Annual Environmental Report

March 2017

the city bin co

Annual Environmental Report

Period 1st January 2016 to 31st December 2016
The City Bin Co., Carrowmoneash
Oranmore, Co. Galway

Prepared to comply with
Waste Licence Register No. 148-1.
Condition 11.5.1, 11.5.2 and Schedule F

Approved By:
McCarthy Keville O'Sullivan Ltd

The City Bin Co.
Oranmore Business Park
Co. Galway
T: 1800 24 89 24
F: 1800 65 58 55
E: info@citybin.com
W: www.citybin.com

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1. Introduction

1.1. Reporting Period

This Annual Environmental Report (AER) is the seventh such document produced for The City Bin Co waste transfer station at Carrowmoneash, Oranmore, Co. Galway. Environmental monitoring and reporting are required under Schedules D and E of the facility's EPA Waste Licence (Licence Number 148-1). The reporting period for the AER is from 1st January 2016 until 31st December 2016. The AER is in follow up to the previous report, which was for the report period 1st January 2015 to 31st December 2015.

1.2. Location of Facility

The City Bin Co waste transfer station is located in the townland of Carrowmoneash, Oranmore, Co. Galway, approximately 140 metres east of the N18 (Galway – Limerick) National Primary Road, 420 metres north of the N6 (Galway – Dublin) Dual Carriageway and approximately 30 metres north of the Galway – Dublin railway line. Other facilities surrounding the waste transfer station include the New Galway Metal Company, Old Galway Metal Company yard, the old Steelforms site and the Galway Oil Depot Site. The Deerpark Industrial Estate and a number of commercial premises are located west of the waste transfer station, on the opposite the side of the N18.

2. Waste

2.1. Previous Waste Management Activities

Waste management activities carried out at the facility before the Agency requested review the new First Schedule of the EPA Acts 1992 to 2013 are outlined in Tables 2.1.1 and 2.1.2.

Table 2.1.1. Licensed Disposal Activities

Licensed Waste Disposal Activities, in accordance with the Fourth Schedule of the Waste Management Act, 1996-2003	
Class 11	Blending or mixture prior to submission to any activity referred to in a preceding paragraph of this Schedule. *This activity is limited to bulking and transfer of waste.*
Class 13	Storage prior to submission to any activity referred to in a preceding paragraph of this Schedule, other than temporary storage, pending collection on the premises where the waste concerned was produced. *This activity is limited to the storage of waste prior to bulking and transfer of waste.*

Table 2.1.2. Licensed Recovery Activities

Licensed Waste Disposal Activities, in accordance with the Fourth Schedule of the Waste Management Act, 1996-2003	
Class 2	Recycling or reclamation of organic substances which are not used as solvents (including composting and other biological transformation processes): *This activity is limited to recovery of paper, wood, plastic and organic waste.*
Class 3	Recycling or reclamation of metals and metal compounds. *This activity is limited to recovery of glass and construction and demolition waste.*
Class 4	Recycling or reclamation of other inorganic materials. *This activity is limited to recovery of glass and construction and demolition waste.*
Class 13	Storage of waste intended for submission to any activity referred to in a preceding paragraph of this Schedule. Other than temporary storage, pending collection, on the premises where such waste is produced. *This activity is limited to the storage of water prior to recovery.*

Incoming waste vehicles proceed to an onsite weighbridge where they are then weighed and assessed. Wastes are then tipped in the Waste and Recycling Transfer Building, where they are inspected for suitability, and reloaded if they are found to be unacceptable. Wastes are then sorted and loaded onto waste transfer vehicles prior to their removal from site.

2.2. Quantity and Composition of Wastes Received

Table 2.2.1. lists the incoming wastes that were received at the facility during the period 1st January 2016 to 31st December 2016.

Table 2.2.1. Waste Received at the Facility from 1st January 2016 to 31st December 2016

Waste Type	Annual limits	Quantity (tonnes)
Household waste	20,000	7,421.03
Commercial waste	20,000	12,452.52
Construction and Demolition waste	80,000	2,699.62
Industrial Non-hazardous wastes	10,000	0
Total	**130,000**	**22,573.17**

2.3. Waste Sent Offsite for Recovery or Disposal

Tables 2.3.1 and 2.3.2. list the quantities of outgoing waste from the waste transfer station during the reporting period 1st January 2016 to 31st December 2016.

Table 2.3.1. Waste Sent Offsite for Disposal from 1st January 2016 to 31st December 2016

Waste Type	Quantity (tonnes)
Household Waste	5,153.35
Commercial Waste	9,640.90
Total	**14,794.25**

Table 2.3.2. Waste Sent Offsite for Recovery from 1st January 2016 to 31st December 2016

Waste Type	
Household Waste	2,125.75
Commercial Waste	2,110.55
Construction and Demolition waste	2,566.38
Industrial Non-hazardous wastes	0
Total	**6,805.40**

Total waste sent offsite during 2016 therefore amounts to 21,599.65 tonnes, which is 973.51 tonnes less than the value for incoming waste. The difference arose from difficulties in transporting Landfill waste during the Christmas time. All the outstanding waste was removed during January 2017.

2.4. Waste Previous year Received

Table 2.4.1. lists the incoming wastes that were received at the facility during the period 1st January 2015 to 31st December 2015.

Table 2.4.1. Waste Received at the Facility from 1st January 2015 to 31st December 2015

Waste Type	Annual limits	Quantity (tonnes)
Household waste	20,000	7,464.29
Commercial waste	20,000	10,631.52
Construction and Demolition waste	80,000	2,879.42
Industrial Non-hazardous wastes	10,000	0
Total	**130,000**	**20,975.23**

2.5. Waste Sent Offsite for Recovery or Disposal

Tables 2.5.1 and 2.3.2. list the quantities of outgoing waste from the waste transfer station during the reporting period 1st January 2015 to 31st December 2015.

