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ANNUAL ENVIRONMENTAL REPORT

ORMONDE ORGANICS LTD

KILLOWEN,

PORTLAW,

CO. WATERFORD

LICENCE NO. W0287-01

JANUARY 2017 – DECEMBER 2017

Prepared For: -

Ormonde Organics Limited,
Killowen,
Portlaw,
Co. Waterford

Prepared By: -

O' Callaghan Moran & Associates,
Unit 15 Melbourne Business Park,
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21st September 2018

Project	Annual Environmental Report 2017			
Client	Ormonde Organics Limited W0287-01			
Report No	Date	Status	Prepared By	Reviewed By
1930104	18/09/2018	Draft	Martina Gleeson PhD	Jim O'Callaghan MSc
	21/09/2018	Final	Martina Gleeson PhD	Jim O'Callaghan MSc

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1. INTRODUCTION

This is the 2017 Annual Environmental Report (AER) for the Ormonde Organics Ltd (Ormonde Organics) composting and anaerobic digestion installation at Killowen, Portlaw, County Waterford. The installation operates under an Industrial Emission Licence (IED) (W0287-01) which was granted by the Environmental Protection Agency (Agency) in October 2016. The report covers the period from the 1st January 2017 to the 31st December 2017.

The content of the AER is based on Schedule F of the Waste Licence (W0287-01) and the report format follows guidelines set in the "*Guidance Note for Annual Environmental Report*" issued by the Agency[1]. Cognisance was also taken of the AER Draft Guidance Document issued in January 2012[2].

[1] EPA (Environmental Protection Agency) 1999 Waste Licensing – Draft Guidance on Environmental Management Systems and Reporting to the Agency
[2] EPA (Environmental Protection Agency) 2012 Draft AER Guidance Document

2. SITE DESCRIPTION

2.1 Site Location and Layout

The installation is located at Killowen, approximately 3km north of Portlaw. The River Suir is approximately 350 metres from the north-eastern site boundary. The regional route R680 runs along the western boundary of the site and links Portlaw village to the south with Carrick-on-Suir to the north-west. The surrounding area is mainly agricultural land and individual dwellings.

The installation is divided into two sections, one area houses the compost building, weighbridge and administration building. This area is surrounded by palisade fencing and is accessed via a security gate. The second area is also surrounded by palisade fencing and accessed by a separate security gate. This area houses the Anaerobic digester (AD) tanks, combined heat and power (CHP) generator and a drier building.

2.2 Waste Management Activities

The licence allows Ormonde Organics to accept of 40,000 tonnes of organic waste annually, which includes:

- Municipal wastewater treatment sludge,
- Household biodegradable kitchen and canteen waste,
- Other biodegradable waste (Garden & Park Waste), and
- Septic Tank Sludge.
- Non-hazardous industrial and water treatment sludge.

2.2.1 Waste Types & Processes

Composting is carried out inside the main building, which has offices at the front. The kitchen wastes include materials defined as animal by-products (raw and cooked meats) and Ormonde Organics has obtained approval from the Department of Agriculture, Fisheries and Marine for approval to process these wastes.

The sludges are mixed with woodchip and then loaded into specially constructed compost bays in the Compost Building. The bays have pipes in the floor, through which air is

pumped up into the mixture of sludge and woodchip. The objective is to maintain a high oxygen level in the mixture to encourage oxygen using (aerobic) bacteria to grow and feed on the organic matter.

Anaerobic digestion is carried out in purpose built digesters. The wastes are fed into large fully enclosed tanks, which are continuously stirred and the temperature rises to the optimal level. The gases are drawn off and treated and fed to on-site gas engines which generate electricity and heat. The residue from the process includes a fibre like solid and a liquid (digestate). The solid residue and digestate, which contain nutrients, are used on farmland as an alternative to chemical fertilisers. The incoming waste and digestate are stored in above ground tanks.

3. EMISSION MONITORING

Condition 6.2 and Schedule C of the Licence requires the monitoring of surface water, groundwater, dust, noise and air. Monitoring at the installation began in the second quarter 2017. The monitoring locations are shown on Figure 3.1. The results are submitted to the Agency at quarterly intervals and this section presents an overview of the monitoring completed in the reporting period..

3.1 Surface Water Monitoring

SW-1 is the discharge point from the installation. Stormwater from the roofs and paved areas is collected in the installation's surface water drainage system and discharged via an oil interceptor to a pipe that outfalls to the River Suir. The locations are shown on Figure 3.1.

