



Acorn Recycling
Waste Management for the next generation

ANNUAL ENVIRONMENTAL REPORT

2017

Name: Acorn Recycling Ltd

Address: Ballybeg Composting Facility, Ballybeg, Littleton, Co. Tipperary

Waste Licence: W0249-01

Reporting Period: 01 January 2017 – 31 December 2017

Submitted by *Sam Bowden*
Sam Bowden
Compost Facility Manager

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Acorn Recycling Ltd Registered in Ireland: Company No: 384234. VAT No: 6404234F.
Acorn Recycling is a member of the Lanes Group plc

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Attachments

Environmental Objectives & Targets 2017
Environmental Objectives & Targets 2018

1.0 Introduction

The Ballybeg Composting Facility operated by Acorn Recycling, Ballybeg, Littleton, Co. Tipperary commenced waste acceptance on the 21st June 2010.

The facility is a fully enclosed forced aeration in-vessel composting facility with air extraction and biofiltration.

The facility is licensed by the EPA under waste licence W0249-01 for the acceptance of 45,000 tonnes per annum of a biodegradable wastes.

In accordance with condition 11.12 of the licence this report is the Annual Environmental Report (AER) for 2017. The report covers the period 1st January 2017 to 31st December 2017.

2.0 Waste Activities carried out at the Facility

The facility is licensed to carry out the waste activities listed below in accordance with the third and fourth schedules of the waste management acts 1996 – 2008. The extent to which the waste activity was carried out is detailed for each activity

Third Schedule Activities

- 6. Biological treatment not referred to elsewhere in this Schedule which results in final compounds or mixtures which are disposed of by means of any activity referred to in paragraphs 1 to 5 or paragraphs 7 to 10 of this Schedule (Code: D8)

No wastes were accepted for treatment under this activity in 2017

- 13. Storage prior to submission to any activity referred to in a preceding paragraph of this Schedule, other than temporary storage, pending collection, on the premises where the waste concerned is produced (Code: D15)

Not carried out during the reporting period

Fourth Schedule Activities

- 2. Recycling or reclamation of organic substances which are not used as solvents (including composting and other biological processes) (Code: R3).

43037.32 tonnes of biodegradable wastes was accepted at the facility for composting

- 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 (Code: R13)

Not carried out during the reporting period

3.0 Waste Management Record

3.1 Waste Acceptance

A total of 46676.11 tonnes of waste was accepted at the facility for treatment during the reporting period.

Table 1. below shows the waste types and quantities accepted at the facility during the reporting period.

The most abundant waste type received was Biodegradable Kitchen & Canteen Waste (EWC 200108) which constituted 86.37% of the total waste received.

Table 1. Waste Accepted 2017

EWC	DESCRIPTION	QUANTITY (t)
020101	SLUDGES FROM WASHING/CLEANING	26.02
020106	ANIMAL FAECES, URINE AND MANURE	9.42
020203	MATERIALS UNSUITABLE FOR CONSUMPTION OR PROCESSING	401.30
020204	SLUDGES FROM ON-SITE EFFLUENT TREATMENT (MEAT INDUSTRY)	226.16
020304	MATERIALS UNSUITABLE FOR CONSUMPTION OR PROCESSING (ANIMAL FEED)	340.00
020501	MATERIAL UNSUITABLE FOR CONSUMPTION OR PROCESSING (DAIRY INDUSTRY)	291.3
020502	SLUDGES FROM ON-SITE EFFLUENT TREATMENT (DAIRY INDUSTRY)	438.26
020704	MATERIALS UNSUITABLE FOR CONSUMPTION PROCESSING (DRINKS INDUSTRY)	115.12
020799	BREWERY WASTE	26.54
070112	EFFLUENT TREATMENT SLUDGE	4.54
070599	WASTE NOT OTHERWISE SPECIFIED	0.62
100101	BOTTOM ASH	260.34
190805	SLUDGES FROM TREATMENT OF URBAN WASTE WATER	669.82
190901	SOLID WASTE FROM PRIMARY FILTRATION AND SCREENINGS	475.36
190904	SPENT ACTIVATED CARBON	49.60
200108	BIODEGRADABLE KITCHEN AND CANTEEN WASTE	40313.22
200125	EDIBLE OIL AND FAT	424.95
200201	BIODEGRADABLE WASTE	30.96
200304	SEPTIC TANK SLUDGE	624.32
200306	WASTE FROM SEWAGE CLEANING	1948.26
	Total	46676.11

3.2 Waste Dispatched

Two waste types were dispatched offsite during the reporting period namely; plastics from the screening of compost (EWC 190501) and Water from the biofilter onsite (161002)

The following quantities of each waste were disposed of in 2017

Table 2. Waste dispatched 2017

EWC	DESCRIPTION	TONNAGE DISPOSED
190501	Plastic 'Overs'	2472.44
161002	Biofilter Water	1689.41

In accordance with condition 11.13 of the waste licence a full record is maintained on site which is open to inspection by the agency. This record contains the tonnages, EWC code, description of waste, details of the waste haulier, and details of the disposal destination (including waste licence/permits where appropriate).