Table 2.5.1. Waste Sent Offsite for Disposal from 1st January 2015 to 31st December 2015

Waste Type	Quantity (tonnes)
Household Waste	5,141.48
Commercial Waste	8,642.66
Total	**13,784.14**

Table 2.5.2. Waste Sent Offsite for Recovery from 1st January 2015 to 31st December 2015

Waste Type	
Household Waste	2,090.68
Commercial Waste	1,899.16
Construction and Demolition waste	2,854.72
Industrial Non-hazardous wastes	-
Total	**6,844.56**

Total waste sent offsite during 2015 therefore amounts to 20,628.7 tonnes, which is 346.53 tonnes less than the value for incoming waste. The difference arose from difficulties in transporting waste during the Christmas time. All the outstanding waste was removed during January 2016.

3. Summary Report on Emissions

3.1. Monitoring Schedule

Table 3.1.1 presents the monitoring and reporting requirements in compliance with Waste License 148-1 Schedule D: Monitoring.

Table 3.1.1. Monitoring Requirements, Schedule D of Waste Licence 148-1

Media	Parameter	Monitoring Frequency	Reporting Frequency
Integrity Test[1]	Levels	Once every three years	Annually
Surface Water [5, 6, 7]	Quality	Quarterly	Quarterly
Groundwater[2, 3, 5, 6, 7]	Quantity/ Quality	Bi-annul	Quarterly
Noise [4]	Levels	Once every two years	Annually
Dust	Quantity	Three times per year	Three times per year
Air	Total Particulates	Annually	Annually

[1] Integrity Test according with Condition 3.12.4 all inlets, outlets, vent pipes, values and gauges must be within the bunded area. This confirmation shall be repeated at least once every three years thereafter and reported to the Agency on each occasion. Next integrity test will be in August 2017.

[2] Further to a letter sent by the EPA on 23rd June 2005 (EPA Ref:148-1/GEN07), monitoring of groundwater at each of the six boreholes was reduced from quarterly to bi-annually.

[3] Further to correspondence from 20th December 2010 (W0148-01 (11) AP24JG.docx) the monitoring frequency has been changed from bi –annually to annual monitoring.

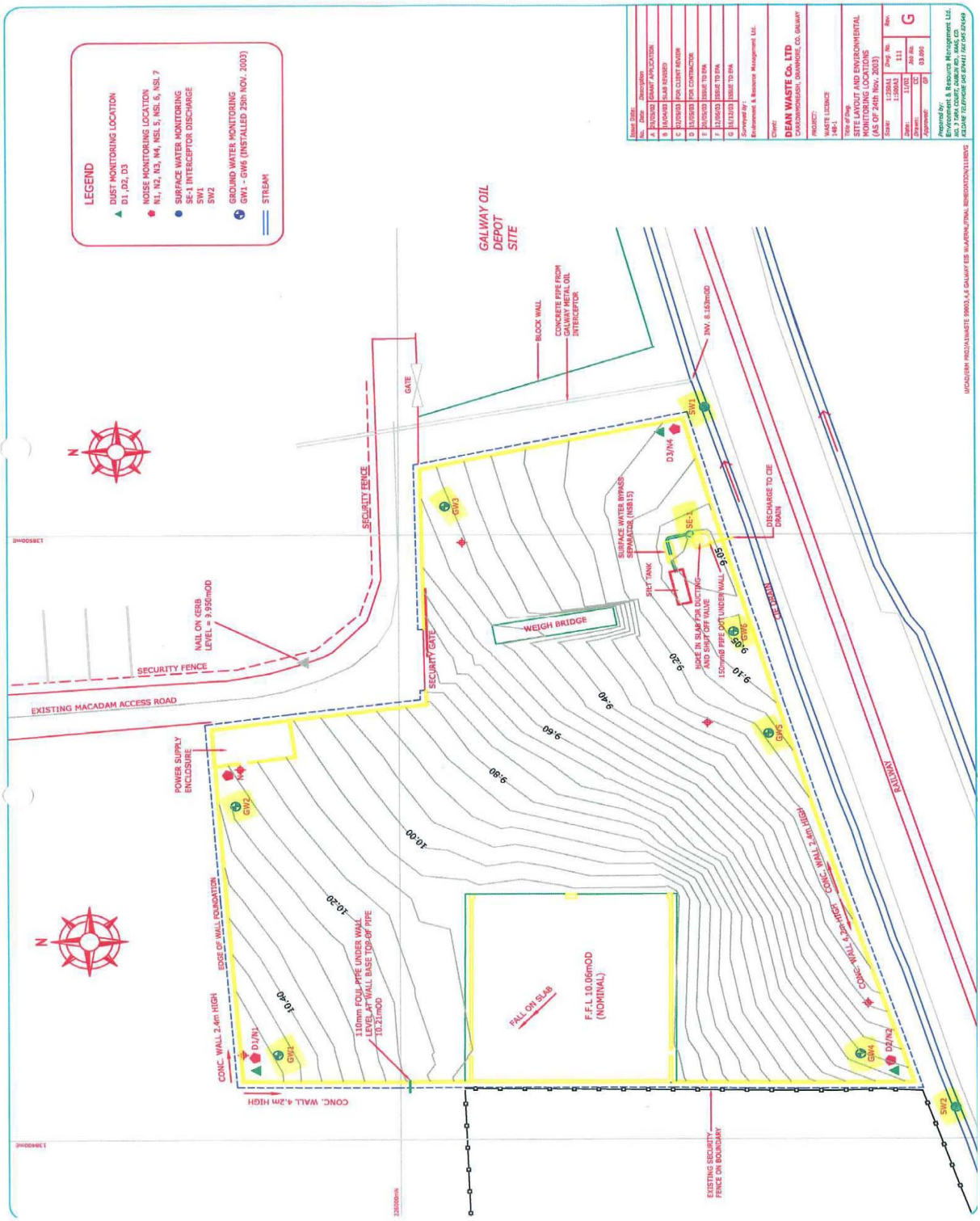
[4] Further to letter sent by EPA on 29th November 2010 (W0148-01 (10) AP22JG.docx), the frequency of noise monitoring has been changed to once every two years. Last noise monitoring was done in 2014 so next will be in 2016.