The monitoring results are presented in Table 3.1. There are no emission limit values set in the Licence Table includes, for comparative purposes, the environmental quality standards (EQS) for a river water body assigned 'Good Status' in the Surface Water Environmental Objectives (Surface Water) Regulations 2009 (SI 272 of 2009). An EQS is not emission limit value, but is a quality objectives to be achieved in specified water bodies. An exceedance of an EQS in a surface water discharge does not mean that the emission is of environmental significance, as this is determined by the assimilative capacity of the receiving water.

Table 3.1 Results SW-1 2017

Parameter	Units	2nd Quarter 2017	3rd Quarter 2017	4th Quarter 2017	EQS
pH	pH Units	8.21	7.30	7.62	4.5-9.0
COD	mg/l	26	36	27	-
BOD	mg/l	8	3	4	1.5-2.6
TSS	mg/l	19	<10	22	-
Total Ammonia	mg/l	0.66	0.16	3.56	0.065-0.14
Total Nitrogen	mg/l	5.8	2.4	10.4	-
Conductivity	mS/cm	0.454	0.288	0.336	-
Mineral Oil	mg/l	<0.01	<0.01	<0.01	-
Sulphate	mg/l	18.1	16.2	25	-

The EQS for ammonia was exceeded during all monitoring events, while the EQS for BOD was exceeded in the first quarter 2017. Given the dilution capacity in the receiving water course the emissions were not of environmental significance.

3.2 Groundwater Monitoring

The programme specified in the Licence includes monitoring of the on-site drinking water well (GW-1) and two off site wells BH-1 and GW-2. The sampling locations are shown on Figure 3.1. OCM could not locate off-site well BH-1 listed in Schedule C 6.2 of the Licence. There is a pump in GW-2 and Ormonde Organics use water from this well in the process. The sample from GW-1 was taken from a pipe fitted with a tap and the sample from GW-2 was taken from a tap at the side of the biofilter building.

There are no emission limits set in the Licence and therefore the results are compared to the Threshold Values for groundwater (GTV) quality introduced by the European Communities Environmental Objectives (Groundwater) Regulations 2010 S.I. No. 9 of 2010.

The IGV levels represent typical background or unpolluted conditions; however levels higher than the IGV can occur naturally, depending on the local geological and hydrogeological conditions. While the Threshold Values are more appropriate for large scale abstraction wells used for potable supply, they can be used to assess the significance of contamination where present in groundwater. Because not all parameters monitored have been assigned Threshold Values, the relevant IGV continue to be used for comparative purposes.

The results are presented in Tables 3.2 and 3.3. The groundwater quality is good and there is no evidence of any impact downgradient of the installation.

Table 3.2 Groundwater results GW-1 2017

Parameter	Units	Q2	Q4	TV	IGV
Total Ammonia	mg/l	<0.03	<0.03	0.065-0.175	-
Electrical Conductivity	mS/cm	0.597	0.425	1.875	1.000
pH	pH Units	8.06	7.89	-	6.5 - 9.5
Chloride	mg/l	16.6	17.5	24-187.5	30
Fluoride	mg/l	<0.3	<0.3	-	1.0
Sulphate	mg/l	11.3	10.9	187.5	200
Nitrate	mg/l	16.4	15.8	37.5	25
Ortho Phosphate	mg/l	<0.06	<0.06	-	0.03
BOD	mg/l	<1	<1	-	-
COD	mg/l	<7	<7	-	-
Total Nitrogen	mg/l	4.8	4.6	-	NAC
Total Suspended Solids	mg/l	<10	56	-	-
Total Petroleum Hydrocarbons	mg/l	<0.01	<0.01	-	0.01

Table 3.3 Groundwater results GW-2 2017

Parameter	Units	Q2	Q4	TV	IGV
Total Ammonia	mg/l	<0.03	<0.03	0.065-0.175	-
Electrical Conductivity	mS/cm	0.702	0.494	1.875	1.000
pH	pH Units	8.02	7.65	-	6.5 - 9.5
Chloride	mg/l	18.7	19.3	24-187.5	30
Fluoride	mg/l	<0.3	<0.3	-	1.0
Sulphate	mg/l	16.5	17.8	187.5	200
Nitrate	mg/l	16.4	16.1	37.5	25
Ortho Phosphate	mg/l	<0.06	0.14	-	0.03
BOD	mg/l	1	<1	-	-
COD	mg/l	<7	<7	-	-
Total Nitrogen	mg/l	5.0	4.7	-	NAC
Total Suspended Solids	mg/l	<10	<10	-	-
Total Petroleum Hydrocarbons	mg/l	<0.01	<0.01	-	0.01