4.0 Resource Consumption Summary

4.1 Electricity Usage

Table 3. and Figure 1. below detail the day and night units of electricity used on site during each month in 2017

Table 3. Electricity Consumption 2017

Electricity Consumption 2017			
Billing Period	Day Units	Night Units	Total Units
Jan-17	65995	39378	105373
Feb-17	63533	38438	101971
Mar-17	62078	37649	99727
Apr-17	64620	39092	103712
May-17	64783	39171	103954
Jun-17	59999	35831	95830
Jul-17	63995	38494	102489
Aug-17	68645	41598	110243
Sep-17	63785	38321	102106
Oct-17	66853	39853	106706
Nov-17	67911	40227	108138
Dec-17	69491	41376	110867
	781688	469428	1251116

Figure 1. Electricity Consumption 2017



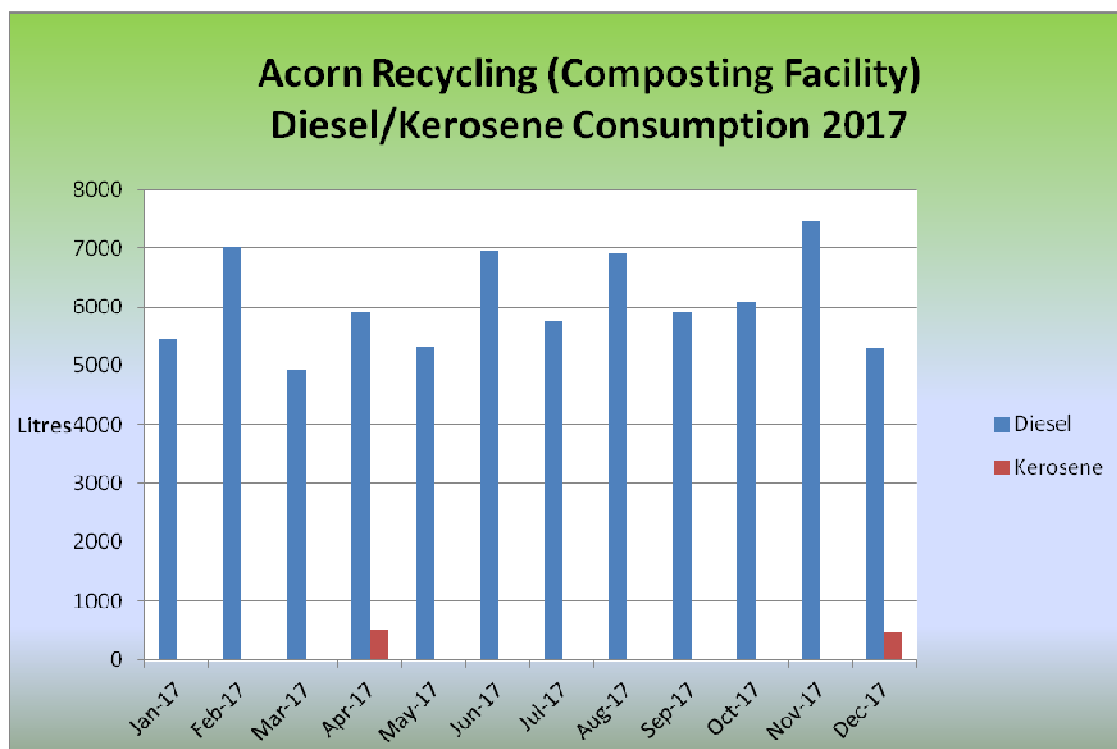
4.2 Diesel Usage

Table 4. and Figure 2. below show diesel and kerosene consumption in 2017. Diesel is used for the three front end loaders on site and kerosene was for the power washer.

Table 4. Diesel Consumption 2017

Month	Diesel (litres)	Kerosene
Jan-17	5462	
Feb-17	7007	
Mar-17	4924	
Apr-17	5903	500
May-17	5313	
Jun-17	6961	
Jul-17	5766	
Aug-17	6921	
Sep-17	5912	
Oct-17	6086	
Nov-17	7461	
Dec-17	5296	453
	73012	953

Figure 2. Diesel/Kerosene Consumption 2017



4.3 Compost Amendment Materials

1734.36 tonnes of woodchip material was accepted at the facility for use as a bulking agent in the composting process.