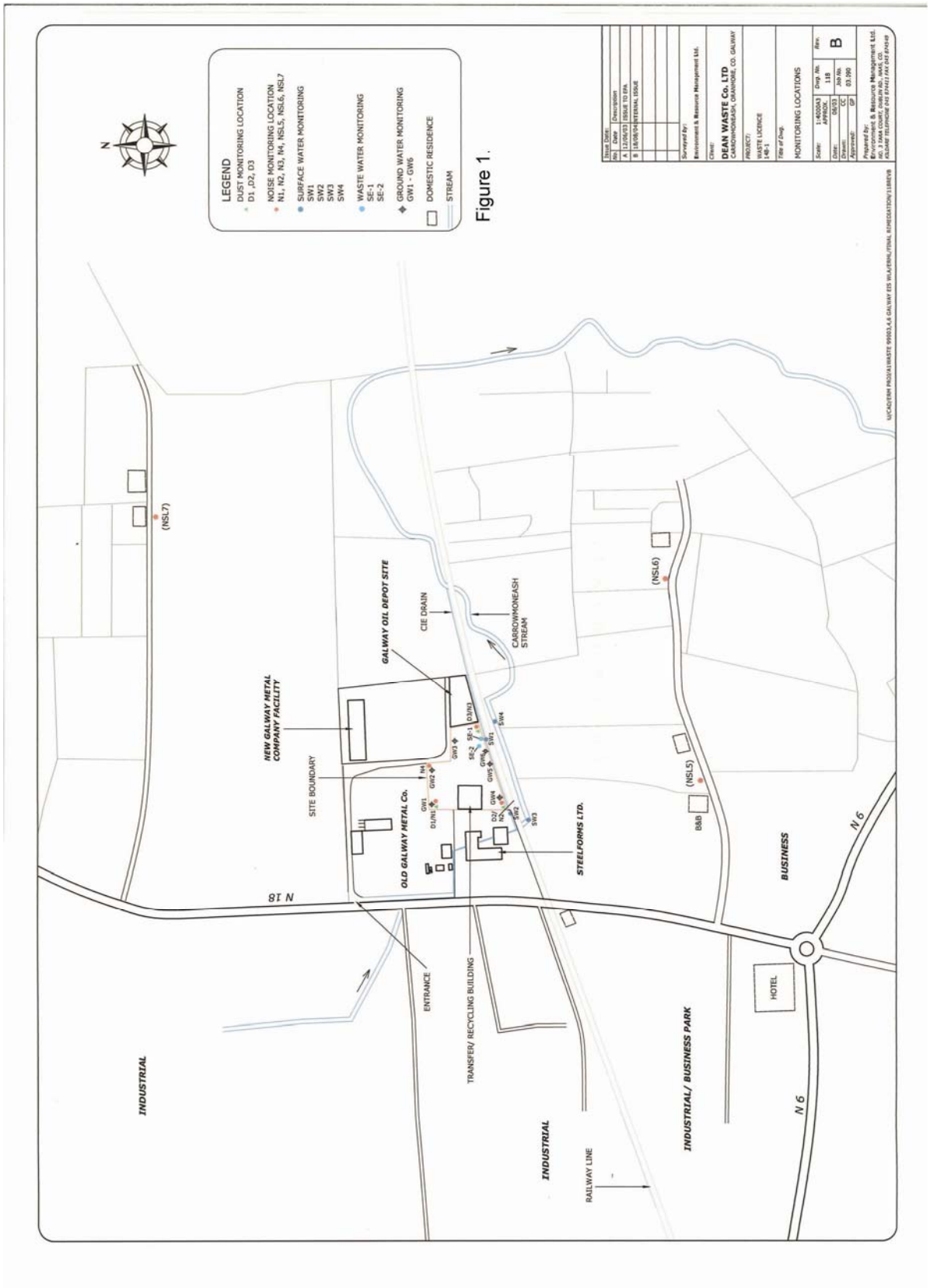
[5] Further to letter received from EPA on 08th March 2013 from Agency, the ground water monitoring frequency has been changed from once a year to quarterly for another 12 month and number of parameters has been increased. Also surface water number of parameters has been increased as well for 12 month starting from Q2 2013 till Q1 2014.

[6] Further to letter sent by EPA on 17th of April 2014 (ALDER LR008939), the frequency in relation to surface and groundwater. Only the groundwater frequency has been changed from quarterly to bi-annual.

[7] Further to letter sent by EPA on 03rd of June 2014 (ALDER LR009607 and ALDER LR009606), the numbers of parameters for groundwater monitoring and Surface monitoring test to the list before Q1 2013.

McCarthy Keville O'Sullivan Environmental Consultants are employed by The City Bin Co for overall management of the license monitoring program. McCarthy Keville O'Sullivan conduct all monitoring and are responsible for submitting the quarterly environmental report on The City Bin Co behalf.