3.3 Noise Monitoring

The annual noise survey was conducted in November. The survey consisted of daytime, evening and night-time monitoring at four onsite stations. The survey was conducted when the site was fully operational and confirmed that noise emissions fully complied with the licence and that the facility is not impacting negatively on the nearest sensitive receptors. Although the licence does not specify offsite measurement locations, spot checks undertaken in the vicinity of two dwellings after the daytime and night-time surveys indicated that facility emissions were not audible, and were in compliance with specified limits. A summary of the noise results is shown on Table 3.4.

Table 3.4 Noise Monitoring Results 2017

Station	Date	Time	Wind vector	$L_{Aeq\ T}$ dB	$L_{AF10\ T}$ dB	$L_{AF90\ T}$ dB	Specific $L_{Aeq\ T}$ dB
AN1 day 1/3	29.11.17	1016-1046	x	58	63	47	47
	Facility: Sporadic trucks movements audible at low level. Air management system at compost building continuously audible at low level. **Extraneous**: Regular R680 traffic movements entirely dominant, and audible for some distance on approaches. Aircraft, and local birdsong. Lightly rustling vegetation. **Specific $L_{Aeq\ T}$ determination**: L90 reasonably representative of air management system.						
AN1 day 2/3	29.11.17	1148-1218	x	57	61	46	46
	Facility: As previous. **Extraneous**: As previous. **Specific $L_{Aeq\ T}$ determination**: As previous.						
AN1 day 3/3	29.11.17	1321-1351	x	57	62	47	47
	Facility: As previous. **Extraneous**: As previous. **Specific $L_{Aeq\ T}$ determination**: As previous.						
AN1 eve 1/1	29.11.17	2138-2208	x	53	57	41	41
	Facility: Air management system at S end of composting building continuously audible at low level. **Extraneous**: Intermittent R680 traffic dominant when present, and audible on extended approaches. N24 traffic also slightly audible. Aircraft. **Specific $L_{Aeq\ T}$ determination**: L90 representative.						
AN1 night 1/2	29.11.17	2329-2344	x	47	47	39	39
	Facility: As previous. **Extraneous**: As previous. **Specific $L_{Aeq\ T}$ determination**: As previous.						
AN1 night 2/2	29.11.17	0032-0047	x	46	44	39	39
	Facility: As previous. **Extraneous**: As previous. R680 traffic now reduced to sporadic. **Specific $L_{Aeq\ T}$ determination**: As previous.						
AN2 day 1/3	29.11.17	1010-1040	-	61	64	46	<56
	Facility: Several truck movements on adjacent access road, and accessing nearest building, clearly audible when present. Several gate opening/closing movements nearby clearly audible During traffic lulls, air management system audible at low level. **Extraneous**: Regular R680 traffic entirely dominant when present, and audible for some distance on approaches. N24 traffic to NE also audible at low level during R680 lulls. Bird song/calls, and aircraft. **Specific $L_{Aeq\ T}$ determination**: Not possible to derive specific Leq due to traffic intrusion. L10 unrepresentative of traffic, as also influenced by site trucks. Traffic entirely dominant, thus site contribution at least 5 dB lower that Leq.						
AN2 day 2/3	29.11.17	1153-1223	-	61	63	48	57
	Facility: As previous, including truck idling at 20 m to 1209. **Extraneous**: As previous. **Specific $L_{Aeq\ T}$ determination**: Leq to 1209 considered representative, normalised to 30 min.						
AN2 day 3/3	29.11.17	1329-1359	-	59	63	47	<54
	Facility: Several truck movements on adjacent access road clearly audible when present. Several gate opening/closing movements nearby clearly audible During traffic lulls, air management system audible at low level. **Extraneous**: Regular R680 traffic entirely dominant when present, and audible for some distance on approaches. N24 traffic to NE also audible at low level during R680 lulls. Bird song/calls, and aircraft. **Specific $L_{Aeq\ T}$ determination**: Not possible to derive specific Leq due to traffic intrusion. Traffic entirely dominant, thus site contribution at least 5 dB lower that Leq.						
AN2 eve 1/1	29.11.17	2143-2213	-	53	57	39	36
	Facility: Continuous air management emissions audible at low level. **Extraneous**: Intermittent R680 traffic dominant when present, and audible on extended approaches. N24 traffic also slightly audible, over more extended durations. Aircraft. Dog barking occasionally audible to E. Whine from facility several hundred metres to N continuously audible at low level. **Specific $L_{Aeq\ T}$ determination**: L90 not entirely representative, due to interference from N24 traffic and whine to N. Specific Leq estimated at 50 % contributor to L90.						
AN2 night 1/2	29.11.17	2334-2349	-	47	45	37	34
	Facility: As previous. **Extraneous**: As previous. R680 traffic reducing. **Specific $L_{Aeq\ T}$ determination**: As previous.						
AN2 night 2/2	29.11.17	0037-0052	-	46	43	37	34
	Facility: As previous. **Extraneous**: As previous. R680 traffic now sporadic. **Specific $L_{Aeq\ T}$ determination**: As previous.						

