March 31st 2016. From April 1st 2016 the Civic Amenity and Recycling Centre is operated by Panda Waste on a contract agreement between the Council and Panda Waste. For the period of January 1st to December 31st 2017, the operation the Baling Station was operated on a Licence Agreement basis with Panda Waste Services.

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 and Panda Waste Services Policy

The Council and Panda Waste Services 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 Panda Waste Services management committee are: -

- 1. A commitment to compliance with the Industrial Emissions Licence and all pertinent environmental legislation and approved codes of practice. To this end, the 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).
- 5. Utilise BAT (Best Available Technology)
- 6. To maintain and operate the facility in an environmentally sustainable manner.

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 the pre-treatment of municipal solid household waste for export to incineration for energy recovery by Panda Waste Services and also by Panda Waste Services the acceptance of non-recyclable and recyclable household waste types at the Civic Amenity Facility. The main activity at the facility is the pre-treatment, baling and wrapping of waste for energy recovery by incineration.

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.

On the 16th of December 2015, the EPA deemed Waste Licence W0003-03 to be an Industrial Emissions Licence and granted the following under Part IV of the Environmental Protection Act 1992 as amended.

The licenced activities were amended as follows:

11.4 (B) (ii) Recovery, or a mix of recovery and disposal, of non-hazardous waste with a capacity exceeding 75 tonnes per day involving one or more of the following activities; pre-treatment of waste for incineration or co-

incineration.

11.1 The recovery or disposal of waste in a facility, within the meaning of the Act

of 1996, which facility is connected or associated with another activity specified in the Schedule in respect of which a licence or revised licence under Part IV is in force or in respect of which a licence under the said Part

is or will be required.

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 703.5 mm* in 2017. 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. *Baldonnel – Casement Aerodrome

There are approximately 13 people employed on a full-time basis at the facility.

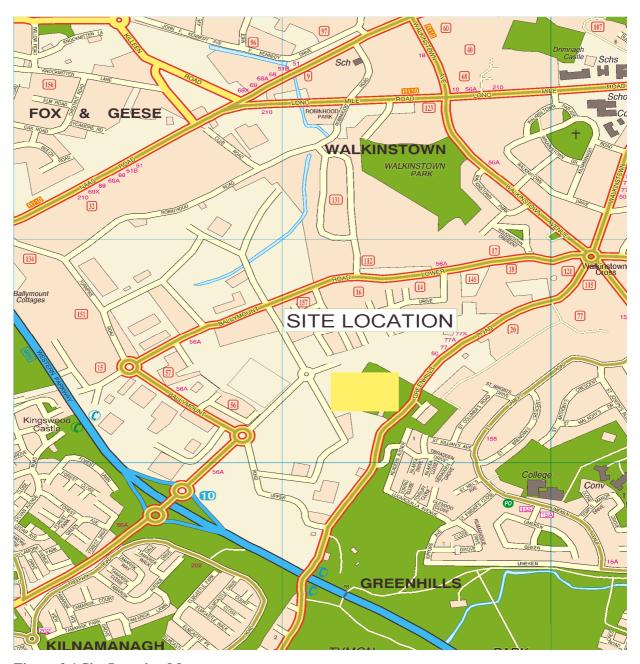


Figure 2.1 Site Location Map

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DISCOVERY SERIES SHEET No. 50

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 Industrial Emissions 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 EPA Industrial Emissions Licence W0003-03.

The surface water monitoring results for grab samples were taken upstream and downstream of the facility at S1, S2 and S3 during the reporting period 1st January to 31st December 2017. Exceedances were recorded both upstream and also downstream of the facility in December. Interpretation of results can be found in 3.7.1 along with a copy of results which can be found in the appendices.

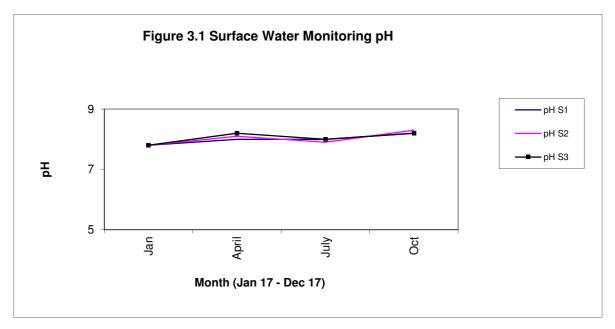


Figure 3.1 Surface Water Monitoring - pH

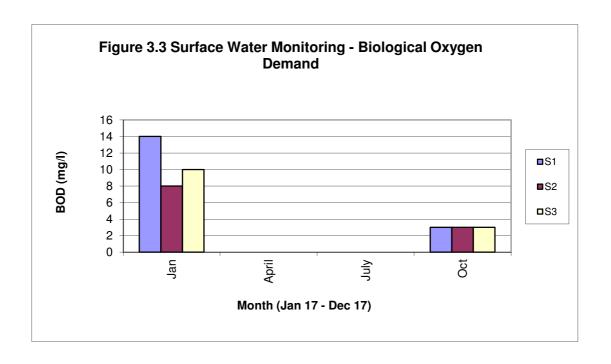


Figure 3.2 Surface Water Monitoring - Biological Oxygen Demand (ELV 25mg/l) (BOD detectable limit: <2mg/l)

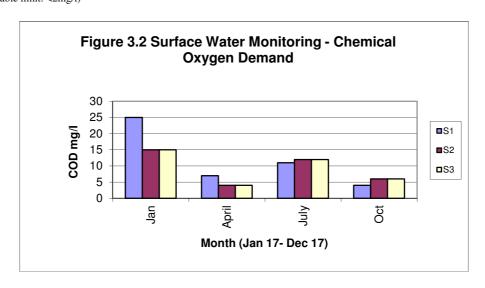


Figure 3.3 Surface Water Monitoring - Chemical Oxygen Demand (ELV 150mg/l)

(COD detectable limit: <4mg/l)

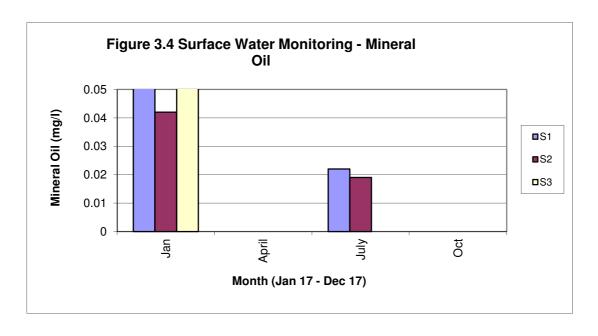


Figure 3.4 Surface Water Monitoring - Mineral Oil (ELV 10mg/l)

(Mineral Oil detectable limit: 0.04mg/l)

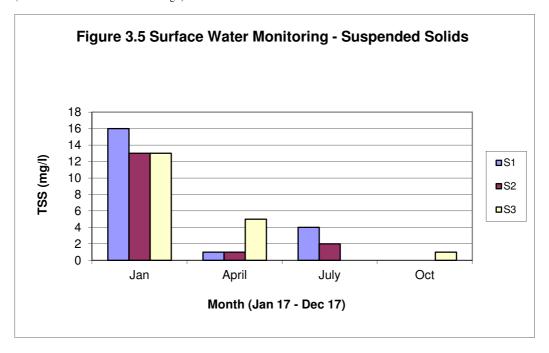


Figure 3.5 Surface Water Monitoring - Suspended Solids (ELV 35mg/l)

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. Due to insufficient sampling volumes, 1 sample was available during the reporting period.

