Ray Whelan Ltd W0-158-01

Annual Environmental Report 2017

All data and information presented in this report has been checked and certified as being accurate. The quality of the information is assured to meet licence requirements.

ANNUAL ENVIRONMENTAL REPORT January – December 2017.

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1. Introduction.

1.1 This Annual Environmental Report (AER) has been prepared by Wood Environmental Management Ltd (WEML) on behalf of Ray Whelan Ltd as required by condition 11.6 and Schedule F of Waste Licence 158-1 issued by the Environmental Protection Agency on 23rd May 2003.

2. Reporting Period.

- 2.1 This Annual Environmental Report (AER) covers the period 1st January to 31st December 2017 inclusive.
- 3. Waste Activities Carried out at the Facility.
- 3.1 Ray Whelan Ltd operate an authorised waste skip hire, wheelie bin collection and recycling business from premises at Cappanaboe, Co Laois.
- Waste Licence 158-1 issued by the EPA on 23rd May 2003 permits Ray 3.2 Whelan Ltd to carry out the following waste activities at the facility, in accordance with the Waste Management Act, 1996;
 - Third Schedule of the Waste Management Act, 1996;
 - 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 the bulking and transfer of waste for disposal off-site.
 - 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 is produced: This activity is limited to storage prior to the bulking and transfer of waste for disposal off-site.

Fourth Schedule of the Waste Management Act, 1996;

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 the segregation of cardboard, paper, wood, plastic and organic waste prior to recovery off-site.

- Class 3. Recycling or reclamation of metals and metal compounds:

 This activity is limited to the segregation of steel and metals prior to recovery off-site.
- Class 4. Recycling or reclamation of other inorganic materials:

 This activity is limited to the segregation of glass and construction and demolition waste prior to recovery off-site.
- 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 waste prior to recovery off-site.
- 4. Quantity and Composition of Wastes Recovered, Received and Disposed of During the Reporting Period and Each Previous Year.
- 4.1 Based on figures provided to WEML by Ray Whelan Ltd, Ray Whelan Ltd collected and handled 36,365.78 tonnes of waste at the facility during the period 1st January 31st December 2017. This is a slight increase in the quantity of waste collected and handled at the facility during 2016 (see Table 1).
- 4.2 Of the 36,365.78 tonnes of waste collected and handled at the facility in 2017, a total of 14,715 tonnes of waste were disposed of ie. approximately 40 % and a total of 21,651 tonnes of waste were recovered/recycled ie. approximately 60 %. This is the same percentage split as 2016 (see Table 1).
- 4.3 Table 1 shows the percentage disposal and recycling rates over the period 2004 to 2017.

Table 1. Quantity of Waste Disposed of and Recycled by Ray Whelan Ltd over the period 2004 - 2017.

Year	Total	Disposed	%	Recycled	%
2004	21,525	20,062	93.2	1,463	6.8
2005	26,292	24,588	93.5	1,704	6.5
2006	28,521	23,223	81.4	5,298	18.6
2007	35,167	27,203	77.3	7,964	22.7
2008	28,028	22,863	81.6	5,165	18.4
2009	34,897	28,582	81.9	6,315	18.1
2010	33,004	15,444	46.8	17,506	53.0
2011	32,017	10,728	33.5	19,287	60.2
2012	30,985	7,331	23.7	23,654	76.3
2013	37,389	6,922	18.5	23,026	61.5
2014	32,411	13,999	43	18,410	57
2015	35,547	15,394	43	20,153	57
2016	35,835	14,320	40	21,515	60
2017	36,365	14,715	40	21,651	60

4.4 A breakdown of the waste quantities recovered and disposed of by Ray Whelan Ltd during 2017 are shown in Tables 2 & 3.

Table 2. Quantity of Waste Disposed of by Ray Whelan Ltd (01/01/17 – 31/12/17)

Waste Type	Origin of	EWC	Quantity	Destination	Treatment
	Waste	Code	(tonnes)	of Waste	of Waste
Mixed Household	Carlow	191212	6,598.22	Powerstown	Disposal
Waste	Kildare			Landfill	
	Kilkenny				
	Laois				
	Wicklow				
Mixed Household	Carlow	200301	4,258.10	Bord na	Disposal
Waste	Kildare			Mona	
	Kilkenny				
	Laois				
	Wicklow				
Mixed Household	Carlow	200301	2,547.46	Ballynagran	Disposal
Waste	Kildare			Landfill	
	Kilkenny				
	Laois				
) (1 x	Wicklow	200201	1.011.06		- · · · ·
Mixed Household	Carlow	200301	1,311.86	Powerstown	Disposal
Waste	Kildare			Landfill	
	Kilkenny				
	Laois				
	Wicklow	T. 4. 1	14515 (4		
		Total	14,715.64		

Table 3. Quantity of Waste Received & Recycled by Ray Whelan Ltd (01/01/17 -31/12/17)