Station	Date	Time	Wind vector	$L_{Aeq\ T}$ dB	$L_{AF10\ T}$ dB	$L_{AF90\ T}$ dB	Specific $L_{Aeq\ T}$ dB
AN3 day 1/3	29.11.17	1107-1136	x	53	55	48	49
	Facility: Tanker unloading at 100 m continuously audible at low level. No other noise audible, apart from truck approaching measurement position at 1136, requiring termination of measurement to allow access. **Extraneous**: R680 traffic continuously quite audible in distance. N24 traffic to NE also continuously audible at low level. Whine from facility on hillside several hundred metres NW continuously audible at low level. Aircraft and local birdsong. **Specific $L_{Aeq\ T}$ determination**: L90 unrepresentative of tanker unloading due to traffic and offsite whine, and therefore calculated by subtracting extraneous Leq level measured during subsequent interval.						
AN3 day 2/3	29.11.17	1239-1309	x	51	53	46	<46
	Facility: Tanker unloading operation at SE corner slightly audible continuously until 1255, in addition to faintly audible water flow in nearby manhole. **Extraneous**: As previous. **Specific $L_{Aeq\ T}$ determination**: Audible emissions insufficient to influence L90 due to extraneous sources, thus <L90 derivation possible only.						
AN3 day 3/3	29.11.17	1415-1445	x	51	53	46	<46
	Facility: As previous, with tanker unloading at SE corner slightly audible from 1421. **Extraneous**: As previous. **Specific $L_{Aeq\ T}$ determination**: As previous.						
AN3 eve 1/1	29.11.17	2229-2259	x	46	48	41	<41
	Facility: Continuous emissions from one or more fan sources slightly audible. Water flow in nearby manhole also slightly audible. **Extraneous**: R680 and N24 traffic almost continuously clearly audible, in addition to quite audible whine to N. Aircraft, and dog barking to E. **Specific $L_{Aeq\ T}$ determination**: L90 dominated by traffic and whine. <L90 contribution determined.						
AN3 night 1/2	29.11.17	2301-2316	x	43	45	40	<40
	Facility: As previous. **Extraneous**: As previous. **Specific $L_{Aeq\ T}$ determination**: As previous.						
AN3 night 2/2	29.11.17	0005-0020	x	44	47	40	<40
	Facility: As previous. **Extraneous**: As previous. **Specific $L_{Aeq\ T}$ determination**: As previous.						
AN4 day 1/3	29.11.17	1055-1125	0	64	65	62	64
	Facility: Regular forklift truck operations on adjacent yard dominant when present, in addition to sporadic truck movements. Inbuilding operations also audible. Nearby gas engines continuously clearly audible. **Extraneous**: None audible. **Specific $L_{Aeq\ T}$ determination**: Leq representative.						
AN4 day 2/3	29.11.17	1233-1303	0	72	75	63	72
	Facility: Tanker unloading on yard entirely dominant to 1255, with emissions codominant from nearby flare unit to 1247. Emissions otherwise as previous. **Extraneous**: None audible. **Specific $L_{Aeq\ T}$ determination**: As previous.						
AN4 day 3/3	29.11.17	1411-1441	0	67	70	62	67
	Facility: Tanker unloading nearby entirely dominant from 1421. Yard activity and gas engines also audible. **Extraneous**: None audible. **Specific $L_{Aeq\ T}$ determination**: As previous.						
AN4 eve 1/1	29.11.17	2225-2255	0	62	62	61	62
	Facility: Nearby gas engines entirely dominant, almost entirely masking other continuous sources. **Extraneous**: None audible. **Specific $L_{Aeq\ T}$ determination**: Leq representative.						
AN4 night 1/2	29.11.17	2304-2319	0	62	62	61	62
	Facility: As previous. **Extraneous**: As previous. **Specific $L_{Aeq\ T}$ determination**: As previous.						
AN4 night 2/2	29.11.17	0001-0016	0	63	64	62	63
	Facility: As previous. **Extraneous**: As previous. **Specific $L_{Aeq\ T}$ determination**: As previous.						