Monitoring Point	SV		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
March	65	28.94	8	48	68	86.55	9	22
June	64	133.58	2	23	57	120.74	<2	126
August	224	<2.5	51	123	97	<2.5	7	118
October	311	<2.5	64	171	212	<2.5	35	1155

Table 3.1 Emissions to Surface Water

3.3. Emissions to Foul Sewer

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

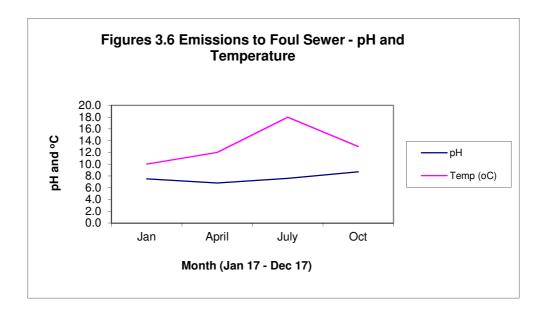


Figure 3.6 Emissions to Foul Sewer - pH and Temperature (ELV 5-10 & 42°C)

^{*}Temperature unavailable for January

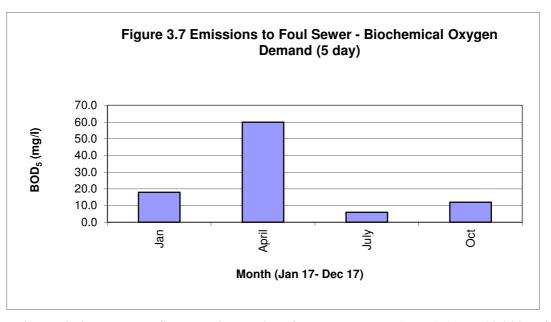


Figure 3.7 Emissions to Foul Sewer - Biochemical Oxygen Demand (5 day) (ELV 10,000mg/l)

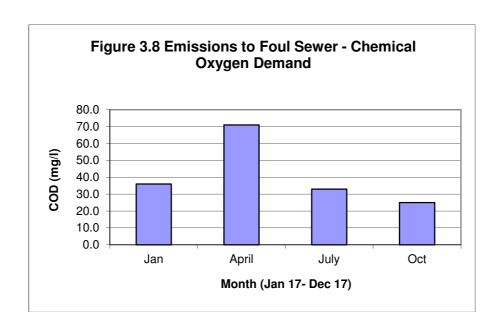


Figure 3.8 Emissions to Foul Sewer - Chemical Oxygen Demand (ELV 30,000mg/l)

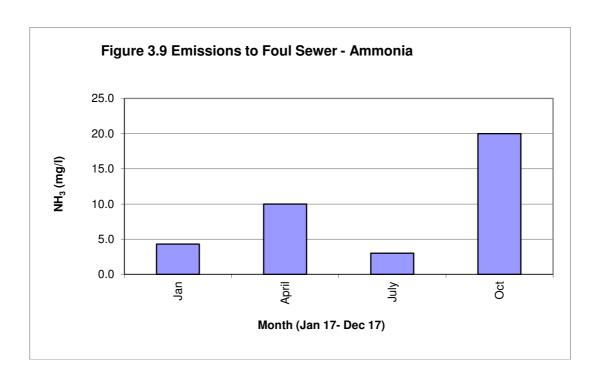


Figure 3.9 Emissions to Foul Sewer – Ammonia (ELV 50mg/l)

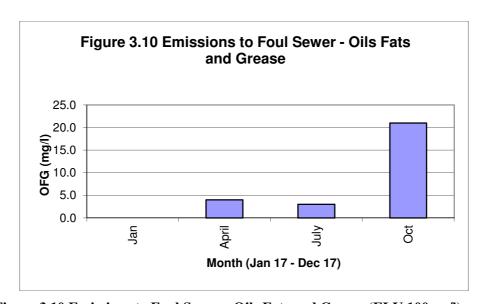


Figure 3.10 Emissions to Foul Sewer - Oils Fats and Grease (ELV 100mg/l)

(No OFG available in January) (OFG detectable limit: <2mg/l)

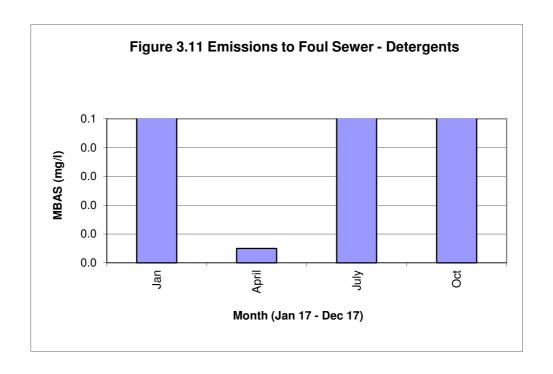


Figure 3.11 Emissions to Foul Sewer – Detergents (ELV 100mg/l)

(Detergents detectable limit: <0.05mg/l)

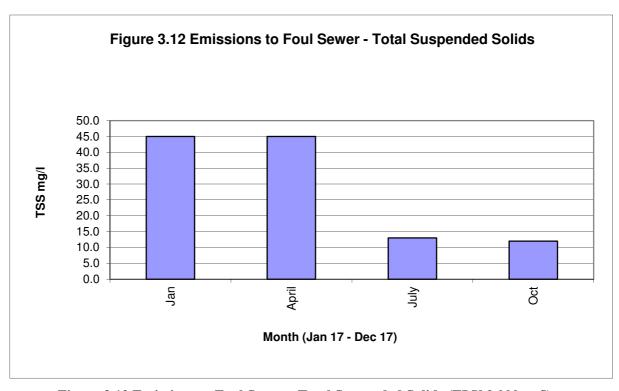


Figure 3.12 Emissions to Foul Sewer - Total Suspended Solids (ELV 2,000mg/l)

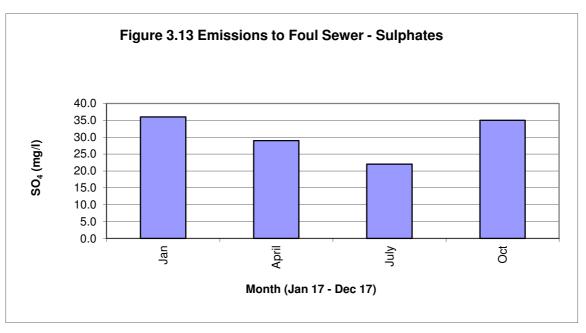


Figure 3.13 Emissions to Foul Sewer – Sulphates (ELV 500mg/l)

Noise

Noise Monitoring was carried out in June 2017. Monitoring was done for both night and day. Noise monitoring results are presented below in Table 3.2.

_	Point Location	Sound Pressure dB(A)				
Location	NG Ref.	L(A) _{EQ}	L(A) ₁₀	L(A)90		
<u>Daytime</u>						
N1	Boundary	57.4	58.7	53.1		
N2	Boundary	52.6	55.0	46.8		
N3	Boundary	61.4	56.4	50.8		
N4	Boundary	55.5	58.0	48.4		
N5	Nearest NSL	60.2	62.5	49.0		
Night-time						
N1	Boundary	44.2	45.3	42.9		
N2	Boundary	45.6	47.6	42.8		
N3	Boundary	45.6	46.2	44.2		
N4	Boundary	47.5	49.7	44.5		
N5	Boundary	49.6	52.1	44.8		

Table 3-2 Noise Monitoring Results Summary

NSL = Nearest Noise Sensitive Location.