LEGEND
DUST MONITORING LOCATION
D1, D2, D3
NOISE MONITORING LOCATION
N1, N2, N3, N4, NSL 5, NSL 6, NSL 7
SURFACE WATER MONITORING
SE-1 INTERCEPTOR DISCHARGE
SW1
SW2
GROUND WATER MONITORING
GW1 - GW6 (INSTALLED 25th NOV. 2003)
STREAM
GALWAY OIL DEPOT SITE
BLOCK WALL
CONCRETE PIPE FROM GALWAY METAL OIL INTERCEPTOR
GATE
SECURITY FENCE
NAIL ON KERB LEVEL = 9.950mOD
SECURITY FENCE
EXISTING MACADAM ACCESS ROAD
SECURITY GATE
WEIGH BRIDGE
SURFACE WATER BYPASS SEPARATOR (NSB15)
SET TANK
SIDE IN SLAB FOR DUCTING AND SHUT OFF VALVE
150mmØ PIPE DOT UNDER WALL
DISCHARGE TO CIE DRAIN
INV. 8.183mOD
POWER SUPPLY ENCLOSURE
EDGE OF WALL FOUNDATION
CONC. WALL 2.4m HIGH
110mm FOUL PIPE UNDER WALL LEVEL AT WALL BASE TOP OF PIPE 10.21mOD
FALL ON SLAB
F.F.L 10.06mOD (NOMINAL)
CONC. WALL 4.2m HIGH
CONC. WALL 2.4m HIGH
RAILWAY
EXISTING SECURITY FENCE ON BOUNDARY
D1/N1
D2/N2
D3/N4
GW1
GW2
GW3
GW4
GW5
GW6
SW1
SW2
9.60
9.80
10.00
10.20
10.40
9.40
9.20
9.10
9.05


LEGEND
DUST MONITORING LOCATION
D1 ,D2, D3
NOISE MONITORING LOCATION
N1, N2, N3, N4, NSL5, NSL6, NSL7
SURFACE WATER MONITORING
SW1
SW2
SW3
SW4
WASTE WATER MONITORING
SE-1
SE-2
GROUND WATER MONITORING
GW1 - GW6
DOMESTIC RESIDENCE
STREAM
Figure 1.
GALWAY OIL DEPOT SITE
CIE DRAIN
CARROWMONEASH STREAM
NEW GALWAY METAL COMPANY FACILITY
SITE BOUNDARY
OLD GALWAY METAL Co.
STEELFORMS LTD.
ENTRANCE
TRANSFER/ RECYCLING BUILDING
INDUSTRIAL
INDUSTRIAL/ BUSINESS PARK
BUSINESS
HOTEL
B&B
RAILWAY LINE
N 18
N 6
(NSL7)
(NSL6)
(NSL5)
DEAN WASTE Co. LTD
CARROWMONEASH, ORANMORE, CO. GALWAY
WASTE LICENCE
148-1
MONITORING LOCATIONS

3.2. Dust Monitoring

A summary of the Dust deposition rates for The City Bin Co Transfer Station during reporting period are presented in table 3.2.1.

Table 3.2.1. Dust Deposition Rates

Sampling Point	Dust Deposition Rate (mg/m^2/day)		
	Q1 2016	Q2 2016	Q3 2016
D1	48	122	348
D2	76	153	161
D3	81	144	295

Summary of Results

Currently in Ireland there are no statutory limits for total dust deposition. The EPA however, recommends a maximum level of 350 mg/m^2/day of dust deposition when measured according to TA Luft standard, which includes both soluble and insoluble matter (i.e. EPA compliance monitoring is based on the TA Luft Method). This limit value is stated in the Waste Licence for the facility, No. 148-1. Dust samples were collected at the site over a period of more than 30 days, which is the standard sampling time.

The values presented in Table 3.1 show that total depositional dust levels measured at D1, D2 and D3 monitoring locations during last year 2016 were below the 350 mg/m2/day limit value which indicates that nuisance levels of dust do not occurring at the waste transfer station site. The increase has been attributed to activities to the north of the site boundary wall where DM1 & DM2 are located where a saw dust open extraction unit has come into operation in a compound under the operation of Greenway who are a construction company operating out of the old Steelforms site.

The full dust monitoring reports were submitted to ALDER system.

3.3. Air Monitoring

A result of the Air monitoring for The City Bin Co Transfer Station during reporting period is present in table 3.3.1.

Table 3.3.1. Average ambient PM 10 concentration in Q3 2016

Date	Ambient PM10 conc. (ug/m^3)
Monitoring Location D1	22
Limit Value at 98.07th percentile	50 [1,2]
Limit value-annual mean	20 [3]

[1] Irish and EU ambient air standard (SI 271 of 2002 and 1999/30/EC) as a 24-hour average
[2] Maximum number of exceedence seven times in a one-year period
[3] Annual limit value for Stage 2 implementation

Summary of Results

Major sources of particulates include industrial/residential combustion and processing, energy generation, vehicular emissions and construction projects. PM10 monitoring in Ireland is limited to continuous monitoring stations operated by the Local Authorities and the Irish EPA, mainly in large urban centres. Average 24-hour ambient air concentrations monitored in the Phoenix Park and Whitehall respectively are in the range of 16 µg per cubic metre and 17 µg per cubic metre for an annual mean in 1999. The EPA measured an annual mean of 15 µg per cubic metre at a monitoring station located within the Phoenix Park. The dominant source of PM10 in that area appeared to be vehicle emissions, boilers (home heating and industrial heating), industrial processes and construction activities.

The average ambient PM10 value recorded at The City Bin Co facility was 22 µg per cubic metre which is well below the statutory 24-hour average ambient air concentration level of 50 µg m-3 EU limit.

The Air monitoring report was submitted to ALDER system.