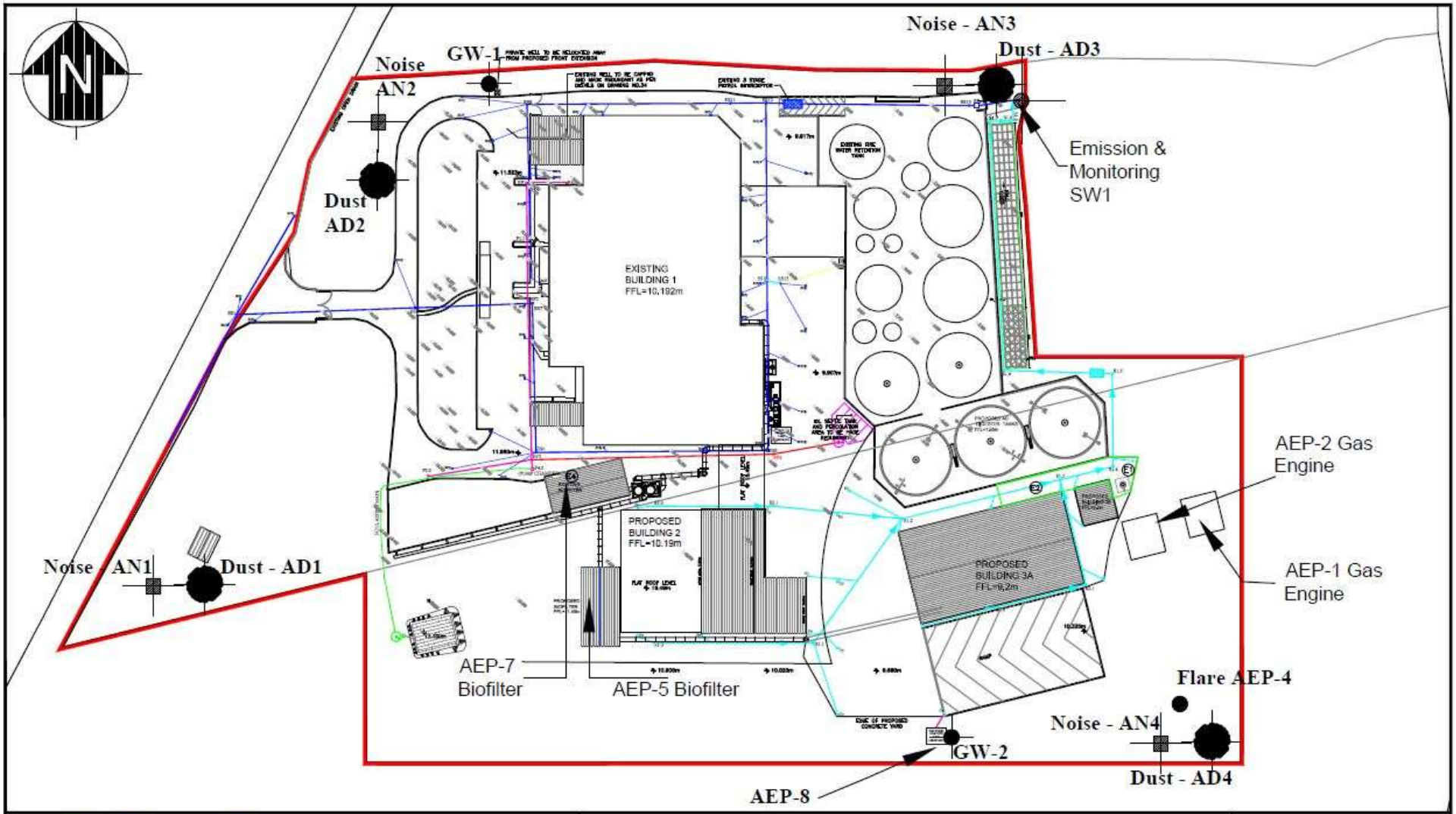
3.4 Dust Monitoring

Dust monitoring is carried out quarterly at four on-site locations (AD-1, AD-2, AD-3 and AD-4). Monitoring commenced in Q2 2017 and the results of the monitoring are included on Table 3.5.