All operations on site are housed except activity which is associated with the civic amenity and trucks entering and leaving the site. All operations on site were being carried out including

operations which are housed inside a large building. The dominant noise outside the site is from the busy road network; the Greenhills Rd, M50 and the Ballymount Avenue adjoining the site.

Location N1: The dominant noise at this location was from the Greenhills Rd and Ballymount Avenue. Trucks entering and exiting the adjoining site also contributed. The activity from the waste facility was not audible at this location at a background of 53.1dBA.

Location N2: The dominant noise at this location was from trucks entering and exiting the waste facility close-by and from road traffic noise extraneous to the waste activity. The waste facility would be contributing in the region of 52dBA.

Location N3: The dominant noise levels at this location are from the amenity facility and road traffic. The contribution from the waste facility would be in the region of less than 51dBA

Location N4: The dominant noise levels at this location are from road traffic and the waste facility. The waste facility contributes less than the background at 48.4dBA.

Location N5: The dominant noise levels at this location are from road traffic on the

Greenhils Rd, Ballymount Rd and M50. There is no audible noise from the waste facility at an L_{min} of 48.1dBA.

There was no noise related activity on site at night-time and all recorded noise levels were from activity (road traffic) extraneous to the site. Road traffic noise was the dominant noise at all monitoring locations at night. Accordingly the noise emissions from the site were well below the noise limits for night-time. There were no tonal or impulsive emissions on site during the daytime or night-time.

The noise levels at all monitoring locations are within the limits specified in the licence for day time. The elevated level of road traffic noise from the local road networks masks the noise levels off-site.

The noise emissions were well within the noise limits for night –time at all locations. The noise emissions were in-audible and below the noise limits for day time and night at the NSL (location N5). There was no clearly audible tonal component or impulsive emission from the facility at any monitoring location during the day time or night-time

3.4. Dust and Air Quality Monitoring (PM10)

Dust monitoring was carried out during February to August 2017. PM_{10} monitoring was carried out during August 2017. 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/m²/day). PM_{10} results are also in compliance with guideline limits (EC/1999/30 PM_{10} - 50 ug/m³).

Monitoring	Dust	Dust	Dust	PM10
Location	Feb	May	June	(ug/m3)
	(mg/m²/	$(mg/m^2/$	(mg/m²/	August
	day)	day)	day)	2017
D1	25	26	28	10
D2	22	25	26	14
D3	30	34	36	15

Table 3-3 Dust and PM10 Monitoring Results

3.5. 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 $3.0~\rm Ou_E/m^3$ at the $98^{\rm th}$ 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 ³ s ⁻¹)	Odour Emission Rate From Carbon Filtration System Oues
March 2017	407	22.48	9,143
May 2017	512	22.87	11716
September 2017	598	23.56	14,082
December 2017	474	21.87	10,373

Table 3-4 Odour Concentrations.

3.7 Interpretation of results

3.7.1 Surface Water Background Monitoring and Emissions to Surface Water

For 2017, predominantly the background surface water monitoring results indicate that the levels of analyses detected downstream of the facility did not exceed the limit values set out in the licence.

Exceedances were recorded upstream at the facility discharge point and downstream of the facility in December 2017. It must be noted that samples that were taken and recorded; followed a sustained period of dry weather and what was recorded was possibly a first flush through the drainage system. The results of this exceedance can be found in the appendices.

3.7.2 Emissions to Foul Sewer

There was no exceedance of the ELVs recorded in Schedule C.4 of the Waste Licence over 4 sampling events in 2017.

.3.7.2.1 pH

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 6.8 pH to 8.7 pH. The Average level was 7.65 pH.

.3.7.2.2 Temperature

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 10°C to 18°C. The Average level was 13.25°C.

3.7.2.3 Biochemical 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 6 mg/l to 60 mg/l. The Average level was 24 mg/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 25 mg/l to 71 mg/l. The Average level was 41.25 mg/l.

3.7.2.5 Ammonia

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 3 mg/l to 20 mg/l. The Average level was 9.33 mg/l.

3.7.2.6 Total Suspended Solids (TSS)

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 12 mg/l to 45 mg/l. The Average level was 28.75 mg/l.

3.7.2.7 Oils Fats and Grease (OFG)

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 <2 mg/l to 21 mg/l. The Average level was 7.5 mg/l.

3.7.2.8 Detergents

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 0.31 mg/l to 0.91 mg/l. The Average level was 0.41 mg/l.

3.7.2.9 Sulphates

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 22 mg/l to 35 mg/l. The Average level was 28 mg/l.

3.7.3 Noise

The results presented in Table 3.2 indicate that daytime and night-time noise levels recorded exceeded licence limits at 8 out of the 10 monitoring points during daytime and night-time monitoring.

Road traffic was the dominant source of noise $(LA)_{10}$) at all of the locations, which primarily emanates from the busy Greenhills Road which adjoins the site and the M50 motorway.

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

There was no audible tonal component or impulsive emission from the facility at any monitoring location during the day time or night-time.

3.7.4 Dust and Air Quality Monitoring (PM₁₀)

The results presented in Table 3.3 indicate that the TA Luft limit for dust deposition (350mg/m²/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 as required per licence W0003-03. Independent monitoring consultants conducted the quarterly 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 1195 OU_E/m³ and 349 OU_E/m³ for the reporting period 2017. No complaints were received at the facility during the 2017 reporting period.

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
Divert mattresses from landfill for recycling and recovery	Achieved
Implement pay by weight system for MSW in CA	Not Achieved

Table 4-1 Site Development Works during Reporting Year

Requirement	Time Scale
Install a designated MSW area in the Civic Amenity	December 2017
Install new CCTV system to complement the existing system.	Achieved

Table 4-2 Site Development Works for the Forthcoming Year

5. WASTE RECEIVED BY AND CONSIGNED FROM THE FACILITY

5.1. Wastes Pre-Treated, Baled and Compacted

5.1.1 <u>Waste Composition</u>

In February 2013 South Dublin County Council entered into a licence agreement with Panda Waste Services for the operation of the waste transfer station only. On February 1st 2013 MSW was accepted at Ballymount waste transfer station from Panda Waste Services along with the Civic Amenity and other permitted third party waste collectors. This agreement with Panda Waste Services has continued at the waste transfer station. The quantities of waste accepted at the Waste transfer station only are summarised in Table 5.1.

Sources of	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes
MSW	17	16	15	14	13	12	11
Dublin Corporation							
(DCC)	0	0	0	0	0	3,560	62,172
South Dublin County Council (SDCC)							
	0	0	0	0	0	0	8,498
Civic Amenity	17,570.98	2,213.13	2271.21	3156.4	3,156.40	3,419	10,065
Panda Waste Services & Other	83,338.79	92,664.96	159,449.43	154,789.68	154,529.30	0	2,199
Total	100,909.77	94,878.09	161,720.64	157,946.08	157,685.70	6,979	82,934

Table 5-1 MSW Quantities into Facility

5.1.2 Baled and Bulked Waste Quantities

Monthly quantities of treated, baled and wrapped waste sent to incineration or waste bulked transferred for incineration as EWC 191212 are shown in Figure 5.1. The bailing of waste ceased in May 2017 and from July onwards the waste was bulked transferred to the 'Dublin Waste To Energy' Incinerator

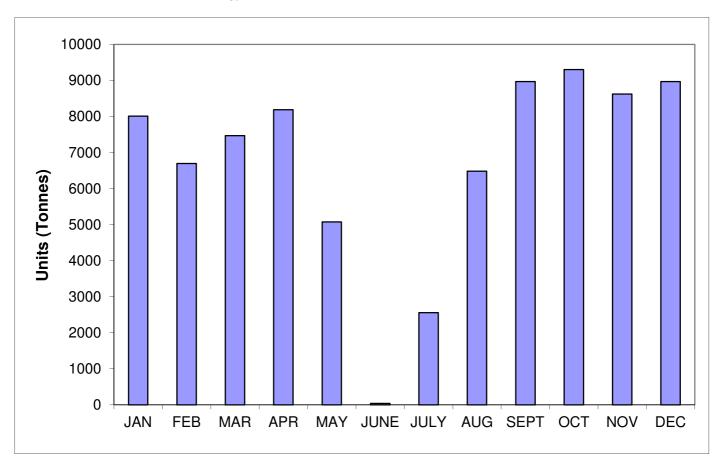


Figure 5.1 Monthly Waste Quantities to Incineration 2017

5.1.2 Treatment of MSW Quantities 2017

The following tonnages were recovered following the treatment of MSW at the waste transfer station:

Organic Fines: 6277.22Bulky Waste: 148.46

• Steel: 118.74

5.2. Civic Amenity

5.2.1 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 is sent off site for recovery.