4.4 Water

Water usage on site is minimal. A power washer is used on site to wash vehicles upon exit as well as cleaning equipment on site. Other uses on site include use in the canteen. The water usage when the power washer is operational is estimated at 15l min. Total estimated water usage on site is 450 litres per day.

5.0 Report on the assessment of the efficiency of use of raw materials is processes and the reduction in waste generated.

Total woodchip used was 1734.36 tonnes up from 607.86 tonnes per annum in 2017. In 2017 we investigate alternative amendments to the composting process such as sawdust, overs from green waste composting and other products. We starting using 'overs' from a green waste composting facility of which we used 604.26 (included in total figure above).

The plastics produced for disposal offsite increased from 4.04% in 2016 to 5.29% in 2017. Although an increase from 2016 this figure demonstrates the effectiveness of the further processing of the oversize material that began in 2015. This involves further composting, shredding and rescreening of the material.

6.0 Complaints Summary

Odour complaints received from 1 complainant in 2017.

1. [REDACTED]

Date of complaint: 13/12/17 & 22/12/17

13/12/17. By Phone. Complained of bad on numerous occasions during the year. Very bad odour in evening of 8th and 12th December.

22/12/17. By text message. Odour at 7.30 and 10 am that day.

Following these complaints improvements were made to the operation of the biofilter in January 2018;

1. A layer of approx. 1 - 2 ft of biofilter media was added close to where the air enters the biofilter in order to provide further treatment .
2. A biological inoculant was applied to the biofilter.

7.0 Reported Incidents Summary

There was no incident reported in 2017.

8.0 Review of Nuisance Controls

Every effort is made to eliminate nuisance problems on site.

Potential nuisance problems include the following;

Dust: During normal operations dust has not been an issue at the site whatsoever. 3 times per year monitoring will continue and no high levels of dust have been recorded. The potential for dust arise from compost that sometimes can become very dry in the maturation area. When a trailer is being loaded with compost the shed doors must be closed down to prevent any dust emissions.

Litter: No litter nuisance has occurred outside the boundary of the site. Good housekeeping has ensured that any litter present within the site is quickly removed. Work practices on site, such as all loads tipped inside the building with doors closed, ensure there is little risk of litter generation outside the building. A member of staff patrols the site to collect any litter at least once a week.

Vermin: A comprehensive pest control programme is in place whereby a specialist pest company puts out bait and monitors activity on site.

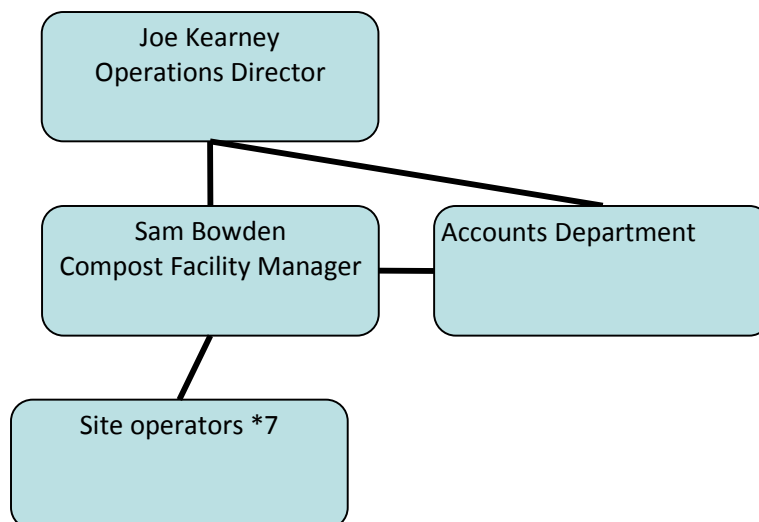
Birds: Birds are not an issue at the site. All waste activities are carried out within the closed building.

Noise: Noise monitoring has shown that no noise levels in excess of licence limits have been caused by noise from the facility at the noise sensitive locations. As all activities are carried out within a closed building this reduces the risk of nuisance caused by noise from the facility. There have been no complaints relating to noise from the facility.

9.0 Management and Staffing Structure of the Facility and programme for public information

Table 5. Management of the Facility

Name	Position	Duties and Responsibilities	Experience /Qualifications
Sam Bowden	Compost Facility Manager	Overall Responsibility for maintaining EMS, liaising with licensing authorities, quality control, process optimisation, waste acceptance, Health & Safety	B.Sc. in Environmental Science and Technology, M.Sc. in Environmental, Health and Safety Management Certificate in Compost Facility Operation 9 years waste management experience



Programme for public information

Acorn Recycling have an open door policy for public information. Members of the public are regularly shown around the facility and can access environmental information on site. A copy of the communications programme is available on site EMS ARB06-CP

10.0 Environmental Monitoring

10.1 Noise Monitoring

Day and Night noise monitoring was carried out at the facility by an independent consultants Panther Environmental on 09th August 2017. The results showed no significant noise nuisance being caused by the facility. Daytime and night noise levels at NSL1 & NSL2 above the licence limits were recorded but these were caused by high noise levels at the road and were not caused by the composting facility. There was no noise audible from the compost facility.