Waste Type	Origin of	EWC	Quantity	Destination	Treatment
	Waste	Code	(tonnes)	of Waste	of Waste
Household (mixed collection)	Carlow Kildare Kilkenny Laois Wicklow	200301	9,863.66	Indaver	Recycled
Mixed Dry Recyclables	Carlow Kildare Kilkenny Laois Wicklow	200301	6,297.90	Re-Gen	Recycled
Household (mixed collection)	Carlow Kildare Kilkenny Laois Wicklow	200301	4,909.72	Dublin Waste to Energy	Recycled
Wood	Carlow Kildare Kilkenny Laois Wicklow	170201	734.10	OCR	Recycled
Clay	Carlow Kildare Kilkenny Laois Wicklow	200303	666.00	Powerstown Landfill	Recycled
Paper & Cardboard	Carlow Kildare Kilkenny Laois Wicklow	150101	659.12	Natural Energy & Recycling Ltd	Recycled
Household Food Waste	Carlow Kildare Kilkenny Laois Wicklow	200108	580.12	Waddock Composting Ltd	Recycled
Green Waste	Carlow Kildare Kilkenny Laois Wicklow	200201	399.50	Bord na Mona, Kilberry	Recycled
Glass	Carlow Kildare Kilkenny Laois Wicklow	150107	374.74	Glassco	Recycled

Table 3. Quantity of Waste Received & Recycled by Ray Whelan Ltd (01/01/17 –31/12/17) continued....

Waste Type	Origin of	EWC	Quantity	Destination	Treatment
	Waste	Code	(tonnes)	of Waste	of Waste
Metal	Carlow	200140	171.40	A1 Metals	Recycled
	Kildare				
	Kilkenny				
	Laois				
	Wicklow				
Wood	Carlow	170201	144.78	Clonmel	Recycled
	Kildare			Waste	
	Kilkenny				
	Laois				
	Wicklow				
Metal	Carlow	200140	64.40	Allied	Recycled
	Kildare			Recycling	
	Kilkenny			Ltd	
	Laois				
	Wicklow				
Plastic	Carlow	150102	30.20	Natural	Recycled
	Kildare			Energy &	
	Kilkenny			Recycling	
	Laois			Ltd	
	Wicklow				
Metal	Carlow	200140	27.86	Molly	Recycled
	Kildare			Metals	
	Kilkenny			Recycling	
	Laois			Ltd	
	Wicklow				
Tyres	Carlow	160103	27.62	WTS	Recycled
	Laois				
Rubble	Carlow	170101	26.16	Powerstown	Recycled
	Kildare			Landfill	
	Kilkenny				
	Laois				
	Wicklow				
Metal	Carlow	191202	23.58	Molly	Recycled
	Kildare			Metals	
	Kilkenny			Recycling	
	Laois			Ltd	
	Wicklow				
Metal	Carlow	191202	10.22	Allied	Recycled
	Kildare			Recycling	
	Kilkenny			Ltd	
	Laois				
	Wicklow				
		TOTAL	25,011.08*		

^{*} more waste sent off site than collected in 2017 due to stock held on site at end of 2016.

5. Summary Report of Emissions.

5.1 Waste licence 158-1 requires Ray Whelan Ltd to carry out the following site emissions monitoring.

Table 4. Site Monitoring Requirements.

Condition	Monitoring	Nos Locations	Frequency
Ref	Required		
Schedule D2	Dust Monitoring	D1, D2	Three times a year. Twice
			during May - September
Schedule D3	Noise Monitoring	N1-N5, NSL1	Annually
Schedule D4	Surface Water	SW1	Quarterly
	Monitoring		
Schedule D4	Waste Water	WW1	Bi-Annually
	Monitoring		
Schedule D5	Ground Water	GW1	Annually
	Monitoring		

5.2 A summary of the site emissions monitoring surveys for 2017 is presented below. Laboratory certificates are available for inspection on Site.

Dust Deposition Results.

- WEML carried out dust deposition surveys at the facility in Feb/March,May/June, Sept/Oct 2017.
- 5.4 Dust deposition monitoring was based on a modified version of the Bergerhoff method VDI 2119 'Measurement of dustfall using the Bergerhoff instrument (standard method)'. Dust results are presented below.

Table 5. Dust Deposition Results (Feb-March 2017).

Location	Suspended Solids mg/sample	Dust Deposition mg/m²/day	Dust Deposition Limit (mg/m²/day)
D1 Site Entrance	49.6	32.65 mg/m ² /day	350 mg/m ² /d
D2 Second Entrance	29.88	19.67 mg/m ² /day	350 mg/m ² /d
D3 Rear site boundary	<3	$< 1.97 \text{ mg/m}^2/\text{day}$	$350 \text{ mg/m}^2/\text{d}$

5.5 The above dust deposition results are all in compliance with the licence limit of 350g/m²/day.

Table 6. Dust Deposition Results (May-June 2017).