Description	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes
	2017	2016	2015	2014	2013	2012	2011	2010	2009
Glass	101.34	91.35	88.76	97.94	100.87	114.4	99.12	103.94	118.54
Paper	89.55	98.34	110.1	74.64	73.28	78.38	52.7	51.62	51.68
Textiles	58.49	45.42	30.06	27.47	22.28	29.81	25.63	29.62	40.18
WEEE	775.20	761.23	704.63	620.91	668.7	748.83	781.04	855.38	873.9
Plastic	195.14	93.9	64.26	80.12	75.46	31.33	11.3	18.04	9.64
Waste Oil	26.26	28.26	24.94	24.56	24.4	32.72	43.56	36.72	26.86
Green waste	1676.94	1,803.26	1,642.70	2076.12	1757.73	2145.36	1,940.86	2,307.12	1850.06
Batteries	9.28	8.72	16.19	10.18	12.72	13.14	14.14	21.06	23.72
Beverage cans	1.66	1.26	2.17	1.02	1.12	2.82	1.64	1.41	1.31
Metal	550.48	521.22	365.24	340.64	321.8	331.42	343.32	440.55	447.2
Black bag Waste (MSW)	3469.59	3281.96	2,972.81	3,156.40	3215.46	3419.11	3582.3	3653.84	3238.16
Bulky waste	6165.89	5181.46	5713.07	5,113.08	4949.85	5581.86	6483.12	6,077.04	7499.35
Household Hazardous	179.94	141.1	92.58	26.22	35.2	33.73	33.66	24.9	29.32
Plasterboard	101.20	54.64	97.84	32.16			8.54	41.76	46.16
Rubble / C&D	1345.4	1,469.39	881.4	846.3	723.02	698.89	789.08	724.66	655.48
Cardboard	353.23	349.1	267.43	266.38	257.98	277.84	206.78	230.2	232.49
Waste Edible Oil	1.26	0.86	1.5	1.8	1.18	1.38	0.94	0.6	0.74
Wood	2453.89	1858.21	774.78	483.98	484.98	270.11	66.02	140.06	336.76
Ink Cartridges	0	0	0	0.66	0.58	1.16	0.28	0.36	0.2
Gas Cylinders	7.24	3.74	4.73	2.82	1.71	3.6	3.54	4.46	5.82
Metal Packaging							0.2	0.92	
Total Civic Amenity	17570.98	15,797.12	13,855.12	13,283.40	12729.35	13,816.15	14,487.60	14,764.10	15,487.60

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

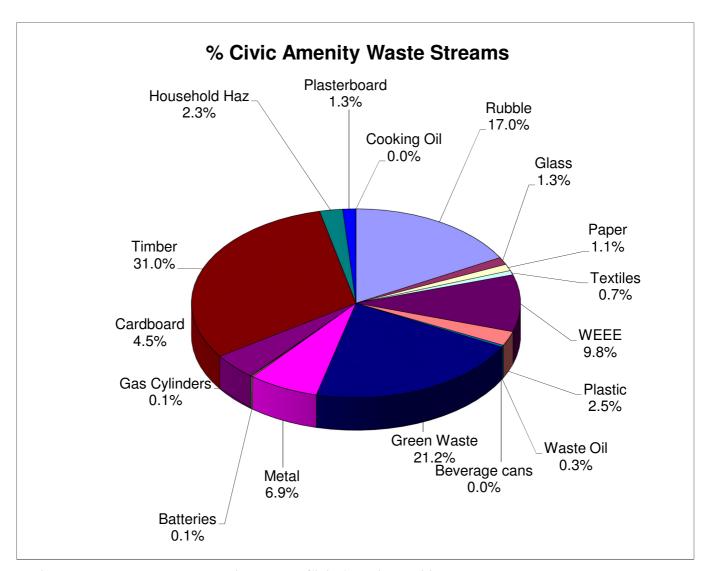


Figure 5.2 Recyclable Waste Types Received at the Civic Amenity Facility

5.3 Waste Received and handled

Waste received at the baling facility during the reporting period amounted to 83,367 tonnes, which is 241,113 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).

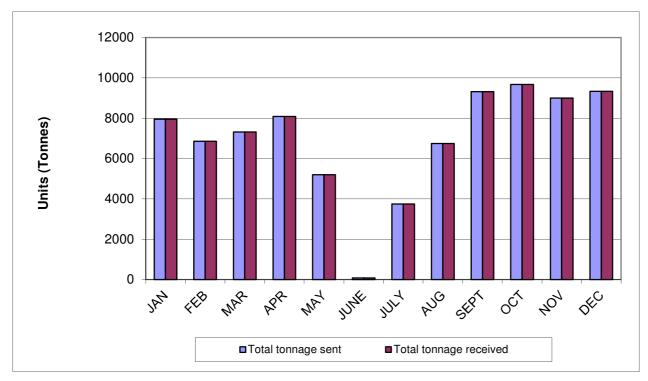


Figure 5.3 Tonnage Received and Sent in 2017 to the Baling Station and to Incineration or recovery

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.

.6.1.2 <u>Daily Odour monitoring</u>

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 record.

6.1.3 Quarterly Odour Monitoring

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

.6.1.4 Odour Emission control system

The in-situ odour emission control system is a dry dust filtration and annular bed activated carbon filtration system. The annular activated 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. A 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. <u>Dust Monitoring</u>

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

7.0 Incidents Summary

Condition 11.2 of the Waste Licence requires that the licensee shall make written records of the environmental incidents. There was 1 incident recorded during the reporting period.

7.1. Complaints Summary

There was no complaints received from local residents or commercial interests during the reporting period.

7.2. Corrective Action

7.2.1 Surface Water

- The current cleaning procedures of the site have been reviewed with stringent and improved cleaning regime has been implemented including the weekly manual cleaning of all gullies and the fortnightly jetting of gullies and sewer-lines
- The procurement of an additional road-sweeper which will routinely sweep the site daily in conjunction with the forklift mounted 'multisweeper'.
- Full time cleaning / compliance operative has been employed.
- ❖ All cleaning and jetting frequency of all foul and surface water lines, along with all gullies has been increased.

7.2.2 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 August 2017.
- ❖ The dust filters were replaced in November 2015.