3.4. Surface Water Monitoring

Four surface water-sampling events were undertaken at three monitoring locations SW-1, SW-2 and SE-1 during the monitoring period. The ranges of values recorded for each parameter over the reporting period are shown in Table 3.4.1.

Table 3.4.1 Surface Water Monitoring Results: 1st January 2016 to 31st December 2016.

Parameter Q1	**Units**	Monitoring Location Q1			Waste Licence Trigger Limits for SE1
		SW1	SW2	SE1	
BOD	mg/l	2	3	6	25
Total Suspended Solids	mg/l	<10	<10	<10	60
Oils Fats and Greases	mg/l	<0.01	<0.01	<0.01	-
pH	-	7.67	7.70	7.7	-
Total Ammonia (N)	mg/l	<0.03	<0.03	0.05	-
Mineral Oil	mg/l	<0.01	<0.01	<0.01	5

Parameter Q2	**Units**	Monitoring Location Q2			Waste Licence Trigger Limits for SE1
		SW1	SW2	SE1	
BOD	mg/l	5	2	3	25
Total Suspended Solids	mg/l	14	<10	<10	60
Oils Fats and Greases	mg/l	<0.01	<0.01	<0.01	-
pH	-	7.79	7.77	7.75	-
Total Ammonia (N)	mg/l	3.41	0.03	4.85	-

Parameter Q3	**Units**	Monitoring Location Q3			Waste Licence Trigger Limits for SE1
		SW1	SW2	SE1	
BOD	mg/l	2	<1	3	25
Total Suspended Solids	mg/l	<10	<10	16	60
Oils Fats and Greases	mg/l	<0.01	<0.01	0.16	-
pH	-	7.33	7.55	6.92	-
Total Ammonia (N)	mg/l	0.61	0.48	0.48	-
Mineral Oil	mg/l	<0.01	<0.01	0.16	5

Parameter Q4	**Units**	Monitoring Location Q4			Waste Licence Trigger Limits for SE1
		SW1	SW2	SE1	
BOD	mg/l	1	7	8	25
Total Suspended Solids	mg/l	12	<10	<10	60
Oils Fats and Greases	mg/l	<0.01	0.08	0.12	-
pH	-	7.16	7.08	7.14	-
Total Ammonia	mg/l	<0.03	0.25	0.06	-

Summary of Results

Surface water results for this sampling period are all within 'typical' level with the BOD and Total Suspended Solids within the waste licence trigger limits for SE1. Results indicate that waste transfer station activities are not resulting in any pollution to local stream.

The full surface water monitoring reports were submitted to ALDER system.

3.5. Groundwater Monitoring

Groundwater samples are taken on annually basis at six monitoring locations, GW-1, GW-2, GW-3, GW4, GW5 and GW6, during the monitoring period. However, this schedule has changed by the Agency to the bi- annual. Groundwater sampling was carried in second and fourth quarter at the waste transfer station. The ranges of results recorded during sampling are presented in Table 3.5.1.

Table 3.5.1. Groundwater Monitoring Results: 1st January 2016 to 31st December 2016.

Parameter Q2	Units	GW1	GW2	GW3	GW4	GW5	GW6
Mineral Oils	mg/l	<0.01	<0.01	34.6	<0.01	<0.01	<0.01
Diesel Range Organics	mg/l	<0.01	0.28	49.54	0.11	0.13	0.1
Petrol Range Organics	mg/l	<0.01	0.563	<0.01	<0.01	<0.01	<0.01
Electrical Conductivity	mS/cm	0.501	0.475	0.558	0.371	0.593	0.612

Parameter Q4	Units	GW1	GW2	GW3	GW4	GW5	GW6
Mineral Oils	mg/l	<0.01	<0.01	19.84	<0.01	<0.0	<0.01
Diesel Range Organics	mg/l	0.14	0.28	66.12	0.14	0.1	0.09
Petrol Range Organics	mg/l	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Electrical Conductivity	mS/cm	0.565	0.516	0.546	0.366	0.540	0.501

Summary of Results

During the second and fourth quarterly results show elevated levels of Diesel Range Organics (DRO) and Mineral oil in one boreholes GW3. Elevated levels of hydrocarbons have been consistently detected in the groundwater since monitoring began in 2006 and these persist although at lower levels than previous monitoring events. The elevated parameters are not considered to be the result of licensed activities onsite.

The elevated parameters are not considered to be the result of licensed activities onsite.

The full groundwater monitoring reports were submitted to ALDER system.

3.6. Noise Monitoring

On 06.07.16, Damian Brosnan Acoustics carried out a noise survey at The City Bin Co. waste management facility at Carrowmoneash, Oranmore, Co. Galway. The survey is a biannual (i.e. once every two years) requirement of waste licence W0148-01 which applies to the site.

Monitoring was carried out at four onsite and three offsite locations specified in the licence. Night-time monitoring was carried out during the period 5:00-8:00 h as required by the licence. Daytime monitoring was carried out later that morning. There was no activity at the site prior to 8:00 h apart from several truck departures. Daytime operations gradually commenced from 8:00 h.

Noise data recorded are presented in tables below. Respective daytime and night-time limits of 55 and 45 dB specified in waste licence W0148 -01 apply only to the offsite stations NSL5-NSL7, and do not apply to the onsite stations N1-N4.