Location	Suspended Solids mg/sample	Dust Deposition mg/m²/day	Dust Deposition Limit (mg/m²/d)
D1 Site Entrance	45.2	32.9 mg/m ² /day	350 mg/m ² /d
D2 Second Entrance	7.5	5.46 mg/m ² /day	350 mg/m ² /d
D3 Rear site boundary	362	263.8 mg/m ² /day	350 mg/m ² /d

5.6 The above dust deposition results are all in compliance with the licence limit of 350 mg/m²/day.

Table 8. Dust Deposition Results (Sept-Oct 2017).

Location	Suspended Solids mg/sample	Dust Deposition mg/m²/day	Dust Deposition Limit (mg/m²/d)
D1 Site Entrance	39	24.1 mg/m ² /day	$350 \text{ mg/m}^2/\text{d}$
D2 Second Entrance	13.33	8.24 mg/m ² /day	$350 \text{ mg/m}^2/\text{d}$
D3 Rear site boundary	5.95	$3.68 \text{ mg/m}^2/\text{day}$	$350 \text{ mg/m}^2/\text{d}$

5.7 The above dust deposition results are all in compliance with the licence limit of 350 mg/m²/day.

Noise Results.

- 5.8 WEML carried out a noise monitoring survey at the facility on 26th May 2017.

 Noise monitoring was carried out to the International Standard ISO 1996/1

 "Acoustics Description & measurement of environmental noise" using a calibrated Sound Level Meter.
- 5.9 Monitoring was carried out over a typical day. Weather conditions during sampling were dry and sunny with a slight breeze. Ray Whelan Ltd do not operate the site at night-time, therefore noise monitoring was not carried out overnight.
- 5.10 During monitoring, there was typical activity taking place on site. The monitoring equipment was manned throughout the sampling period and comments/notes taken to assist the interpretation and assessment of results.

- 5.11 Sampling was carried out at the following five boundary locations;
 - N1 Site entrance.
 - N2 Second site entrance.
 - N3 Rear corner site boundary (opposite second site entrance).
 - N4 Outside transfer station building.
 - NSL1 Outside closest house to the facility.
- 5.12 Noise monitoring results are summarised below.

Table 8. Summary of Site Boundary Noise Levels.

Location	Start Time	LAeq	Comments
N1	10:30	70.6	Site operational. Noise from machines moving waste inside
			shed. Vehicles visiting site offloading waste.
N2	11:05	64.5	Site operational. Noise from machines moving waste inside
			shed. Reversing sirens.
N3	11:40	55.0	Site operational. Vehicles visiting site. Waste being moved
			inside shed and in yard.
N4	12:15	56.2	Site operational. Noise from vehicles dropping skips &
			waste in yard. Machines moving waste in yard and shed.

Table 9. Summary of Sensitive Locations Noise Levels.

Location	Start Time	LAeq	Comments
NSL1	13:00	59.2	Site operational. Noise from passing traffic and bird song.

- 5.13 The above results show that during the survey, the noise level recorded at the closest sensitive location (NSL1) was slightly above the waste licence daytime noise limit of 55 dB(A) L_{Aeq} . Noise levels at this location was impacted by passing traffic.
- 5.14 There are no complaints of noise from the residents at the closest sensitive receptor (NSL1) due to operation of the Ray Whelan Ltd facility. WEML therefore concludes that based on the above survey, noise levels from the Ray Whelan Ltd facility do not cause a significant noise nuisance at sensitive locations beyond the site boundary.

Surface Water Monitoring Results.

- 5.15 Waste licence 158-1 requires Ray Whelan Ltd to carry out quarterly surface water sampling and monitoring for the following analysis;
 - pH
 - Conductivity
 - BOD
 - Suspended Solids
 - Ammonia
 - Mineral Oils
- 5.16 All site yard run off water is diverted to the underground 'blind' waste water collection sump prior to collection and disposal off site. There is no point discharge of yard surface water from the site.
- 5.17 Bi annual water samples were taken from the underground wastewater holding tank and tested for a range of analyses as presented below.

Waste Water Monitoring Results.

- 5.18 Waste licence 158-1 requires Ray Whelan Ltd to carry out bi-annual waste water sampling and monitoring for the following analysis;
 - pH
 - BOD
 - COD
 - Suspended Solids
 - Ammonia
 - Mineral Oils
 - Fats, Oils, Grease
- 5.19 As detailed above, the site drainage infrastructure diverts all site run off and waste water in to the waste water collection sump prior to collection and disposal off site.

5.20 WEML took samples of the combined surface water and waste water in March and June 2017. The results of the combined surface water and waste water analyses are shown in Table 10 below.

Table 10. Summary of Combined Surface Water Waste & Water Analyses.