7.3. Non-Compliance Summary

3 non-compliances were received at the facility during the Reporting period:

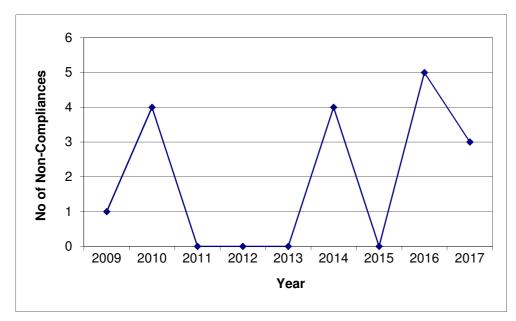


Figure 7.1 Number of Non Compliances

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 last submitted to the Agency for agreement on the 31st March 2012. The Agency asked that no EMP plan was to be submitted to them after 2012. A review of The Environmental Management Plan was conducted in 2016 and a copy kept onsite at the facility. 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 Directors of the Facility Management. Items referred to within these objectives are site specific and are the combined responsibility of the Council's Environmental Manager and The Facility Management.

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	Refresher Forklift Training	Achieved
Target 1.3	Refresher Front End Loader Training	Achieved
Target 1.4	Refresher teleporter training	Achieved
Target 1.5	MEWP 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	Upgrade signage at entrance gate and within the Civic Amenity	Achieved
Target 2.3	Introduce pay by weight for MSW in Civic Amenity	Not Achieved
Target 2.4	Introduce Mattress recovery and recycling	Achieved
Target 2.5	Introduce Public awareness recycling flyer	Achieved

Objective 3	To Continue site development/improvement	
Target 3.1 Target 3.2	Install designated MSW disposal area Install extra CCTV	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	Reduction of water consumption Decrease in the use of electricity Undertake energy audit of the facility	Achieved Achieved Not-Achieved
Objective 5	To comply with Emission Limit Values in Schedule E of Waste Licence	
Target 5.1	Reinstall Bio-Tubes to all interceptors to reduce OFG levels.	Not Achieved
Target 5.2	Replace Activated Carbon in odour control system.	Achieved
Objective 6	To successfully control emergencies at the facility	
Target 6.1	Review and update of safety statement, site	Achieved
Target 6.2 Target 6.3	health and safety plan and site risk assessments Introduce new Environmental Response Plan Introduce new Health and Safety response Plan	Achieved Achieved

Table 8-1 Achievement of Environment Objectives & Target

8.2. Proposal

Target Number	Description	Time Frame	Responsibility
Target 1.1	Continue to conduct Environmental Training refresher course for all Baling Station and Civic Amenity Staff	September 2018	Facility Manager
Target 1.2	Refresher Front End Loader Training	June 2018	H&S Manager
Target 1.3	MEWP training	July 2018	H&S Manager
Target 1.4	Fire Extinguisher training	August 2018	H&S Manager
Target 1.5	First Aid Refresher training	September 2018	H&S Manager
Target 2.1	Further expansion of recycling facilities at the Civic Amenity Facility by increasing the number of waste types accepted for recycling.	September 2018	Env. Manager
Target 2.2	Introduce pay by weight for MSW in Civic Amenity (if required by legislation)	December 2018	Env. Manager
Target 2.3	Facilitate school tours and awareness visits	December 2018	Env. Manager
Target 3.1	Review layout of Civic Amenity to ensure ease of use.	December 2018	Facility Manager
Target 4.1	Reduction of water consumption	December 2018	Facility Manager.
Target 4.2	Decrease in the use of electricity	December 2018	Env. Manager
Target 5.1	Replace Activated Carbon in odour control system.	August 2018	Env. Manager.
Target 5.2	Replace dust filters in Odour control system	August 2018	Env. Manager
Target 5.3	Review and improve foul and surface water cleaning regime.	January 2018	Facility Manager.
Target 5.4	Carry out bund integrity testing	September 2018	Env. Manager / Facility Manager.
Target 6.1	Review and update of safety statement, site health and safety plan and site risk assessments	December 2018	H&S Manager
Target 6.2	Conduct Emergency response training with staff	June 2018	Env. Manager
Target 6.3	Review Fire Risk Assessment	June 2018	H&S Manager
Target 6.4	Fire Drill	August 2018	H&S Manager

Table 8-2 Proposed Environment Objectives & Targets for 2018

The Environmental Objectives and Targets proposed for the forthcoming year (listed in Table Table 8.2 proposed environment objectives and targets) 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.

8.3 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. <u>Standard Operating Procedures</u>

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 updated in June 2015. 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 receiving facility.
- 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 an agreement with Panda Waste Services. 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 Management Committee, the Environmental Manager, the Facility Manager 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.

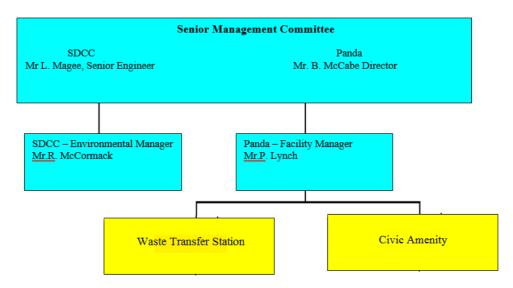


Figure 8.1 Management and Staffing Structure

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 between November and December 2015. At the end of 2015 reporting period all onsite Bunds met the requirements. All bunds to be re-tested in Q4 2018

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 - 10.4.

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

Table 10-1 Principle Resource Consumers

Resource	Quantity Used
Diesel Fuel	50,319 litres
Electricity	1,245,137 kWh
Water	895 m3
Plastic Wrap	66 tonnes

Table 10-2 Energy and Resources (January 2017 – December 2017)

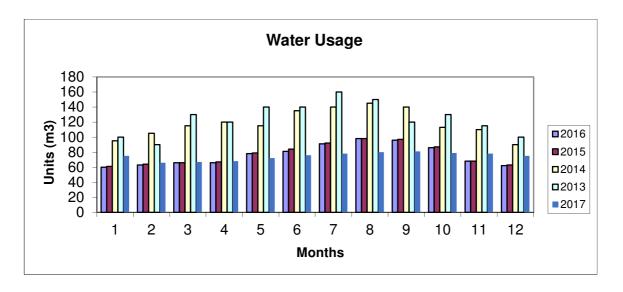


Figure 10.1 Water Use

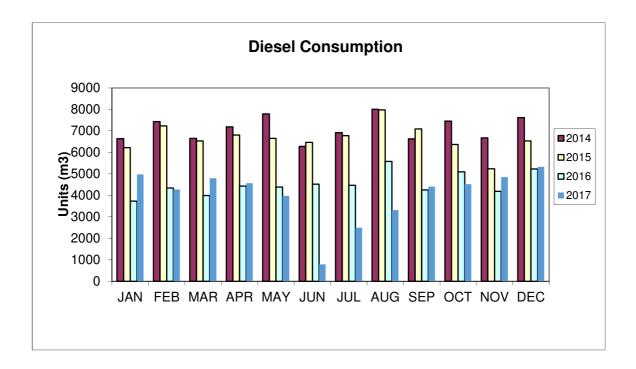


Figure 10.2 Diesel Consumption

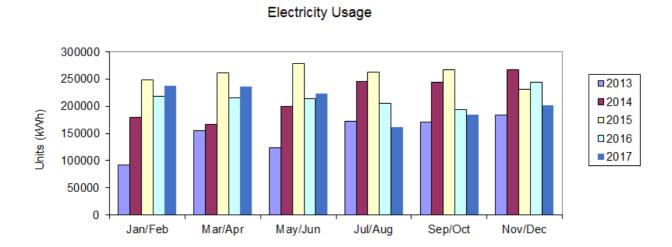


Figure 10.3 Electricity Consumption (bi-monthly comparison)

11. REPORT ON PUBLIC INFORMATION FILE

During the 2017 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 2017, 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. Pat Lynch Panda Waste Management Facility Manager

Mr. Richard McCormack 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.