The dust emission limit (350 mg/m^2/day) was not exceeded during the monitoring period.

Table 3.7 Dust Monitoring Results 2017

Dust Emission (mg/m^2/day) **Sample Location**	**Q2**	**Q3**	**Q4**	**Emission Limit (mg/m^2/day)**
AD-1	110	87	117	350
AD-2	48	98	<10	350
AD-3	139	128	148	350
AD-4	58	47	43	350



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CLIENT	FIGURE No.	
Ormonde Organics	3.1	
TITLE	SCALE	REV.
Monitoring Locations and Emission Points	NTS	A

4. SITE DEVELOPMENT WORKS

4.1 Specified Engineering Works

In 2017 the following engineering works were carried out: a second gate valve was installed at the sump in Q1; a new holding tank and pipe work from the tank to the second biofilter was installed; the bunded oil tank was moved and a bunded tank for AdBlu and waste oil were also installed. . Site development works planned for 2018 include:

- Review of biofilter woodchip levels.

4.2 Summary of Resource & Energy Consumption

Table 4.1 presents an estimate of the resources used on-site during the reporting period and in 2016.

Table 4.1 Estimate of Resources Used On-Site 2017

Resources	Quantities 2016	Quantities 2017
Diesel (green)	30,000 litres	111,915 litres
Electricity	610,000 kWh	2,613,454 kWh
Hydraulic & Engine Oil	200 litres	0 litres
AdBlu	1,000 litres	0 litres
Sulphuric Acid	0 Tonnes	118.1 Tonnes

5. WASTE RECEIVED AND CONSIGNED FROM THE INSTALLATION

Table 5.1 shows the total quantities of waste received and consigned from the installation in 2017. A breakdown of the waste types is provided in accordance with the EPA's Waste Classification (2015). A more detailed description of the wastes consigned is provided in the PRTR return in Appendix 1. The installation transforms all waste accepted into a product and therefore there is no waste consigned from the installation. For comparative purposes the amounts of waste received and consigned from 2016 are presented in Table 5.2.

Table 5.1 Waste Received & Consigned 2017

EWC	Description	Waste In	Waste Out
02 02 03	Waste of animal origin unsuitable for consumption or processing	1,657.69	
02 02 04	Sludges from on-site effluent treatment (animal industry)	4,051.53	
02 05 01	Waste of dairy origin unsuitable for consumption or processing	2,226.94	
02 05 02	Sludges from on-site effluent treatment (dairy industry)	4,598.28	
02 06 01	Waste of bakery origin unsuitable for consumption or processing	145.68	
02 06 03	Sludges from on-site effluent treatment (baking/confectionery industry)	1,393.78	
02 07 01	Waste from cleaning and mechanical treatment of materials (beverage industry)	199.34	
02 07 04	Waste from beverage industry unsuitable for consumption or processing	2,056.96	
02 07 05	Sludges from on-site effluent treatment (beverage industry)	1,425.30	
15 01 07	Glass Packaging		6.80
17 09 04	C&D Inert Mixed		50.80
19 08 05	Sludges from WWTP	9,779.90	
20 01 08	Biodegradable kitchen & canteen waste	7,397.10	
20 01 25	Edible oil and fat	2,716.73	
20 01 38	Wood		6.06
20 03 01	MSW Municipal Mixed		227.64
20 03 07	C&I Dry Mixed		41.608
Total Received		**37,649.24**	
Total Consigned			**332.908**
Recovery			**332.908**
Disposal			**0**
Recovery Rate			**100%**

Table 5.2 Waste Received & Consigned 2016

EWC	Description	Waste In	Waste Out
02 02 03	Waste of animal origin unsuitable for consumption or processing	137.18	
02 02 04	Sludges from on-site effluent treatment (animal industry)	1,358.18	
02 05 01	Waste of dairy origin unsuitable for consumption or processing	321.43	
02 05 02	Sludges from on-site effluent treatment (dairy industry)	1,293.52	
02 06 01	Waste of bakery origin unsuitable for consumption or processing	211.48	
02 06 03	Sludges from on-site effluent treatment (baking/confectionery industry)	237.3	
02 07 01	Waste from cleaning and mechanical treatment of materials (beverage industry)	33.78	
02 07 04	Waste from beverage industry unsuitable for consumption or processing	539.70	
02 07 05	Sludges from on-site effluent treatment (beverage industry)	494.98	
19 08 05	Sludges from WWTP	7480.60	
20 01 08	Biodegradable kitchen & canteen waste	1,586.34	
20 01 25	Edible oil and fat	678.51	
Total Received		14,373	
Total Consigned			**0**
Recovery			**0**
Disposal			**0**
Recovery Rate			**0**

6. ENVIRONMENTAL INCIDENTS AND COMPLAINTS

6.1 Incidents

There were no reportable incidents at the installation in 2017.