Parameter	Sample 1	Sample 2
	March 2017	June 2017
pH Units	6.89	6.43
BOD mg/l	294	480
COD mg/l	835	750
Suspended Solids mg/l	245	112
Ammonia mg/l	10.5	6.6
Mineral Oils mg/l	18.3	3.34
Fats, Oils & Grease mg/l	36.1	16.5

5.21 There are no waste water quality limits set down in waste licence 158-1. The contents of the waste water storage tank are tankered off site for disposal as required by condition 3.12 of the waste licence. The above data is useful when arranging sub-contractors to empty and dispose of the contents of the waste water sump when required.

Ground Water Monitoring Results.

- 5.22 Waste Licence 158-1 requires Ray Whelan Ltd to carry out annual ground water sampling and monitoring for the following analysis;
 - pH
 - Conductivity
 - Ammonia
 - Mineral Oils
- 5.23 A groundwater sampling well was installed at the facility in early 2005.
 WEML sampled the groundwater on 24th June 2017. The results are presented below.

Table 11. Summary of Groundwater Sampling Results (2017).

Ref	pH units	Conductivity ms/cm @ 25°C	Ammonia mg/l	Mineral Oils mg/l
GW1	7.92	0.438	12.6	<1
EPA Limit	No limit Set	No limit Set	No limit Set	No limit Set
Compliance	No limit Set	No limit Set	No limit Set	No limit Set

5.24 There are no groundwater quality limits set down in waste licence 158-1. However the ammonia results in the above sample were high and therefore an additional sample was taken for analysis on 27th October 2017. The results are presented below.

Table 11. Summary of Groundwater Sampling Results (2017).

Ref	pH units	Conductivity ms/cm @ 25°C	Ammonia mg/l	Mineral Oils mg/l
GW1	7.57	0.551	0.307	<5
EPA Limit	No limit Set	No limit Set	No limit Set	No limit Set
Compliance	No limit Set	No limit Set	No limit Set	No limit Set

5.25 The above results show a significant reduction in ammonia levels. The high ammonia reading in the June sample is most likely the result of inefficient well purging and sampling standing water in the well. Since June, a pump has been installed in the well which allows the groundwater to be effectively purged and sampled to reflect actual groundwater quality. It is expected that future ground water samples will continue to show low ammonia levels.

6. Summary of Monitoring Results & Location Plan Showing Monitoring Locations.

A discussion and interpretation of the 2017 site monitoring data is presented in Section 5 above. A site map showing the location of monitoring points is presented in Figure 1.

7. Resource & Energy Consumption Summary.

- 7.1 The main resource used by Ray Whelan Ltd is diesel for fueling the waste collection vehicles, site waste handling and processing equipment. The total quantity of road diesel used by Ray Whelan Ltd during 2017 was 649,010 litres.
- 7.2 Electricity was connected to the site in November 2007. Site water (non potable) is provided by an onsite borehole.

7.3 An approximate breakdown of the resources used by Ray Whelan Ltd in 2017 is shown in the following table.

Table 12. Summary of Resources & Energy Use (2017).

Resource/Fuel	Use	Approximate Quantity
Road Diesel	Diesel for Lorries	639,010 litres
Green Diesel	Site Machinery/Equipment	35,503 litres
Hydraulic Oil	Lorries	5,330 litres
Engine Oil	Lorries	2,656 litres
Transmission Oil	Lorries	374 litres
Lubricants	Servicing Lorries	15 kg
Electricity	Site Power	5820 units

8. Development/Infrastructure Works.

8.1 All site infrastructure works as detailed in Condition 3 and Schedule B of Waste Licence 158-1 has been installed as required.

9. Schedule of Environmental Objectives for 2018.

9.1 Ray Whelan Ltd has developed a schedule of Environmental Objectives & Targets for the period 2018. This schedule is presented in Table 13 below.

Table 13. Register of Environmental Objectives & Targets (2018).

	OBJECTIVES	TARGETS
1		_
1	Assess and reduce where	Not to exceed 350 mg/m ² /day in order to reduce
	possible all dust emissions.	the possibility of causing dust deposition
		nuisance beyond site boundary.
2	Assess and reduce where	Not to exceed 55 db(a) L _{AEq} (30 minutes)
	possible all site noise	during day time at noise sensitive locations in
	emissions.	order to reduce the possibility of causing noise
		nuisance at noise sensitive locations beyond the
		site boundary.
3	Assess and improve where	Compliance with waste licence quality limits
	possible surface water and	and to ensure that there are no surface water
	1 *	
	waste water emissions	pollution incidents.
4	Assess and improve where	Compliance with waste licence quality limits
	possible groundwater quality	and to ensure that there are no groundwater
		pollution incidents.
5	Increase waste recycling	Investigate/implement options to increase waste
	rates	recycling, including brown bin collections/
		organic waste recycling, onsite processing.
6	Ensure that nuisance	Compliance with condition 7 of waste licence
	condition do not arise on site	158-1
		130-1
	or beyond the site boundary.	