Bailing of waste on site ceased in May 2017 and at that stage 35,425 tonnes of waste had been accepted in the Bailing Shed. As the licence permits 324,480 tonnes per annum it meant that there was a maximum tonnage of 289,055 tonnes that could be bulked transferred. There was 47,942 tonnes put through the Waste Transfer Station from 01 June 2017, meaning there was an additional unused capacity of 241,113 tonnes.

In total 83,367 tonnes was accepted in the facility which means the facility was running at 26% capacity

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	$100,000 \text{ m}^3/\text{hr}$
•	Inlet Odour Capacity	5,000 OUE/m3
•	Outlet Odour Concentration	150 OUE/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 S	pares:
-------	--------

Component	No. off
Bearing set for fans	2 No.

Dustfilter Spares:

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

Carbon Spares: 6 Tonnes

13. ENVIRONMENTAL LIABILITIES AND DECOMMISSIONING

13.1. Decommissioning Plan

As per licence condition, 12.2 a Financial Provision for decommissioning is in place by the Council. A copy of the decommissioning plan is available for viewing at the facility office by appointment.

13.2 Environmental Liability Risk Assessment

As per licence condition 14.1, an Environmental Liability Risk Assessment is in place by the Council. A copy of the Environmental Liability Risk Assessment is available for viewing at the facility office by appointment. The assessment details measures taken in relation to the prevention of environmental damage. A cost of 1,224,606 has been quantified. These costs, along with the costs of the subsequent post incident remedial works, will be recouped from the facility insurance policy.

APPENDIX

Parameter	Sample Point	Licence W0003 (mg/l)	Jan 2017	April 2017	Jul 2017	Oct 2017
pН	1(us)	5.5 - 9.0	7.8	8.0	8.0	8.2
	2(us)	5.5 - 9.0	7.8	8.1	7.9	8.3
	3(ds)	5.5 - 9.0	7.8	8.2	8.0	8.2
BOD	1(us)	25.0	14	<2	<2	3
(mg/l)	2(us)	25.0	8	<2	<2	3
	3(ds)	25.0	10	<2	<2	3
COD	1(us)	150.0	25	7	11	4
(mg/l)	2(us)	150.0	15	4	12	6
	3(ds)	150.0	15	4	12	6
Suspended	1(us)	35.0				
Solids			16	1	4	<1
(mg/l)	2(us)	35.0	13	1	2	<1
	3(ds)	35.0	13	5	<1	1
Mineral Oil	1(us)	5.00	0.28	<0.01	0.022	<0.01
	2(us)	5.0	0.042	<0.01	0.019	<0.01
	3(ds)	5.0	0.079	<0.01	<0.01	<0.01

Table 12-1.1 Surface Water Monitoring Results 2017

^{*}us – upstream of baling centre ds – downstream of baling centre

	Sample ID	SE1A	S2	S3
DETERMINAND	Lab ID	134149	134147	134148
BOD	n/a	5	3.75	4.25
COD	n/a	11.75	9.25	10
pH (pH Units)	**	8	8.03	8.05
Suspended Solids	n/a	5.5	5.5	5

 Table 12-1.2 Average Surface Water Monitoring Results 2017

F6	Licence Limit	31/01/2017	13/04/2017	13/07/2017	20/01/2017	Average2017
Ammonia as						
NH ₄	50	4.3	10	3	20	9.33
Detergent	100	0.35	< 0.005	0.032	0.91	0.411
Sulphate	500	26	29	22	35	28
O,F & G	100	<2	4	3	21	7.5
Temp (°C)	42	10	12	18	13	13.25
B.O.D.	10000	18	60	6	12	24
C.O.D.	30000	36	71	33	25	41.25
pН	5 to 10	7.5	6.8	7.6	8.7	7.65
S/s	2000	45	45	13	12	28.75
Mineral Oils						