NSL1 Daytime

The dominant day-time noise source at this location is road traffic passing along the public road which was almost continuous during the busy monitoring period. Noise from the facility was not audible at this location at any time during the monitoring period.

The Leq10 was high due to this almost continuous traffic during the monitoring period.

The Leq90 which may be used to give an indication of the actual back-ground noise was determined to be 41 dB(A).

Facility noise at this location does not therefore appear to constitute a nuisance, as the dominant noise source is traffic from the main road during day-time periods.

NSL2 Daytime

The dominant day-time noise source at this location is road traffic passing along the public road which was almost continuous during the busy monitoring period.

Noise from the facility was not audible at this location at any time during the monitoring period.

The Leq10 was high due to this almost continuous traffic during the monitoring period.

The Leq90 which may be used to give an indication of the actual back-ground noise was determined to be 38 dB(A).

Facility noise at this location does not therefore appear to constitute a nuisance, as the dominant noise source is traffic from the main road during day-time periods.

NLS1 Night-time

Noise from the facility was not audible at this location at any time during the monitoring period. The Leq10 was high due to the passing traffic during the monitoring period.

The Leq90 which may be used to give an indication of the actual back-ground noise was

determined to be 33 dB(A). Facility noise at this location does not therefore appear to

constitute a nuisance, as the dominant noise source is traffic from the main road during night-time periods.

NSL2 Night-time

The dominant night-time noise source at this location is road traffic passing along the public road, although not as frequent as the day-time period. Noise from the facility was not audible at this location at any time during the monitoring period.

The Leq10 was high due to the passing traffic during the monitoring period.

The Leq90 which may be used to give an indication of the actual back-ground noise was

determined to be 41 dB(A). Facility noise at this location does not therefore appear to

constitute a nuisance, as the dominant noise is traffic from the main road during day-time periods.

Table 6. Noise Monitoring 2017 (NSL1/NSL2) 06th September 2017
A survey was carried out at each location day & night

NSL	Day dB(A) Laeq (30min)	Day L ₉₀	Night dB(A) Laeq (30min)	Night L ₉₀
NSL1	65	41	59	33
NSL2	61	38	60	30

10.3 Monitoring of Emissions to Water

Table 9. Storm Water Monitoring

SW1		
Date	NH3	SS
09/01/2017	0.66	<5
16/01/2017	0.77	6
17/01/2017	0.45	7
27/01/2017	0.56	<5
28/01/2017	0.91	<5
06/02/2017	0.02	23
15/02/2017	0.74	23
16/02/2017	1.16	4
10/03/2017	1.21	<5
23/03/2017	1.25	7
03/04/2017	0.7	<5
04/04/2017	1.25	<5
04/05/2017	1.94	<5
25/07/2017	0.75	<5
26/07/2017	1.13	7
31/07/2017	0.24	<5
03/08/2017	0.5	<5
22/08/2017	0.47	5
23/08/2017	0.57	7
07/09/2017	0.14	<6
27/09/2017	0.55	5
28/09/2017	1.62	18
12/10/2017	1.79	6
19/10/2017	0.97	23
07/11/2017	1.91	19

10.4 Odour & Bioaerosols

A comprehensive Odour and Bio aerosols monitoring program is carried out on site by independent consultants, Odour Monitoring Ireland Ltd. This program monitors the efficiency of the biofilter on site as well as ambient bioaerosols.

Biofilter Monitoring 2017

Parameter	Q1 (09Mar2017)	Q2 (29Jun2017)	Q3 (26Sept2017)	Q4 (18Oct2017)	Limit
Average Odour OUE/m ³	3659.5	4098.5	4426.5	3952.5	—
% Odour Removal	92	96	96	96	—
Total Aliphatic Amines (mg/Nm ³)	1.1	1.12	1.28	1.14	—
Hydrogen Sulphide (mg/Nm ³)	0.09	0.01	0.11	0.03	<5
Ammonia (mg/Nm ³)	2	1.96	2.3	1.98	<50
Total Mercaptans (mg/Nm ³)	<0.1	<0.1	<0.1	<0.1	<5
Bed Media pH	7.4	7.3	7.3	7.4	—
Moisture (% w/w)	50	50	50	50	—
Total Viable Counts (CFU/Kg)	6.6*10 ⁵	6.6*10 ⁵	6.6*10 ⁵	6.6*10 ⁵	—

Table 11. Bioaerosols Monitoring 2017

Bioaerosols Monitoring (2017)

Location	Aspergillus Fumigatus (CFU m ³)	Mesophilic Bacteria (CFU m ³)
Loc Bio1	<3	265
Loc Bio2	<3	530
Loc Bio3	<3	353

Table 12. PM10 Monitoring

PM10 Monitoring 2017

Location	(H1) Average Concentration (ug/m ³) 29Jun2017	(H2) Average Concentration (ug/m ³) 27Sept2017	Limit (ug/m ³)
PM1	9	8	50

Ammonia Emissions

The total volume of air extracted through the biofilter is estimated at 55,710m³ per hour.