6.2 Register of Complaints

Ormonde Organics maintains a register of complaints received at the installation offices. There was one complaint about odour received in 2017.

7. ENVIRONMENTAL DEVELOPMENT

7.1 Environmental Management Programme Report

The proposed Schedule of Objectives and Targets for 2017 (Table 7.1) are presented below.

7.1.1 Site Management Structure

Management and Staffing structure: -

Name: Denis Mullally
Responsibility: Facility Manager
Experience: Over 10 years' experience in the Waste Management industry as manager of EPA licenced facilities. Has completed the FÁS Waste Management course.

Name: Pat Cormack
Responsibility: Environmental Officer; Carries out the environmental sampling, landbank preparation and reports for customers.
Experience: Has worked with Ormonde Organics since 2005, has a degree in Agricultural Science. Has completed Waste Collection Permit training with NWCPO and HACCP training.

7.1.2 Staff Training

Environmental training is carried out for any new staff employed at the installation as required. Copies of all training records are held in the installation office.

7.2 Environmental Management Programme

7.2.1 Schedule of Objectives 2017

The schedule of targets and objectives for 2017 are presented in Table 7.1.

7.2.2 Schedule of Objectives 2018

The schedule of targets and objectives for 2018 are presented in Table 7.2.

7.3 Communications Programme

Ormonde Organics is committed to ensuring environmental compliance in all operations. To this end Ormonde Organics has drawn up a Communications Programme, which details how members of the public are facilitated in accessing and viewing environmental information at the installation. Members of the public who wish to inspect these files may do so at any reasonable time by making an appointment with the Operations Manager using the telephone number posted on the main installation entrance sign.

Table 7.1 Schedule of Objective and Targets 2017

No.	Objective	Target	Timescale	Responsibility	Status
1	**Reduce Water Consumption**	Reduce the on-site consumption of water via rainwater harvesting	Q3	Site Management	Ongoing - Trial successfully completed in Biogas plant
2	**Energy Audit**	Carry out Energy Audit at the installation	Q2	Site Management	Site Audit completed in Q4 2017.
3	**Upgrade Storage Areas**	Upgrade the chemical and fuel storage areas	Q2	Site Management	Fuel storage area upgraded with new bunds. Chemical bunds to be upgraded in 2018.
4	**Emergency response procedures**	Complete Emergency Response Procedure and ensure that all information & equipment required in case of an emergency is available. Confirm that relevant staff training adequately addresses.	Q4	Site Management/EHS	Commenced, Worksafe Solutions appointed to update the ERP.
5	**CRAMP, ELRA & Financial Provision**	CRAMP, ELRA & Financial Provision to be carried out	Q2/Q3	EHS team	OCM have been commissioned to update the ELRA in 2018.

Table 7.2 Schedule of Objective and Targets 2018

No.	Objective	Target	Timescale	Responsibility
1	**Reduce Water Consumption**	Expand existing rainwater harvesting IBC's	Q2	Site Management
2	**Energy Audit**	Review the Energy Audit from Urban Volt	Q1	Site Management
3	**Upgrade Storage Areas**	Upgrade the chemical and fuel storage areas	Q2	Site Management
4	**Emergency response procedures**	Complete ERP procedure via Worksafe solutions	Q2	Site Management/EHS
5	**CRAMP, ELRA & Financial Provision**	Update CRAMP, ELRA & Financial Provision	Q3	EHS team

7.4 Report Financial Provision

An updated Closure and Decommissioning Plan and an Environmental Liabilities Risk Assessment (ELRA) including Financial Provision (FP) will be submitted to the Agency for their approval in 2018.

7.5 Nuisance Controls

Ormonde Organics has contracted a vermin control company to carry out nuisance control at the installation. Prevent a Pest provide pest control at the installation and also provide for the treatment of insects at the installation if necessary. A site inspection is carried out daily and recorded on the installation's inspection. These assessments were carried out in a manner consistent with the Agency Guidance Note for EPA Licensed Sites (AG5).