Table 12-2 Emissions to Foul Sewer 2017

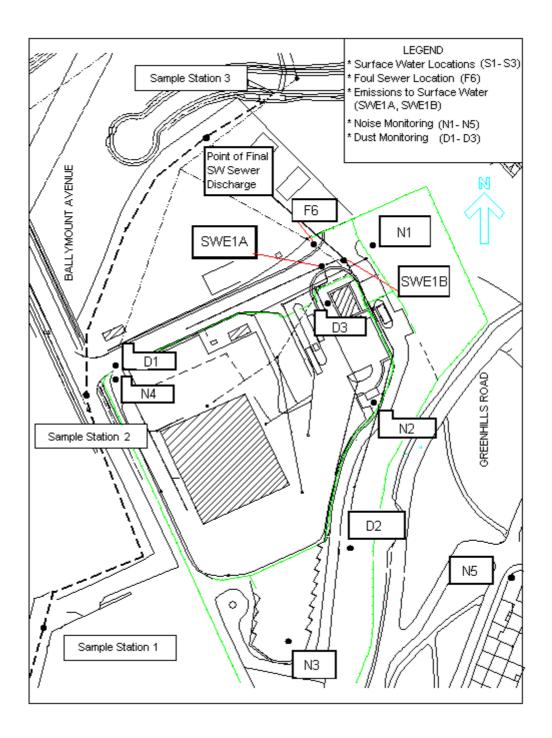


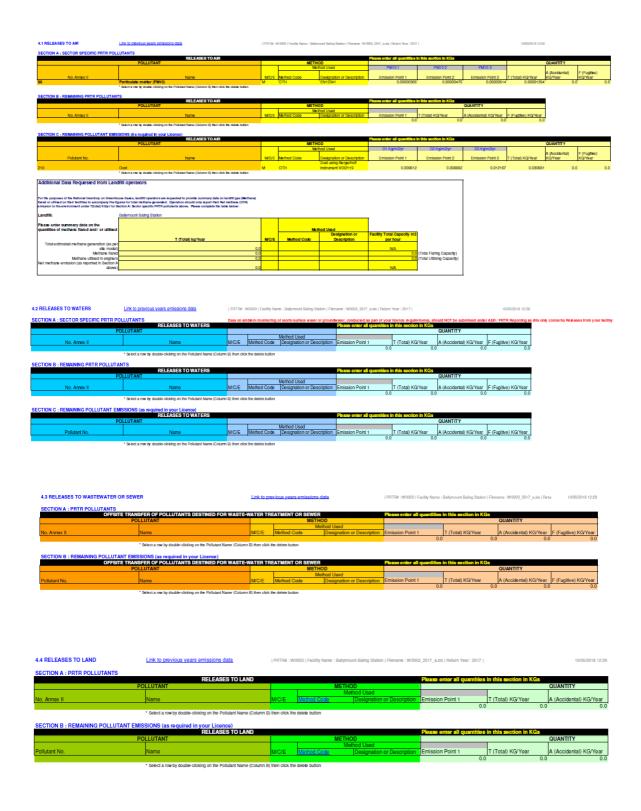
Figure 12.1 Monitoring Location Map



Guidance to completing the PRTR workbook

PRTR Returns Workbook

Environmental Protection Agency	Version 1.1.19
REFERENCE YEAR	
1. FACILITY IDENTIFICATION	
Parent Company Name	South Dublin County Council
	Ballymourt Baling Station
PRTR Identification Number	
Licence Number	
Enterine Harrist	IT waste as
Classes of Activity	
	class name
140.	Refer to PRTR class activities below
	Tener to FTTTT Cabba Scriptura Delon
Address 1	Ballymount Road
	Walkinstown
Address 3	
Address 4	
Address 4	
	D.A.L.
	Dublin
Country	
Coordinates of Location	
River Basin District	
NACE Code	
	Treatment and disposal of non-hazardous waste
AER Returns Contact Name	
AER Returns Contact Email Address	
AER Returns Contact Position	
AER Returns Contact Telephone Number	01 1419000
A ER Returns Contact Mobile Phone Number	
AER Returns Contact Fax Number	
Production Volume	0.0
Production Volume Units	
Number of Installations	
Number of Operating Hours in Year	0
Number of Employees	
User Feedback/Comments	
Web Address	
2. PRTR CLASS ACTIVITIES	
Activity Number	Activity Name
5(c)	Installations for the disposal of non-hazardous waste
5(a)	Installations for the disposal of non-hazardous waste
50.1	General
3. SOLVENTS REGULATIONS (S.I. No. 543 of 20	
is it applicable?	
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 ?	
4. WASTE IMPORTED/A CCEPTED ONTO SITE	Guidance on waste Imported/accepted onto site
Do you import/accept waste onto your site for on-	Constitution of these important accepted office size
site treatment (either recovery or disposal	
activities) ?	This question is only applicable if you are an IPPC or Quarry site
	this questions only applicable it you are an innic or Quarry site



ToOther Countries 2001 35

5. ONSITE TREATMENT & OFFSITE TRANSFERS OF WASTE Har Waste : Address of Next Destination Facility Non Har Waste Address of RecoverDisposer Transfer Destination Offsile in Instand Enva heland ListW0184-2 Est Portisoba, Laota, Felland , Portisoba, Laota, heland ListW0184-2 Est Portisoba, Laota, Felland , Portisoba, Laota, heland ListW0184-2 Est Portisoba, Laota, reland , Portisoba, Laota, heland ListW0184-2 Est Portisoba, Laota, reland , Portisoba, Laota, heland ListW0184-2 Est Portisoba, Laota, reland , Portisoba, Laota, heland , Portisoba, he Within the Country 13 02 08 26.26 other engine, gear and lubricating oils | Block 402 (grants | HJ | Erthoven, EL5598, Durly shife, __Uhilled | Chish in Indiand | G3 | ER, Hallowson, Dublin, Instand | Limited Ringdom | Kingdom | K other engine, gear and lubricating oils Within the Country 13 02 08 Within the Country 15 01 01 paper and cardboard packaging M Weighed Offsite in Ireland Panda Waste ,W0039-02 Groenstar, Millenium Park Offsite in Ireland W0183 Within the Country 15 01 01 paper and cardboard packaging R3 Welched Irish Packaging Recycling
Ltd the Panda Waste
Offsite in Ireland Services, W263 Ballymount Road,Ballymount Road,Walkinstown Within the Country 15 01 01 No 1.85 paper and cardboard packaging м Weighed Offsite in Instand MRP W (038.0) Lett, Ballymouri, Dri Z, Italiand Crawnistar Fassarou, W 0053. Fassarou, Gray W (oblow, ,) of John Crawnistar Fassarou, W 0053. ,D12,Ireland Merrywell Ind Est, Ballymoun Within the Country 15 01 01 and Morrywell Ind Est Ballymount Rd Offsite in Ireland MRF,W 0238.01 R3 Within the Country 15 01 02 177.6 plastic packaging Weighed Lwr, Ballymount, D12, Ireland Merrywell Ind Est, Ballymoun Offsite in Ireland MRF,W 0238.01 Rd Lwt Ballymount,D12,Itoland Within the Country 15 01 02 plastic packaging Weighed Hish Packaging Royoling
Lish Packaging Royoling
Lish Parkaging Royoling
Ballymount Road Ballymount
Road Waterstein
Glasson Shahabh PF-KE-08
Offstel in Invaled
Grawnster Fassano W0053
Fassano Bray Wicklow, Josi
and Within the Country 15 01 04 0.8 metallic packaging Weighed Within the Country 15 01 07 100.24 glass packaging B5 Weighed Within the Country 16 01 19 plastic R3 Weighed Within the Country 16 05 04 Weighed Within the Country 16 05 05 Weighed Within the Country 16 06 01 0.0 lead batteries Welched Enthoven,BL5598,Derbyshire Derbyshire,...,United 10.45 lead batteries 2.64 alkaline batteries (except 16.06.03) 0.38 mercury-containing batteries Abroad KMK Motals, W0113-04 Offsite in Ireland KMK Motals, W0113-04 Offsite in Ireland KMK Motals, W0113-04 To Other Countries 16 06 01 Within the Country 16 06 04 Within the Country 16 06 03 Weighed Weighed Weighed 10.35 inercury-containing batteries mixture of conceals, bricks, files and coramics other than those mentioned in 17 252.72 01 06 Dublin City Council
Offsite in Ireland MRF,W 0238.01 Lwt, Ballymount, D12, Iteland Merrywell Ind Est, Ballymoun Offsite in instead Dublin City Council Rd Lw, Ballymount, D12, Instand Greenste, Millerium Park Grago, Ballycosin, Fingles, Offsite in Instand With III Offsite in Ireland MRF;W 0238.01 Within the Country 17 08 02 Weighed ggroup based construction materials other GLDs than those medianed in 17 08 01 RS Within the County 1708/02 ggoun-based construction make this other 19.05 than those mentioned in 17.00 th mised construction and demotion weather other than those mentioned in 17.09.01, 17. 09.09.00 and 17.09.03 patients. Cappagh nt Dappagogus, Fingles , D11, Indeed Plends Wisele/ Offsite in Indiand Numericky/W0051-02 M Weight Within the County 1708 02 Gatemater Figurera, WODE3 Figurera, Bring, Wickins, "Inc.
Official in Indiand 03 Within the County 170904 M Weight and Self-mark Self-mark Self-mark Child in Indeed Panda Wasta W0036-02 12, Jinkey Could Child in Indeed Panda Wasta W0036-02 Self-mark Child in Indeed Panda Wasta W0036-02 12, Jinkeyd Self-mark Se gg dates with 17 GB 03 mitted construction and demotition weaths other than those mentioned in 17 GB 05, 17 1001 EE 09 02 and 17 GB 03 Within the Country 17090s M Wested Within the County 1912/02 Weight other wastes (including mixtures of materials) from michanical treatment of wastes other than those medianed in 1912 to P3 Newton Redispensive, Official in Instead - Enrich WFP-MH-08-0001-01 - Kilozok, Co. Meeth M Weight Within the County 191212 other stokes (including mixtures of materials) from michanical beatment of seales other 0.0 than those mericoned in 19 12 11 Re Pends Waster/ Drogheds Tom Rose Point Facility, Port Company W FP-LH-11- Balling Rd, Drogheds, Co 0006-01 M Weight ToOffer Countries 1912:12 other weeks (including midutes of materials) from muchanical beatment of weeks other than those mentioned in 19 (2 th Pende Wiseler O Herion and Sons Contractors Ltd Loughingtons Yerd, Quey WFP-LH-9-0003-01 Simet, Durndek, Co. Louth ToOther Countries 191212 M Wested Droglade Port Herbouwille, Montington Comapany, W FP-LH+12-000e-Road Droglade, Co. ToOther Countries 191212 M Weight other explain (including mixtures of materials) from machanical breatment of explain other than those mentioned in 19 12 11 Gineros Pori LigiW FP-LIA 116 0000-01 (Gineros, Co. Losh, Inixed Tom Ress Poris Facility, Belloy Martin Batterly and Co., WFP - Rd, Drogheds Co. LIA-16-0000-01 Last, Initiand ToOther Countries 191212 ToOther Countries 191212 OD Age Lid OD Recycling WEP-T-10-0000F Salighbor, Salighpothis, Commit Others in Indian OD The Committee in Indian OD The India Within the County 191212 Sendeld Court , Sendeld Court Ind Cot, Germin , Cork, Indeed Within the County 191212 Within the County 2001 Or Weight US pays and perfored Within the County 2001-02 ESS glass R3 Weight Kitten, Interd Margard and Est, Buly record Rd Lee, Redymount, D+7, Instend Unit D+C, Bluebell Ind Ext, Rylamore R4, D+2, Indeed Within the Country 2001 11 457 tedbe R3 M Weight Officia in Indeed - Eraph IndeedW79062 Within the County 2001 11 M Weight Other in Instend Tracks Recycling List,0 IS NO belle Supposed tubes and other mercury till a containing weeks M Weight ToOffer Countries 2001 21 Abroad KMK Melek WOn 3-03 Tulieron, Office, United Femorate Factors dring
SAS, to 2x62A, Zer das
Medis, SP03, 1000 Saint
Dungerron, Tyron, , , Inkend Tribsut, , France
Saint Tribsut, , France ToOther Countries 2001 23 Technic Ltd,LN/08/122 M Weight Abroad Officia in Instead IAMK Matels W 01:13-05 Tullerom, Officia, "Instead IAMK Matels W 01:13-05 Didgmount from Did Within the County 20th 23 Wilded Tuberon/Othly, , Inkerd Within the County 2001 25 No 1.52 edible of and bg 89 Wested Access GMB and RU
Infriese RLEGE, Websper
2 to DoGP2 Machine
Materials
Germany, Meldoc Delparitie
Germany
Registra (DPAL20006-0000)
UK, Germany
RUZIO 200006-0000
UK, Germany
PULToning Industrial M Wright ToOther Countries 2001 27 PU/oreg Indutted
Community
Characteristics (Josephan Legis)
Abroad Sine Inherd LE,WOrld+2 Sat, Porticates, Locks, Jailand
Edis, CoRRASTON
Edits, CoRRASTON
Edit paint, into, adhesives and mains containing 179.4 degenous substances P2 ToOffer Courties 2001 27 Abroad KMK Melak,WOrs3-Se Tullence, Chilgs, Joken W SST, MIDLANDS, W SST SELL AND SE