The total volume of air extracted during the year is 55,710m³/hr * 8760 hrs =

258,048,720m³/year

Average of 4 ammonia samples = 2.06 mg/m³ NH₃

Total ammonia emissions load in 2017 = $2.06\text{mg}/\text{m}^3 * 258,048,720\text{m}^3$

= 531.58 kg/year NH₃

10.5 Dust Deposition Monitoring

Dust deposition monitoring was carried out at the site on three times in 2017 at four monitoring locations. Average dust levels exceeded the licence limit of 350mg/m²/day at DD4 during the period 22/06/17 – 17/07/17, significant rotten leaves were in the sample from a nearby tree.

Table 13 Dust Deposition 2017 (mg/m²/day)

Duration	DD1	DD2	DD3	DD4
11/01/17 - 22/06/17	276.4	161.1	163.2	111.2
22/06/17 - 17/07/17	132.54	73.43	63.19	386.87
17/07/17 - 28/09/17	193.4	75.9	137.7	95.1

11.0 Procedures developed in 2017 relating to facility operations

Acorn Recycling developed the Standard Operation Procedures listed in Table 13. for operations at the composting facility. These procedures are kept under continuous review and updated during 2017. Full up-to-date effective versions of these procedures are available on site for inspection.

Document Code	Procedure Description
SOP ARB01	Waste Acceptance and Characterisation Procedure
SOP ARB02	Cleaning and Hygiene Procedure
SOP ARB03	Blending/Loading a Bay
SOP ARB04	Screening and Loading/unloading of ABP sanitisation bays
SOP ARB05	Batch Traceability Procedure
SOP ARB06	Handling of Leachate Procedure
SOP ARB07	Compost Sampling Procedure
SOP ARB08	Non Compliance and Corrective Action
SOP ARB09	Fire Safety Protocol
SOP ARB10	Awareness and Training Procedure
SOP ARB11	Emergency Preparedness and Response Procedure
SOP ARB12	Accident Prevention Procedure
SOP ARB13	Documentation Procedure
SOP ARB14	Groundwater Monitoring Procedure
SOP ARB15	Surface Water Monitoring Procedure
SOP ARB16	Dust Deposition Monitoring Procedure

SOP ARB17	Verification of ABP processing temperatures
SOP ARB18	Management of compost in maturation area
SOP ARB19	Testing of compost for physical contaminants
SOP ARB20	Cleaning of yard, gullies and aco channels procedure

12.0 Environmental Objectives & Targets and Environmental Management Programme report for 2017 and proposal for 2018

See attached separately



ENVIRONMENTAL OBJECTIVES AND TARGETS.

Environmental Objective and Targets (Primary Objectives over the period)			
Objective No.	Objective		
1.0	To implement and maintain an EMS in order to ensure all requirements of the waste licence is being adhered to.		
2.0	To ensure compliance with environmental monitoring and emission limits in the licence and to improve these parameters beyond the requirements of the licence where practicable.		
3.0	To continually improve energy efficiency and resource use at the site		
4.0	To continually improve the quality of the products and residues produced on site destined for reuse, recovery and recycling, and to minimise the quantity of products sent for disposal.		
5.0	To enhance our relationship with the local community through communication, transparency, nuisance avoidance, and provision of services		

**ENVIRONMENTAL MANAGEMENT PROGRAMME 2017****Objective 1.0: To implement and maintain an EMS in order to ensure all requirements of the waste licence is being adhered to**

Objective No.	Target	Plan	Timescale	Responsibility	Status
1.1	To ensure all relevant employees are made aware of the requirements of the EMS and waste licence	Identify Environmental Training needs of all employees Schedule appropriate training Provide environmental awareness training	Deadline 31.12.2017	Environmental Manager (SB)	completed

ENVIRONMENTAL MANAGEMENT PROGRAMME 2017**Objective 2.0: To ensure compliance with environmental monitoring and emission limits in the licence and to improve these parameters beyond the requirements of the licence where practicable.**