Table 3.6.1 Noise Monitoring Results: Night-time

Station	N1	N2	N3	N4	NSL5	NSL6	NSL7
Period	Night	Night	Night	Night	Night	Night	Night
Ambient |Aeq 15min (dB)	37	43	52	45	53	47	47
Facility Specific |Aeq 15 min (dB)	<31	<34	47	<41	<49	<45	<45
Tone objectively detected	x	x	x	x	x	x	X
Tone attributable of Facility	x	x	x	x	x		X
Facility audibly impulsive	x	x	x	x	x	X	X
Facility rated LReq 15 min (dB)	<31	<34	47	<41	<49	<45	<45
Limit (dB)	-	-	-	-	45	45	45
Compliance	N/A	N/A	N/A	N/A	Yes	Yes	Yes

Table 3.6.2 Noise Monitoring Results: Daytime

Station	N1	N2	N3	N4	NSL5	NSL6	NSL7
Period	Day	Day	Day	Day	Day	Day	Day
Ambient |Aeq 15min (dB)	56	55	58	63	53	47	48
Facility Specific |Aeq 15 min (dB)	<49	<50	57	63	<50	<44	<45
Tone objectively detected	x	x	x	x	x	x	X
Tone attributable of Facility	x	x	x	x	x		X
Facility audibly impulsive	x	x	x	x	x	X	X
Facility rated LReq 15 min (dB)	<49	<50	57	63	<50	<44	<45
Limit (dB)	-	-	-	-	55	55	45
Compliance	N/A	N/A	N/A	N/A	Yes	Yes	Yes

Summary of Results

Daytime operations at The City Bin Co facility did not give rise to noise levels above 55 dB at the offsite sensitive stations NSL5-NSL7, to which limits set out in licence W0148-01 apply. Night-time operations did not give rise to levels higher than 45 dB at these stations. It follows that facility emissions complied with the 55 dB daytime and 45 dB night-time criteria. CBC emissions were inaudible at all three locations during both periods.

The City Bin Co operations did not give rise to any audible tones or impulses, thus complying with condition 6.5 of waste licence W0148-01.

The full noise monitoring report was submitted to ALDER system.

3.7. Foul Water Transported Offsite

Foul water, which was the result of cleans up of drainage sump and oil and grit interceptor, was collected and disposed safely by Comhlacht Lompar Clochmor Teo once last year. The silt tank has been emptied and cleaned on 7/04/2016.

4. Resource and Energy Consumption

Table 4.1 present the resource and energy consumption at the facility during the reporting period 1st January 2016 to 31st December 2016.

Table 4.1. Energy and Resource Consumption.

Resource/ Energy Use	Quantity	Unit
Electricity	**67,277**	**kWhr**
Diesel	**20,039**	**Liter**

5. Report on Development Work

5.1. Works for the Preceding year

During the reporting period 1st January 2016 to 31st December 2016 the licensee has completed the development works as listed in Table 5.1.1.

Table 5.1.1. Development Works between 1st January 2016 and 31st December 2016

Item	Works	Licence Condition
1	Developing bin washing station	N/A
2	Developing truck washing facilities	N/A
3		

5.2. Works for the Coming Year

The following is the proposed works for the reporting period 1st January 2017 to 31st December 2017 the licensee has currently planned as listed in Table 5.2.1.

Table 5.2.1. Proposed Development Works between 1st January 2017 and 31st December 2017.

Item	Works	Licence Condition
1	Public segregation process	N/A
2	Pawer wash the wall around the yard	N/A
3	Weighbridge Maintenance job and drainage	N/A

6. Schedule of Environmental Targets and Objectives

6.1. Objectives and Targets for the Preceding Year

Table 6.1.1 below is the environmental objectives and targets set for 2016.

Table 6.1.1 Objectives & Targets for 2016

Objective	Target	Responsibility	Completion
Energy Usage	Reduce the amount of energy used by the transfer station by 4% i.e. electricity & diesel consumption **Method to achieved the target:** Replace the bulbs with LED bulbs to achieve higher efficiencies	Operation Manager	Dec 2016
Improve Health and Safety standards	Train all staff in matters of Health and safety and display additional signage to support same. **Method to achieved the target** Engage with Health and safety Professional to deliver training and assessment.	Operation Manager	Dec 2016
Train extra staff in waste facility management.	Train extra staff in facility management to ensure skills are gained for this role **Method to achieved the target** In house training with Environmental Engineer.	Environmental Engineer	Dec 2016
Environmental Monitoring	Maintain standards of BOD, suspended Solid and Dust as per Waste Licence **Method to achieved the target** Continue best practice regarding environmental activities on site.	Facility Manager	Dec 2016
Management and abatement of litter	To develop litter management and control system regarding window blow litter. **Method to achieved the target** Weekly mechanical yard sweeping.	Facility Manager	Dec 2016
Odour Management and Waste storage	To develop an improved odour management system and waste storage at the facility **Method to achieved the target** Keep EWC 200301 and EWC 200108 to a minimum over night by increasing output from facility daily	Facility Manager	Dec 2016

6.2. Objectives and Targets for the Forthcoming Year

The objectives and targets listed in Table 6.2.1 have been set for 2017.

Table 6.2.1 Objectives & Targets for 2017

Objective	Target	Responsibility	Completion
Energy Usage	Reduce the amount of energy used by the transfer station by 4% i.e. electricity & diesel consumption **Method to achieved the target:** Replace the bulbs with LED bulbs to achieve higher efficiencies	Operation Manager	Dec 2017
Improve Health and Safety standards	Train all staff in matters of Health and safety and display additional signage to support same. **Method to achieved the target** Engage with Health and Safety Professional to deliver training and assessment.	Operation Manager	Dec 2017
Train extra staff in waste facility management.	Train extra staff in facility management to ensure skills are gained for this role **Method to achieved the target** In house training with Environmental Engineer.	Environmental Engineer	Dec 2017
Environmental Monitoring	Maintain standards of BOD, suspended Solid and Dust as per Waste Licence **Method to achieved the target** Continue best practice regarding environmental activities by putting the environment socks in silt tank	Facility Manager	Dec 2017
Management and abatement of litter	To develop litter management and control system regarding window blow litter. **Method to achieved the target** Weekly mechanical yard sweeping.	Facility Manager	Dec 2017
Upgrading Weighbridge	To develop a routine weighbridge maintenance job **Method to achieved the target** Lift the bridge to clean the pit with brushes and shovels, power wash the surface and put the bridge back.	Facility Manager	Dec 2017