7.6 Foul water Volume Transported Off-Site

No wastewater was removed from site in 2017. Approximately 400 m^3 of wastewater was generated at the installation in 2017, this was re-used in the composting process.

7.7 Summary of Flare usage

The flare runtime for 2017 was 39 hours.

8. OTHER REPORTS

8.1 European Pollutant Release and Transfer Register Regulation

Under the European Pollutant Release and Transfer Register Regulation (EC) No. 166/2006 GES are required to submit information annually to the Agency. A copy of the return submitted to the Agency via the web-based data reporting system is included in Appendix 1.

APPENDIX 1

European Pollutant Release and Transfer Register

| PRTR# : W0287 | Facility Name : Ormonde Organics Limited (Portlaw) | Filename : W0287_2017.xls | Return Year : 2017 |

Guidance to completing the PRTR workbook

PRTR Returns Workbook

Version 1.1.19

REFERENCE YEAR	2017

1. FACILITY IDENTIFICATION

Parent Company Name	Ormonde Organics Limited
Facility Name	Ormonde Organics Limited (Portlaw)
PRTR Identification Number	W0287
Licence Number	W0287-01

Classes of Activity

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

Address 1	Killowen
Address 2	Portlaw
Address 3	
Address 4	
	Waterford
Country	Ireland
Coordinates of Location	-7.30808008699995 52.311138403
River Basin District	IESE
NACE Code	3821
Main Economic Activity	Treatment and disposal of non-hazardous waste
AER Returns Contact Name	Pat Cormack
AER Returns Contact Email Address	pcormack@ormondeorganics.ie
AER Returns Contact Position	Environmental Officer
AER Returns Contact Telephone Number	051567024
AER Returns Contact Mobile Phone Number	0878206757
AER Returns Contact Fax Number	051567005
Production Volume	0.0
Production Volume Units	
Number of Installations	0
Number of Operating Hours in Year	0
Number of Employees	10
User Feedback/Comments	
Web Address	

2. PRTR CLASS ACTIVITIES

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

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

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/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) ?	

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: Ormonde Organics Limited (Portlaw)

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 t

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	15 01 07	No	6.8	glass packaging	R13	M	Weighed	Offsite in Ireland	Starrus Eco Holidings Ltd,WFP-KK-14-007-02	Unit 15/16 Hebron Industrial Estate,Kilkenny,,,,Ireland		
Within the Country	20 03 01	No	227.64	mixed municipal waste	R13	M	Weighed	Offsite in Ireland	Starrus Eco Holdings Ltd.,W0177-03	Six Cross Roads Business Park,Six Cross Roads ,Waterford,,Ireland		
Within the Country	20 03 07	No	2.74	bulky waste	R13	M	Weighed	Offsite in Ireland	Glanway Limited,P1015-01	Unit 4-5 ,Gurteens,Slieverue,Co. Kilkenny,Ireland		
Within the Country	20 03 07	No	38.56	bulky waste	R13	M	Weighed	Offsite in Ireland	Starrus Eco Holdings Ltd.,W0177-03	Six Cross Roads Business Park,Six Cross Roads ,Waterford,,Ireland		
Within the Country	17 09 04	No	16.72	mixed construction and demolition wastes other than those mentioned in 17 09 01, 17 09 02 and 17 09 03	R12	M	Weighed	Offsite in Ireland	Starrus Eco Holdings Ltd.,W0177-03	Six Cross Roads Business Park,Six Cross Roads ,Waterford,,Ireland		
Within the Country	17 09 04	No	34.08	mixed construction and demolition wastes other than those mentioned in 17 09 01, 17 09 02 and 17 09 03	R12	M	Weighed	Offsite in Ireland	Chi Environmental,W0266-01	Grannagh,Kilmacow,Co. Kilkenny,,Ireland		
Within the Country	20 03 07	No	0.31	bulky waste	R12	M	Weighed	Offsite in Ireland	Quality Recycling Limited,WFP-TS-0002-04	Unit 6 Rosehill Industrial Estate,Ballinacurra,Midleton, Co. Cork,Ireland		
Within the Country	20 01 38	No	6.06	wood other than that mentioned in 20 01 37	R12	M	Weighed	Offsite in Ireland	Starrus Eco Holdings Ltd.,W0177-03	Six Cross Roads Business Park,Six Cross Roads ,Waterford,,Ireland		

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