7	Install and maintain site	Compliance with condition 3 and Schedule B of
	infrastructure/Specified	waste licence 158-1
	Engineering Works	
8	Develop and implement a	Compliance with condition 2.3 of waste licence
	site environmental	158-1
	management system (EMS)	
9	Ensure that all staff receive	Compliance with condition 2.3.2.4 of waste
	appropriate environmental	licence 158-1
	training	
10	Strive to maintain	To meet all legal and waste licence
	environmental improvements	requirements.
	and legal obligations	

10. Progress on Environmental Objectives in Previous AER (2017).

- 10.1 Ray Whelan Ltd established a register of Environmental Objectives & Targets for 2017 which are similar to the above Environmental Objectives & Targets set for 2018.
- 10.2 Progress on meeting the 2017 Environmental Objectives & Targets are summarised in Table 14 below.

Table 14. **Progress of 2016 Environmental Objectives & Targets.**

	OBJECTIVES	TARGETS	PROGRESS
1	Assess and reduce	Not to exceed 350 mg/m ² / day in	This target was achieved.
	where possible all	order to reduce the possibility of	Surveys show that dust
	dust emissions.	causing nuisance beyond site	emissions did not exceed 350
		boundary.	$mg/m^2/day$ in 2017.
2	Assess and reduce	Not to exceed 55 db(a) L _{AEq} (30	Although noise levels in 2017
	where possible all	minutes) during day time at	at the closest sensitive
	site noise	noise sensitive locations in order	receptor were above the
	emissions.	to reduce the possibility of	licence limits, there are no
		causing noise nuisance at noise	noise nuisance complaints
		sensitive locations beyond the	associated with the site.
		site boundary.	
3	Assess and	Compliance with waste licence	There are no direct surface
	improve where	quality limits and to ensure that	water discharges from the
	possible surface	there are no surface water	site. All site run off and waste
	water and waste	pollution incidents.	water is diverted to the waste
	water emissions		water sump prior to collection
			and disposal off site.
4	Assess and	Compliance with waste licence	This target was achieved. A
	improve where	quality limits and to ensure that	pump was installed in the
	possible	there are no groundwater	well and additional
	groundwater	pollution incidents.	groundwater monitoring
	quality		carried out in 2017 showed
			reduced ammonia levels.

5	Ensure that nuisance condition do not arise on site or beyond the site boundary.	Compliance with condition 7 of waste licence 158-1	This target was achieved. A nuisance inspection procedure has been implemented at the site. There were no recorded complaints about nuisance conditions at the site in 2017.
6	Install and maintain site infrastructure/ Specified Engineering Works	Compliance with condition 3 and Schedule B of waste licence 158-1	All specified engineering works were completed in 2006, 2007 and 2008. A new weighbridge was installed in 2017 as agreed with the EPA.
7	Develop and implement a site environmental management system (EMS)	Compliance with condition 2.3 of waste licence 158-1	This target was achieved. A series of written site operating procedures were established and implemented at the site in 2007.
8	Ensure that all staff receive appropriate env. training	Compliance with condition 2.3.2.4 of waste licence 158-1	This target was achieved. Relevant staff training was carried out in 2011.
9	Strive to maintain environmental improvements and legal obligations	To meet all legal and waste licence requirements.	There were no reported waste licence non-conformances identified by the EPA during 2017.

11. Written Site Procedures.

11.1 Ray Whelan Ltd has developed a register of written site procedures as detailed in previous AER's. These procedures are available for inspection on site if required.

12. Tank, Drum, Pipeline & Bund Testing Report.

12.1 There were no tests of tanks, drums, pipelines and bunds carried out in 2017 and there are no results/data available.

13. Reported Incidents & Complaints Summary.

13.1 There were no reported or recorded incidents/complaints in relation to the operation of the facility during the reporting period.

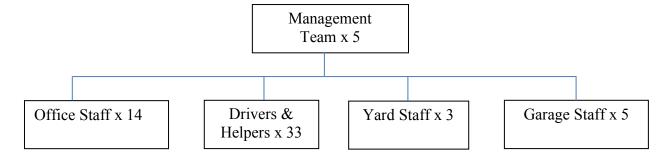
14. Review of Nuisance Controls.