7. Description of Procedures Developed

A review of the site procedures was carried out, and amendments were made to the below procedure, please see Table 7.1

Table 7.1 Procedures Developed in the Reporting Period

Procedure	Description
EP7021	Fire Preventative Procedure
Draft	Decommissioning/Closure Plan
Draft	Environmental Liability Risk Assessment

8. Tanks, Pipeline, Drum and Bund Inspection

8.1. Tanks

The City Bin Company Ltd commissioned McCarthy Keville O'Sullivan Ltd to carry out integrity testing of their facility's surface water drainage interceptor, silt tank and four mobile plastic bunds. The testing was carried out last time in August 2014 in accordance with the guidance provided in the SVR report.

The tank is a concrete, cast-in-situ tank, most likely installed at the same time as the concrete yard surface was being laid. The tank measures approximately 2 metres x 5.5 metres in plan, with a depth of 1.5 metres, and is covered with a steel plate, which can be lifted off by facility machinery as required.

The partial hydrostatic test undertaken to test the water tightness of the tank did not result in any drop in water level over the test period.

The silt tank is constructed of reinforced concrete sides and base. The concrete appears in good condition with no evidence of cracks or seepage of water into tanks when empty.

The interceptor is Kingspan fibre glass self-contained unit. Access to the tank is limited however the main chamber was observed and appeared to be in good conditions, intact and fit for purpose.

The Integrity test monitoring report was submitted to ALDER system. The next integrity test will be in August 2017.

8.2. Pipework

There are two pipe work systems at the facility; one collecting rainwater from the roof and carrying the water to the water tanks on site and one connecting the silt interceptor to the hydrocarbon interceptor which leads to the SE1 sump and then to the outer surface water drain. The rainwater pipeline is inspected on a weekly basis and was visually inspected before this AER was completed. It was found to be fully intact and working efficiently. The silt interceptor/hydrocarbon interceptor pipeline is located underground under a concrete slab. The pipe was inspected before the AER was completed and is transmitting water as intended. The flow of water in the SE-1 sump, which is pumped into the external surface water drain, was inspected and found to be flowing freely.

8.3. Bunds and Drums

There are four small plastic spill pallet bunds used to store smaller oil cans and 200l oil barrels. Each are of a similar construction design and size. However, there are no drums present at the facility. The Agency required during the Audit the integrity test for the interceptor and during these works the mobile bounds were tested as well. The water tightness test was conducted by Michael Watson and Owen Cahill of McCarthy Keville O'Sullivan Ltd.

The partial hydrostatic test undertaken to test the water tightness of the spill pallet currently in use did not result in any drop in water level over the test period nor did it show any signs of leakage.

9. Report Incident and Complaint Summaries

Condition 11.2 of Waste Licence Register No. 148-1 requires a notification of the Agency in case an incident has, or may have, taken place at the facility. Incidents are described in Condition 1.7 of the License.

There were no incidents or complaints received at the transfer station during last year.

10. Review of Nuisance Controls

The Licensee undertakes a weekly inspection of the facility and its immediate surroundings for nuisance caused by vermin, birds, flies, mud, dust and odours. The Facility Manager carries out these inspections. A written report of each inspection is filed and kept at the facility office.

10.1. Nuisance Caused by Vermin

Vermin control is carried out on the site by Ecolab Limited. This monitoring included regular site assessments and the maintenance (examining and replenishing) of bait boxes placed and fixed locations around the site.

10.2. Nuisance Caused by Birds

Two model MP3 Ultra Sonic Pest Scarers were installed in the warehouse building above the floor area to “cover” the entire floor space. The Ultra Sonic Pest Scarers deter pests, in particular birds, from the warehouse. Birds have not been reported as being a nuisance at the transfer station.

10.3. Nuisance Caused by Mud and Dust

Monitoring for dust emissions on the site is carried out three times per year, as detailed in Section 3.2 of this report. Dust emission monitoring at the facility indicates that dust emissions levels are below the emissions limits set out in the Schedule C of Waste License 148-1 and are therefore not considered a nuisance.

10.4. Nuisance Caused by Odours

Due to the nature of waste accepted at the facility, the low residence time of the waste and operational practice employed at the facility, the potential for odour to become a nuisance in the local environment is considered to be minimal.

11. Financial Provision

The Waste Licence holder annually provides the Environmental Protection Agency with a minimum of €7,022.00 for services they provide in relation to overseeing the Waste License. Fees have been paid to EPA since the commencement of waste acceptance activities at the facility.

Cost estimates have been made regarding the potential environmental liability of operation and decommissioning. To cover any environmental pollution events and pursuant to Condition 12.2.2 of Waste License 148-1, the Licensee has taken out an Environmental Site Liability Insurance Policy with Chubb Insurance Company of Europe.

To cover the costs of closure and decommissioning, which has been estimated at €70,000, the Licensee proposes to use operating capital and/or overdraft facilities available to the Licensee.

12. Transfer Station Management and Staffing Structure

The Facility Manager at the site is Mr. Donagh Killilea. There are also two Deputy Facility Managers: Mr. James Browne and Mrs. Katarzyna (Kate) Rybczynska and Mr. Nigel Diskin as the Assistant Facility Manager.