										Ballymount Cross, Tallaght, Dublin
Witt	in the Country	20 03 01	No	407.14 mixed municipal waste other wastes (including mixtures of	D15	м	Weighed	Offste in Ireland	Panda Waste ,W0039-02	12, liteland
				materials) from mechanical treatment of wastes other than those mentioned in 19 12						Ballymount Cross, Tallaght, Dublin
With	in the Country	19 12 12	No	28.04 11 other wastes (including mixtures of	D15	м	Weighed	Offsite in Ireland	Panda Waste ,W0039-02	12, liteland
				materials) from mechanical treatment of						
witt	in the Country	191212	No	wastes other than those mentioned in 19 12 6256.32 11	R3	м	Weighed	Offste in Ireland	Enrich,WFP-MH-08-0001-01	Nawtown, Rathganley, Kiloook ,Co. Kildare, ite land
										Ballymount Cross, Tallaght, Dublin
Witt	in the Country	20 01 38	No	2453.89 wood other than that mentioned in 20 01 37	R3	м	Weighed	Offsite in Ireland	Panda Waste ,W0039-02	12, lto land Ballymount
18791	in the Country	20.01.20	No	7.22 plastics	R3	м	Weighed	Offetto in Instance	Panda Waste .W0039-02	Cross, Tallaght, Dublin 12 _ lite land
									Greenstar Fassaroe, W0053-	Fassaroe, Bray, Wicklow, "Iro I
WIT	in the Country	20 01 39	No	plastics	R3	м	Weighed	Offsite in Ireland		and
									Irish Packaging Recycling Lid Va Panda Waste	Ballymount Road, Ballymount Road, Walkinstown
With	in the Country	20 01 39	No	plastics	R3	м	Weighed	Offste in Ireland	Services, W263	,D12,Ireland Merrywell Ind Est,Ballymount
wat	in the Country	20 01 39	No	plastics	R3	м	Weighed	Offste in Ireland	Dublin City Council MRF, W0238.01	Rd Lwr,Ballymount, D12, its land
							2008/0000		Multimotals	Bollamov. The Morrough.Co.
With	in the Country	20 01 40	No	448.12 metals	R4	м	Weighed	Offsite in Ireland	Ltd,ESS/15/8121319	Wicklow, Ireland Ballymount
	in the Country	20.04.40	No	7.34 metals	D.	м	Manager	Official in Instant	Panda Wasto .W0039-02	Cross, Tallaght, Dublin
	in the Country				R4		Weighed		Clearcircle Metals, WFP-LKC-	
	in the Country		No	motals	R4	м	Weighed	Offsite in Ireland		Road,, Limerick, Ireland Kilberry, Athy, Co. Kildare,, Irel
		20 02 01	No	biodegradable waste	R3	м	Weighed		Bord na Mona, W0198-01 Bord na Mona Drehid	and
With	in the Country	20 02 01	No	biodegradable waste	R3	м	Weighed	Offsite in Ireland	,W0201 Greenstar, Millenium Park	Albriwood, "Kildaro, "Ireland Grange, Ballycoolin, Finglas,
WH	nin the Country	20 03 01	No	55.7 mixed municipal waste	D15	м	Weighed	Offsite in Ireland	W0183	Dublin, Iroland Ballymount
wee	in the Country	20.03.01	No	1447.33 mixed municipal waste	D15	м	Weighed	Offsto in Iroland	Panda Wasto ,W0039-02	Cross, Tallaght, Dublin 12,lio land
		20 03 07	No		D5				Panda Waste /	Rathdrinagh, Beaupark, Slane
				21.5 bulky wasto			Weighed		Nurendale, W0140-04 Greenstar, Millenium Park	,Meath, Ireland Grange, Ballycoolin, Finglas,
	in the Country		No	77.04 bulkywasto	R12	м	Weighed	Offsite in Ireland	Greenstar Fassaroe, W0053-	Dublin, Iroland Fassaroe, Bray, Wicklow, ,, Irol
		20 03 07	No	73.8 bulkywasto	R12	м	Weighed	Offsite in Ireland		and 133A ,Slaney Road,Dublin
With	in the Country	20 03 07	No	bulkywasto	R12	м	Weighed	Offste in Ireland	Ecomattress Recycling.	ind Est,d11,lip land Ballymount
witt	in the Country	20 03 07	No	597 2.93 bulky wasto	R12	м	Weighed	Offste in Ireland	Panda Wasta .W0039-02	Cross, Tallaght, Dublin 12, ito land
				, , , , , , , , , , , , , , , , , , , ,					Panda Waste /	Cappagh nd, Cappagogua, Finglas
With	in the Country	20 03 07	No	29.28 bulky wasto	R12	м	Weighed	Offste in Ireland	Nurendale,W0261-02	,D11,Ireland
										Discontinues David Davidson
	to the Count	00.00.04			D.		THE COLUMN TWO IS NOT	Officer to but	Dublin Waste to	Pigson House Road, Poolbeg Pininsular, Dublin
TY III	in the Country	20 03 01	No .	44898.17 mixed municipal waste	R1	-	Weighed	Ottom in related	Energy W0232-01	4, Dublin, Ireland