14.1 Ray Whelan Ltd has a written procedure (EOP 017) to monitor potential nuisance conditions at the facility in order to comply with conditions 7 and 8.8.1 of Waste Licence 158-1, including;

vermin

birds

- mud
- dust
- litter
- odours
- 14.2 At a minimum of weekly intervals (or sooner if required), Ray Whelan Ltd site staff carry out an inspection of the yard, access roads and surround area for potential nuisance conditions caused by any of the above issues.
- 14.3 Any potential nuisance conditions are addressed and rectified as soon as possible. Site inspections and actions taken are recorded on a weekly inspection sheet that is available at the site office for inspection if required.
- 15. Financial Provision, Management Structure & Public Information.
- 15.1 Ray Whelan Ltd management will make available all the necessary finances, resources and manpower required in order to ensure that the conditions of waste licence 158-1 are met. Furthermore, Ray Whelan Ltd management are committed to providing the necessary finances and resources in order to achieve the companys' stated Environmental Objectives and Targets.
- 15.2 Ray Whelan Ltd prepared and submitted to the Agency a comprehensive and fully costed environmental liabilities risk assessment (ELRA) in August 2005 as required by condition 12.2.1 of waste licence 158-1. The ELRA included a proposal for financial provision.
- 15.3 The management & staffing structure at Ray Whelan Ltd during 2017 is outlined below.



15.4 All information relating to the environmental performance of the facility, including emissions monitoring reports, waste licence conditions, incidents, complaints, operating procedures etc are available for public inspection at the site by prior arrangement. Furthermore, all reports, information and documents submitted by Ray Whelan Ltd to the Agency are available for public consultation and review.

16. Volume of Waste Water Produced and Volume Transported Off Site.

16.1 A total of approximately 248 m³ of waste water was collected from the sump during 2017. The sump was emptied by a third party contractor and disposed of at Athy sewage treatment works.

17. Any Other Items Specified by the Agency.

17.1 There were no other items specified by the Agency during 2017 that require incorporation into this AER. This section is not applicable.



| PRTR# . W0158 | Facility Name . Ray Whelan Ltd | Filename .: W0158_2017-7th March 2018-01 xtsm | 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	Ray Whelan Limited
Facility Name	Ray Whelan Ltd
PRTR Identification Number	W0158
Licence Number	W0158-01

Classes of Activity

array,	The state of the state of
No. class_name	No.
- Refer to PRTR class activities below	

Address 1 Waste Services Address 2 Cappanaboe Address 3 Address 4 Laois Laois Country Ireland Coordinates of Location -6.96733 52.8735 River Basin District IESE NACE Code 3821 Main Economic Activity Treatment and disposal of non-hazardous waste AER Returns Contact Name Andrew Wood AER Returns Contact Email Address awood@weml.ie AER Returns Contact Position Consultant AER Returns Contact Telephone Number 0872854171 AER Returns Contact Mobile Phone Number 0872854171
Address 3 Address 4 Laois Country Ireland Coordinates of Location -6.96733 52.8735 River Basin District NACE Code Main Economic Activity Main Economic Activity AER Returns Contact Email Address AER Returns Contact Position AER Returns Contact Telephone Number 0872854171
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AER Returns Contact Email Address awood@weml.ie AER Returns Contact Position Consultant AER Returns Contact Telephone Number 0872854171
AER Returns Contact Position Consultant AER Returns Contact Telephone Number 0872854171
AER Returns Contact Telephone Number 0872854171
AER Returns Contact Mobile Phone Number 0872854171
AER Returns Contact Fax Number
Production Volume 36365.0
Production Volume Units TONNES
Number of Installations 1
Number of Operating Hours in Year 2200
Number of Employees 65
User Feedback/Comments The volume of waste water removed from the yard was higher in 2017
compared to 2016. This accounts for the higher waste water
parameter values in 2017 compared to 2016.
Web Address www.raywhelan.ie

2. PRTR CLASS ACTIVITIES

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

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

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

| PRTR# : W0158 | Facility Name : Ray Whelan Ltd | Filename : W0158_2017-7th March 2018-01.xlsm | Return Year : 2017 | Page 1 of 2

Sheet: Facility ID Activities

4. WASTE IMPORTED/ACCEPTED ONTO SITE

Guidance on waste imported/accepted onto site

Do you import/accept waste onto your site for onsite treatment (either recovery or disposal activities) ? No Annual of the Party

4.1 RELEASES TO AIR

Sheet: Releases to Air

Link to previous years emissions data

SECTION A: SECTOR SPECIFIC PRTR POLLUTANTS

A (Accidental) KG/Year T (Total) KG/Year Emission Point 2 RELEASES TO AIR No. Annex II

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

SECTION B : REMAINING PRTR POLLI ITANTS

		RELEASES TO AIR			Please enter all curantiti	or in this section in Kee		
	POLLUTANT		ME	ЕТНОВ			OHANTITY	
				Method Used				
			S S S S S S S S S S S S S S S S S S S	N G G G G		_	A (Accidental)	
NO AIRIBA II		Name	M/C/E Method Code	Designation or Description	Emission Point 1	T (Total) KG/Year	KG/Year	F (Fugitive) KG/Year
						0.0	00	0.0