13. The Decommissioning and Aftercare Plan and Environmental Liability Risk assessment

According with Environmental Agency request the Decommissioning and Aftercare Plan and Environmental Liability Risk assessment has been prepared. The relevant document has been send as a draft to the Agency to approval in August 2016.

14. AER/ PRTR Reporting for 2016

Guidance to completing the PRTR workbook

PRTR Returns Workbook

Version 1.1.19

REFERENCE YEAR	2016

1. FACILITY IDENTIFICATION

Parent Company Name	The City Bin Co.
Facility Name	City Bin Co Ltd
PRTR Identification Number	W0148
Licence Number	W0148-01

Classes of Activity

No.	**class_name**
-	Refer to PRTR class activities below

Address 1	Townlands of Carrowmoneash
Address 2	Oranmore
Address 3	
Address 4	
	Galway
Country	Ireland
Coordinates of Location	-8.92349 53.2808
River Basin District	IEWE
NACE Code	3821
Main Economic Activity	Treatment and disposal of non-hazardous waste
AER Returns Contact Name	Niall Killilea
AER Returns Contact Email Address	info@citybin.com
AER Returns Contact Position	Managing Director
AER Returns Contact Telephone Number	091787800
AER Returns Contact Mobile Phone Number	
AER Returns Contact Fax Number	091787879
Production Volume	0.0
Production Volume Units	
Number of Installations	0
Number of Operating Hours in Year	23500
Number of Employees	146
User Feedback/Comments	
Web Address	www.citybin.com

2. PRTR CLASS ACTIVITIES

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

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

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

4. WASTE IMPORTED/ACCEPTED ONTO SITE

Guidance on waste imported/accepted onto site

Do you import/accept waste onto your site for on-site treatment (either recovery or disposal activities) ?	no

This question is only applicable if you are an IPPC or Quarry site

4.1 RELEASES TO AIR

Link to previous years emissions data

SECTION A : SECTOR SPECIFIC 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 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					
Pollutant No.	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

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: City Bin Co Ltd

Please enter summary data on the quantities of methane flared and / or utilised	T (Total) kg/Year	M/C/E	Method Used: Method Code	Method Used: 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 facillity

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						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	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

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					
Pollutant No.	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

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	17 05 04	No	53.08	soil and stones other than those mentioned in 17 05 03	R5	M	Weighed	Offsite in Ireland	Barna Golf Club,Corboley Barna Co Galway COR-G-13-0001-01	Corboley ,Barna,Galway,Galway,Ireland		
Within the Country	20 01 02	No	2.72	glass	R5	M	Weighed	Offsite in Ireland	Rehab Glassco Limited,W0279-01	Unit 4 Osberstown Industrial Park Caragh Road, Naas ,County Kildare,0,Ireland		
Within the Country	20 01 08	No	24.02	biodegradable kitchen and canteen waste	R3	M	Weighed	Offsite in Ireland	Barna Recycling,W106-02	Carrowbrowne ,Headford Road,Galway,0,Ireland		
Within the Country	20 01 39	No	7.58	plastics	R5	M	Weighed	Offsite in Ireland	Barna Recycling,W106-02	Carrowbrowne ,Headford Road,Galway,0,Ireland		
Within the Country	20 03 01	No	4212.28	mixed dry recycling waste	R5	M	Weighed	Offsite in Ireland	Dillon Waste Recycling,WFP KY 10-001	The Kerries,Tralee,Co Kerry,0,Ireland		
Within the Country	20 03 01	No	11097.58	mixed municipal waste	D5	M	Weighed	Offsite in Ireland	Bord na Móna Environmental Ltd,W0201-02	Main Street,Newbridge,Co. Kildare,0,Ireland		
Within the Country	20 03 01	No	1443.19	mixed municipal waste	D5	M	Weighed	Offsite in Ireland	ADVANCED ENVIRONMENTAL SOLUTIONS (IRELAND) LTD ,WO194-02	C/O Bord na Mona PLC , Main Street ,Newbridge Co. Kildare,0,Ireland		
Within the Country	20 03 01	No	1848.68	mixed municipal waste	D5	M	Weighed	Offsite in Ireland	East Galway Landfill,W178-02	Killagh More Ballybaun ,Ballintober Ballinasloe ,Co Galway,0,Ireland		
Within the Country	20 03 01	No	404.8	mixed municipal waste	D5	M	Weighed	Offsite in Ireland	Knockharley Landfill LTD, WO146-02	Knockharley ,Navan , Co Meath,0,Ireland		
Within the Country	20 03 07	No	101.68	bulky waste	R5	M	Weighed	Offsite in Ireland	Nurendale Ltd T/A Panda Waste Services,W0140-03	Rathdrinagh,Beauparc,Navan,Co Meath,Ireland		
Within the Country	20 03 07	No	2382.66	bulky waste	R5	M	Weighed	Offsite in Ireland	Panda Cappagh(Nurendale Limited trading as I Panda Waste Services),W0261-01	Cappagh Road ,Finglas ,Dublin 1,0,Ireland		
Within the Country	20 03 07	No	21.38	bulky waste	R5	M	Weighed	Offsite in Ireland	Wilton Waste Recycling Limited ,WFP-CN-15-0003-01	Kiffagh Crosserlough ,Ballyjamesduff , Co Cavan,0,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
Link to Waste Guidance

The City Bin Co. Oranmore Business Park, Oranmore, Galway
The City Bin Co. 15 The Exchange, Calmount Park, Ballymount, Dublin 12

Freefone: 1800 24 89 24
E Mail: info@citybin.com
Web: www.citybin.com

Tw: @Citybin
FB: www.facebook.com/thecitybin

the city bin co