Objective No.	Target	Plan	Timescale	Responsibility	Status
2.1	To carry out all environmental monitoring as agreed with the agency	develop and implement monitoring schedule. Change as per agreements with Agency liaise with contractors Collate data	Deadline 31.12.2017	Environmental Manager (SB)	completed
2.2	Monitor performance of biofilter		Deadline 30.08.2017	Environmental Manger (SB)	Completed. Biofilter was monitored by odour Ireland in 2017. Results are in AER.
2.3	Improvements to management of surface water onsite to ensure only clean surface water is discharge	Stringently enforce site procedures with regard washing of vehicles upon exit from the building. Particular focus on clean side of building. Compost truck must be washed thoroughly. Loader must be washed thoroughly when leaving building to fill with diesel or for repairs & maintenance.	Deadline 01.06.2017	Environmental Manger (SB)	Completed.

ACORN RECYCLING LTD



Title: Environmental Objectives and Targets & EMP 2017
Code: ARB EO&T2017
Revision: 1
Date: 16/03/2018
Site Location: Ballybeg Composting Facility

ENVIRONMENTAL MANAGEMENT PROGRAMME 2016

Objective 3.0: To continually improve energy efficiency and resource use at the site

Objective No.	Target	Plan	Timescale	Responsibility	Status
3.1	Maintain Electricity consumption per waste received at <33units per tonne received.	Continuous monitoring of electricity usage via scada system. Extraction & aeration fans to be adjusted to reflect operations. Awareness to turn off lights when not in use.	Dec 2017	Environmental Manager	. Completed. Units of electricity per tonne of waste processed was 26.8
3.2	To review on a continuous basis the compost quality results obtained from the testing as required under the licence.	Review results as received for conformity to the compost quality requirements	Continuously Deadline 31.12.2017	Environmental Manager	Completed.

**ENVIRONMENTAL MANAGEMENT PROGRAMME 2017**

Objective 4.0: To continually improve the efficiency of the materials flow through the operations with a view to improving the quality of the products and residues produced on site destined for reuse, recovery and recycling, and to minimise the quantity of products sent for disposal

Objective No.	Target	Plan	Timescale	Responsibility	Status
4.1	Carry out an assessment of the efficiency of use of raw materials in all processes, having particular regard to the reduction in waste generated	Continued monitoring of batches to enhance process efficiency. Maintain plastics sent to landfill at less than 6% of waste received.	Deadline 31.12.2017	Environmental Manager	Completed. 5.3 tonnes of plastics was disposed of per tonne of waste processed.
4.2	Increase number of sustainable outlets for compost use. Addition of at least 2 new farms.	Sales team to focus on a 30km radius of farms. Use established customer base to help draft new farms. Improve transportation methods for compost.	August 2017	Environmental Manager	Completed. 4 new farms added. Demand for compost has increased so that there is now no issue finding outlets. Trailer & skip used for compost transport extended to allow more compost to be carried in each load, reducing carbon footprint by approx. 15%

**ENVIRONMENTAL MANAGEMENT PROGRAMME 2017****Objective 5.0: To enhance our relationship with the local community through communication, transparency, nuisance avoidance, and provision of services**

Objective No.	Target	Plan	Timescale	Responsibility	Status
5.1	<p>Improve visual appearance site.</p> <p>New gravel to be laid in car park and around site perimeters.</p> <p>Lawn to be maintained along driveway.</p>	<p>Improve visual appearance site.</p> <p>New stone/gravel to be put down at back of site.</p> <p>Planting to take place at east side of composting plant in winter 17/18</p>	30.01.18	Environmental Manager (SB)	<p>Visual appearance of site has been improved.</p> <p>Fencing & container at storage area painted.</p> <p>Gravel laid.</p> <p>Planting at east of site not carried out. Possible use of this area for reed bed.</p>



ENVIRONMENTAL OBJECTIVES AND TARGETS.

Environmental Objective and Targets (Primary Objectives over the period)			
Objective No.	Objective		
1.0	To implement and maintain an EMS in order to ensure all requirements of the waste licence is being adhered to.		
2.0	To ensure compliance with environmental monitoring and emission limits in the licence and to improve these parameters beyond the requirements of the licence where practicable.		
3.0	To continually improve energy efficiency and resource use at the site		
4.0	To continually improve the quality of the products and residues produced on site destined for reuse, recovery and recycling, and to minimise the quantity of products sent for disposal.		
5.0	To enhance our relationship with the local community through communication, transparency, nuisance avoidance, and provision of services		

**ENVIRONMENTAL MANAGEMENT PROGRAMME 2017****Objective 1.0: To implement and maintain an EMS in order to ensure all requirements of the waste licence is being adhered to**