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

		RELEASES TO AIR		The second secon	Please enter all quantities	in this section in KGs				
	POLLUTANT		4	METHOD					CHANTITY	
				Method Used						
100000000000000000000000000000000000000									A (Accidental)	F (Fugitive)
Policiant No.		Name	M/C/E Method Code	Designation or Description	Emission Point 1	Emission Point 2	Emission Point 3	T (Total) KG/Vear	KCNast	KG/Vear
	Dust		M ALT	Alcontrol Labs	0.02	9000	50.0	3200	1	80
		1				2000				

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

For the purposes of the National Inventory on Greenhouse Gesea, landfill operators are requested to provide summary data on landfill gate (Martin Paris) lared or utilised on their feelithes to accompany the figures for total methons generated. Operators should only report black har methone (CH4) emission to the emicrotement under T(lotal) KG/pt for Section A. Sector specific PRTR politizants above. Please complete the table below. Additional Data Requested from Landfill operators

Landfill:	Ray Whelan Ltd				8	
Please enter summary data on the quantities of methane flared and / or utilised			Metho	Method Used		
	T (Total) kg/Year	MICIE	Method Code	Designation or Description	Facility Total Capacity m3	
Total estimated methane generation (as por site model)	0.0				A/N	
Methane flared Methane utilised in engine/s	0.0				0.0	(Total Flaring Capacity)
Net methane emission (as reported in Section A above)	0.0				N/A	D. D

4.3 RELEASES TO WASTEWATER OR SEWER

Sheet: Releases to Wastewater or Sewer

Link to previous years emissions data

OFFSI	TE TRANSFER OF POLLUTANTS DESTINED FOR WASTE-WATER TR	REATMENT OR SEWER	Please enter all quantities in this section in KGs
	POLLUTANT	METHOD	QUANTITY
	C A STATE OF THE S	Method Used	
	Name	MC/E Method Code Designation or Description	Emission Point 1 (Total) KG/Vear A (Accidental) KG/Vear E (Euci

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

SECTION B : REMAINING POLLUTAN	SECTION B: REMAINING POLLUTANT EMISSIONS (as required in your Licence)							
o	DFFSITE TRANSFER OF POLLUTANTS DESTINED FOR WASTE-WATER T	REATMEN	NT OR SEWER		Please enter all quantities	in this section in KGs		
	POLLUTANT		ME	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
303	BOD	M	ALT	Alcontrol Labs	64.0		0.0	0.0
306	GOO	M	ALT	Alcontrol Labs	1310	131.0	00	0.0
240	Suspended Solids	Σ	ALT	Alcontrol Labs	29.5		0.0	0.0
238	Ammonia (as N)	M	ALT	Alcontrol Labs	1.4	1.4	000	0.0
324	Mineral eds	×	ALT	Alcontrol Labs	18	1.8	0.0	
##P	Fats, Oils and Greases	Σ	ALT	Alcontrol Labs	4.3	4.3	00	

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

Sheet: Treatment Transfers of Waste

Transfer Destination European Waste Hazardous Description of Waste Within the Country 15 01 01 No 659.12 paper and cardboard packaging Within the Country 15 01 02 No 374.74 glass packaging Within the Country 16 01 03 No 27.62 end-of-life tyres Within the Country 20 01 08 No 27.86 metals Within the Country 20 02 01 No 27.86 metals Within the Country 20 02 01 No 2547.46 mixed municipal waste Within the Country 20 03 01 No 2547.46 mixed municipal waste Within the Country 20 03 01 No 2547.46 mixed municipal waste Within the Country 20 03 01 No 2547.46 mixed municipal waste Within the Country 20 03 01 No 2547.46 mixed municipal waste Within the Country 20 03 01 No 4909.72 mixed municipal waste Within the Country 20 03 01 No 4909.72 mixed municipal waste Within the Country 20 03 01 No 4909.72 mixed municipal waste <t< th=""><th></th><th></th><th>Method Used</th><th>ă</th><th>Licence/Permi No of Next Destination Facility Haz Waste, Name and Learce/Permi No of Recover/Oisposer</th><th>Haz Waste: Address of Next Nesting Destination Facility Non Haz Waste. Address of Racover/Disposer</th><th>Name and Licenso / Permit No. and Address of Final Recovere / Disposer (HAZARDOUS WASTE ONLY)</th><th>Actual Address of Final Destination i.e. Final Recovery / Disposal Sile (HAZARDOUS WASTE ONLY)</th></t<>			Method Used	ă	Licence/Permi No of Next Destination Facility Haz Waste, Name and Learce/Permi No of Recover/Oisposer	Haz Waste: Address of Next Nesting Destination Facility Non Haz Waste. Address of Racover/Disposer	Name and Licenso / Permit No. and Address of Final Recovere / Disposer (HAZARDOUS WASTE ONLY)	Actual Address of Final Destination i.e. Final Recovery / Disposal Sile (HAZARDOUS WASTE ONLY)
15 01 01 No 15 01 02 No 16 01 03 No 20 01 08 No 20 02 01 No 20 03 01 No		Waste Treatment Operation	M/C/E Method Used	Location of Treatment				
15 01 02 No 16 01 03 No 19 12 02 20 01 40 No 20 03 01 No 44		R3 M	Weighed	nd	Natural Energy and Recycling Ltd,WFP-DS-11- 0001-01	,Dublin,,,Ireland		
16 01 07 No 16 01 03 No 20 01 08 No 20 01 40 No 20 02 01 No 20 03 01 No 48		K3 M	Weighed	Na Re Offsite in Ireland 00	Natural Energy and Recycling Ltd,WFP-DS-11- 0001-01	Dublin, Ireland		
19 12 02 No 20 01 08 No 20 01 08 No 20 01 08 No 20 02 01 No 20 03 03 01 No 20 03 03 03 03 No 20 03		75 M	Weighed	Offsite in Ireland Re	Rehab Glassco,W0279-02	Unit 4,Oberstown Ind, Park,Caragh Road,Naas Co Kildare,Ireland		
19 12 02 No 20 01 40 No 20 01 40 No 20 02 01 40 No 20 03 01 No 20 03 01 No 20 03 01 No 44 20 03 03 03 No 44		71 M	Weighed	W Offsite in Ireland 01	WTCS,NWCPO-06-10464- 01	Earlsgarden,Attanagh,Co Laois,,,Ireland		
20 02 01 40 No Po	l kitchen and canteen waste	74 M	Weighed	Offsite in Ireland Mo	Molloy Metals, TBC Waddock Composting, TBC	,Fems,Co Wexford,Ireland		
20 02 01 No 6 25 20 03 01 No 25 20 03 01 No 75 20 03 03 03 No No 75 20 03 03 No 75 20 03 03 03 No 7		74 M	Weighed	Offsite in Ireland Mo	Molloy Metals, TBC	, Ferns, Co Wexford, Ireland		
20 03 01 No 25 20 03 01 No 98 20 03 01 No 13 20 03 01 No 49 20 03 01 No 49		43 M	Weighed	Offsite in Ireland Bo	Bord na Mona, W0198-01	Kilbeпу,Athy,Kildare,Co Kildare,Ireland		
20 03 01 No 98 20 03 01 No 98 20 03 01 No 49 20 03 01 No 49 49 No 49 20 03 01 No No 49 No		K3 M	Weighed	Abroad	Regen,TBC	Unit 7., Cambane Ind Estate Shepherds Drive, Newry Co Down, Ireland		
20 03 01 No 13 20 03 01 No 49 20 03 01 No 49 20 03 03 01 No A		D5 M	Weighed	W. Offsite in Ireland Co	Wicklow County Council,W0005-01	East Wicklow Landfill,Ballynagran,Kilcandr a,Wicklow,Ireland		
20 03 01 No 13 13 20 03 01 No		31 M	Weighed	Offsite in Ireland Inc	Indaver, Indaver	Duleek, Dufeek, Duleek, Meat h, Ireland		
20 03 01 No 49 20 03 01 No A		D5 M	Weighed	Ca Offsite in Ireland lan	Carlow CC, Powerstown landfill	Carlow		
20 03 01 No 4		M M	Weighed	Gri Offsite in Ireland 01	Greyhound Waste, W0205- 01	Crag Avenue, Clondalkın Ind Estate, Dublin 22, D22 E718, Ireland Drebiri Waste Management		
20 03 03 No		D5 M	Weighed	Offsite in Ireland Bo	Bord na Mona, W0201-03	Facility, Parsonstown, Loughn acush, Co Kildare, Ireland		
		K3 M	Weighed	Offsite in Ireland lan	Carlow CC, Powerstown landfill	Carlow,,Ireland		
Within the Country 19 12 02 No 10,22 ferrous metal Within the Country 20 01 40 No 64,0 metals Within the Country 20 01 40 No 171,4 metals		R4 M R4 M	Weighed Weighed Weighed	Offsite in Ireland All Offsite in Ireland All Offsite in Ireland A1	Allied Recycling,TBD Allied Recycling,TBD A1 Metals,TBD	initial de la constitución de la		
Within the Country 17 01 01 No 26.16 concrete	T.	R5 M	Weighed	Ca Offsite in Ireland Ian	Carlow CC,Powerstown landfill	Carlow,,,,lreland		
Within the Country 17 02 01 No 144,78 wood Within the Country 17 02 01 No 734.1 wood other wastes (ii	wood Wood Wood Gindleding misteres of	R3 M	Weighed	Offsite in Ireland Mc Offsite in Ireland OC	Molloys,TBA OCR,TBD	Clonmel,Co Tipperary,,,,Ireland		
Within the Country 1912 12 No. 669.82 72 21 21	nt of in 19	2	1000	Ca	Carlow CC, Powerstown			