Objective No.	Target	Plan	Timescale	Responsibility	Status
1.1	To ensure all relevant employees are made aware of the requirements of the EMS and waste licence	Identify Environmental Training needs of all employees Schedule appropriate training Provide environmental awareness training	Deadline 31.12.2018	Environmental Manager (SB)	

ENVIRONMENTAL MANAGEMENT PROGRAMME 2017**Objective 2.0: To ensure compliance with environmental monitoring and emission limits in the licence and to improve these parameters beyond the requirements of the licence where practicable.**

Objective No.	Target	Plan	Timescale	Responsibility	Status
2.1	To carry out all environmental monitoring as agreed with the agency	develop and implement monitoring schedule. Change as per agreements with Agency liaise with contractors Collate data	Deadline 31.12.2018	Environmental Manager (SB)	
2.2	Monitor performance of biofilter	Trial use of biological inoculants recommended for use on biofilters to enhance treatment.	Deadline 30.08.2018	Environmental Manger (SB)	
2.3	Improvements to management of surface water onsite to ensure only clean surface water is discharge	Stringently enforce site procedures with regard washing of vehicles upon exit from the building. Investigate feasibility of installing a constructed wetland system on site. Investigate possibility of using this to treat water from the biofilter as well as surface water. Potential significant environmental benefit of not removing water off site by	Deadline 31.12.2018	Environmental Manger (SB)	



		tanker.			
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ENVIRONMENTAL MANAGEMENT PROGRAMME 2016**Objective 3.0: To continually improve energy efficiency and resource use at the site**

Objective No.	Target	Plan	Timescale	Responsibility	Status
3.1	Maintain Electricity consumption per waste received at <32units per tonne received.	Continuous monitoring of electricity usage via scada system. Extraction & aeration fans to be adjusted to reflect operations. Awareness to turn off lights when not in use.	Dec 2018	Environmental Manager	.
3.2	To review on a continuous basis the compost quality results obtained from the testing as required under the licence.	Review results as received for conformity to the compost quality requirements	Continuously Deadline 31.12.2018	Environmental Manager	

ENVIRONMENTAL MANAGEMENT PROGRAMME 2017**Objective 4.0: To continually improve the efficiency of the materials flow through the operations with a view to improving the quality of the products and residues produced on site destined for reuse, recovery and recycling, and to minimise the quantity of products sent for disposal**

Objective No.	Target	Plan	Timescale	Responsibility	Status
4.1	Carry out an assessment of the efficiency of use of raw materials in all processes, having particular regard to the reduction in waste generated	Continued monitoring of batches to enhance process efficiency. Maintain plastics sent to landfill at less than 6% of waste received.	Deadline 31.12.2018	Environmental Manager	

ACORN RECYCLING LTD

Title: Environmental Objectives and Targets & EMP 2018
 Code: ARB EO&T2018
 Revision: 0
 Date: 20/03/2018
 Site Location: Ballybeg Composting Facility

4.2	Increase number of sustainable outlets for compost use. Addition of at least 2 new farms.	Sales team to focus on a 30km radius of farms. Use established customer base to help draft new farms. Improve transportation methods for compost.	August 2017	Environmental Manager	
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ENVIRONMENTAL MANAGEMENT PROGRAMME 2017

Objective 5.0: To enhance our relationship with the local community through communication, transparency, nuisance avoidance, and provision of services

Objective No.	Target	Plan	Timescale	Responsibility	Status
5.1	Improve visual appearance site. New gravel to be laid in car park and around site perimeters. Lawn to be maintained along driveway. New storage container to be painted	Improve visual appearance site. New stone/gravel to be put down at back of site.	31.12.18	Environmental Manager (SB)	

ACORN RECYCLING LTD



Title: Environmental Objectives and Targets & EMP 2018

Code: ARB EO&T2018

Revision: 0

Date: 20/03/2018

Site Location: Ballybeg Composting Facility



Environmental Protection Agency

PRTR - W0249 | Facility Name - Ballybeg Composting Facility | Reference: W0249_2017/46 | Return Year: 2017 |

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Guidance to completing the PRTR workbook

PRTR Returns Workbook

Version 1.1.19

REFERENCE YEAR|2017

1. FACILITY IDENTIFICATION

Parent Company Name Acom Recycling Limited
Facility Name Ballybeg Composting Facility
PRTR Identification Number W0249
Licence Number W0249-01

Classes of Activity

No.	class name
-	Refer to PRTR class activities below

Address 1 Ballybeg
Address 2 Littlton
Address 3
Address 4
Country Ireland
Coordinates of Location -7.72020004905 52.614212
River Basin District EISE
NACE Code 3832
Main Economic Activity Recovery of sorted materials
AER Returns Contact Name Sam Bowden
AER Returns Contact Email Address sam@acomrecycling.com
AER Returns Contact Position Plant Manager
AER Returns Contact Telephone Number 050433721
AER Returns Contact Mobile Phone Number
AER Returns Contact Fax Number
Production Volume Units 0.0
Number of Installations
Number of Operating Hours in Year 0
Number of Employees 8
User Feedback Comments
Web Address

2. PRTR CLASS ACTIVITIES

Activity Number	Activity Name
50.1	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)?
Is the reduction scheme compliance route being used?

4. WASTE IMPORTED/ACCEPTED ONTO SITE

Do you import/accept waste onto your site for on-site treatment (either recovery or disposal activities)?
Guidance on waste imported/accepted onto site

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

4.1 RELEASES TO AIR

Link to Operational Vehicle Emissions Data

19/07/2017 10:20:07 Facility Name: Ballybeg Composting Facility | Finance - V02@_2017_2nd | Return Year: 2017

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SECTION A: SECTION SPECIFIC PRETR POLLUTANTS

No. Annex II	POLLUTANT	RELEASES TO AIR		METHOD		QUANTITY	
		Name	Method Used	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 PRETR POLLUTANTS

No. Annex II	POLLUTANT	RELEASES TO AIR		METHOD		QUANTITY	
		Name	Method Used	Emission Point 1	T (Total) KG/Year	A (Accidental) KG/Year	F (Fugitive) KG/Year
08	Ammonia (NH3)			531.58	531.58	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)

Pollutant No.	POLLUTANT	RELEASES TO AIR		METHOD		QUANTITY	
		Name	Method Used	Emission Point 1	T (Total) KG/Year	A (Accidental) KG/Year	F (Fugitive) KG/Year
216	Hydrogen sulphide			15.48	15.48	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 provide summary data on methane emissions to the environment under 'Total' (Total) (KG/yr for Section A; Sector specific PRETR pollutants above. Please complete the table below:

Landfill:	Ballybeg Composting Facility	Method Used		Facility Total Capacity m3 per hour
		Method Code	Designation or Description	
		0.0		N/A
		0.0		0.0 (Total Flaring Capacity)
		0.0		0.0 (Total Utilising Capacity)

Please enter summary data on the quantities of methane flared and / or utilised

Total estimated methane generation (as per site model)

Methane flared in engines

Net methane emission (as reported in Section A above)

4.2 RELEASES TO WATERS

[Link to previous years emissions data](#)

SECTION A : SECTOR SPECIFIC PRTR POLLUTANTS

RELEASES TO WATERS	
POLLUTANT	
No. Annex II	Name

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

SECTION B : REMAINING PRTR POLLUTANTS

RELEASES TO WATERS	
POLLUTANT	
No. Annex II	Name

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

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

RELEASES TO WATERS	
POLLUTANT	
Pollutant No.	Name

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

SECTION A : PRTR POLLUTANTS

OFFSITE TRANSFER OF POLLUTANTS DESTINED FOR WASTE-WATER TREATMENT OR SEWER

No. Annex II	POLLUTANT Name	M/C/E	METHOD		Please enter all quantities in this section in KGs		QUANTITY	
			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

Pollutant No.	POLLUTANT Name	M/C/E	METHOD		Please enter all quantities in this section in KGs		QUANTITY	
			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

5. ONSITE TREATMENT & OFFSITE TRANSFERS OF WASTE

PRTR#: W02049 | Facility Name: Ballybeg Composting Facility | Filename: W02049_2017-2017 | Return Year: 2017

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Transfer Destination	European Waste Code	Hazardous	Quantity (Tonnes per Year)	Description of Waste	Waste Treatment Operation	Method Used		Location of Treatment	Licence/Permit No of Next Non-Haz Waste: Name and Recover/Dispenser	Licence/Permit No of Next Non-Haz Waste: Address of Next Non-Haz Waste: Address of Recover/Dispenser	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	16 10 02	No	54.2	aqueous liquid wastes other than those mentioned in 16 10 01	R10	M	Weighted	Offsite in Ireland	Irish Water - Limerick Main Drainage, D0013-01	Dock Road, Limerick, Ireland		
Within the Country	16 10 02	No	1635.21	aqueous liquid wastes other than those mentioned in 16 10 01	R10	M	Weighted	Offsite in Ireland	H&L Environmental Services, WFP-TN-12-0003-01	Derryville, Moyne, Thurles, Ireland		
Within the Country	19 05 01	No	2472.44	non-composted fraction of municipal and similar wastes	D1	M	Weighted	Offsite in Ireland	Dreihd Waste Management Facility, W0201-03	Killmogh Upper Carbury, Co. Kildare, Ireland		

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

[Link to previous year's waste data](#)
[Link to previous year's waste summary data & percentage change](#)
[Link to Waste Guidance](#)