OXIGEN ENVIRONMENTAL

Annual Environmental Report 2011

W0152-03

Waste Transfer Station
At

Robinhood Industrial Estate,
Robinhood Road
Ballymount
Dublin 22

PREPARED BY MARIA BYRNE, OXIGEN ENVIRONMENTAL

MARCH 2012

Contents

1. INTRODUCTION

1.0 Introduction

Oxigen Environmental Limited holds EPA Waste Licence Register Number W0152-03 to operate a Waste Transfer Station at the Robinhood Industrial Estate, Robinhood Road, Ballymount, Dublin 22. In accordance with the requirements of Condition 11.9 of the Waste Licence, an Annual Environmental Report (AER) for the facility must be submitted to the Environmental Protection Agency (EPA).

This AER covers the reporting period from the 1st of January 2011 to the 31st of December 2011.

This facility is located at:

Oxigen Environmental Ltd.,
Robinhood Industrial Estate,
Robinhood Road,
Ballymount,
Dublin 22.

Tel: 01 4263118
Fax: 01 4567192

2. FACILITY LOCATION, DESCRIPTION AND WASTE ACTIVITIES

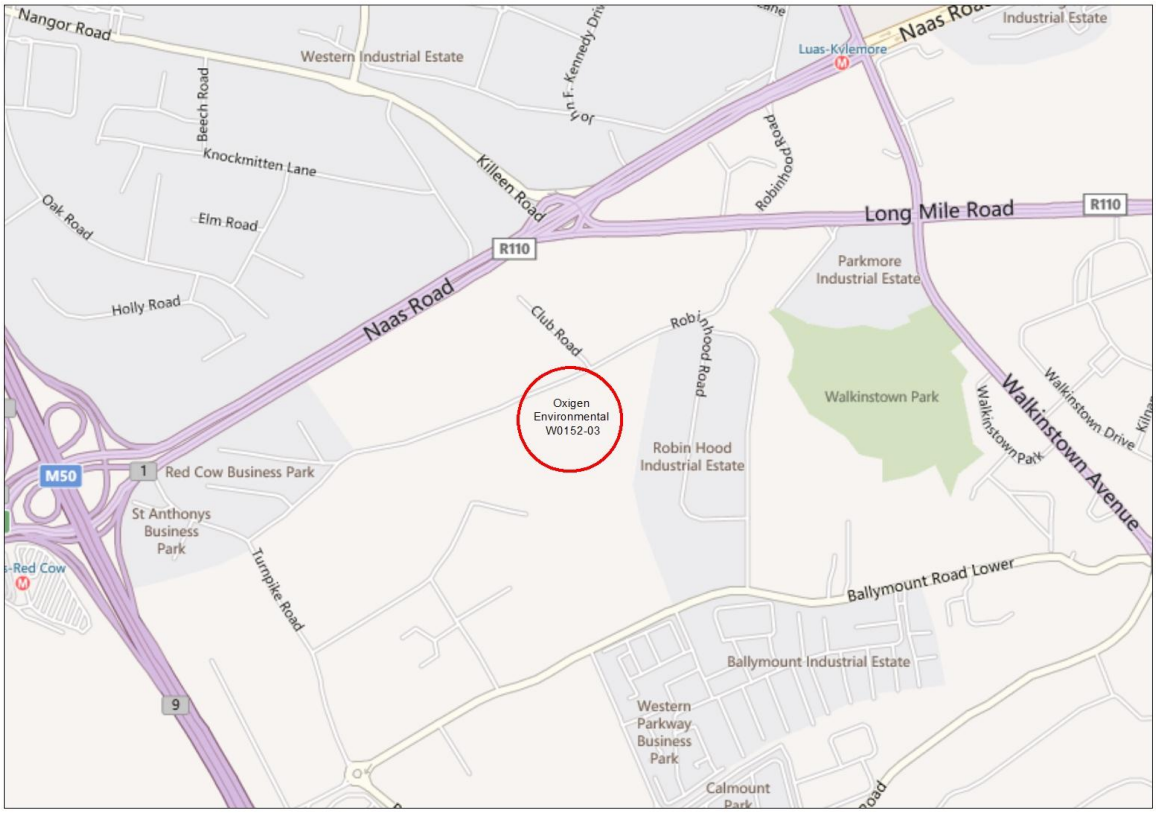
2.0 Facility Location

This facility is located at:

Oxigen Environmental Ltd.,
Robinhood Industrial Estate,
Robinhood Road,
Ballymount,
Dublin 22. Tel: 01 4263118 Fax: 01 4567192

The Waste Transfer Station is located within an industrial area. The facility is surrounded by warehouses and industrial businesses. The Robinhood Road is located at the northern boundary of the site.

Figure2.1. Location Map of Oxigen Environmental Ltd., Robinhood.



Open Street Map 2012

2.1 Description of Operations

Waste handling activities at the site in 2011 consisted of the acceptance and bulking up of municipal solid waste preceding transfer to landfill. All the waste that was destined for Arthurstown Landfill (W0004-03) was baled prior to transfer.

2.2 Process Operations

The licensed waste activities, permitted under the Third Schedule of the Waste Management Acts 1996 to 2003, in the Waste Licence W0152-3 are as follows:

Third Schedule, Class 11	**Blending or mixture prior to submission to any activity referred to in a preceding paragraph of this Schedule.** This activity is limited to bulking and transfer of waste.
Third Schedule, Class 12	**Repackaging prior to submission to any activity referred to in a preceding paragraph of this Schedule.** This activity is limited to the transfer and reloading of waste.
Third Schedule, 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 bulking and transfer or waste.

All the waste that enters the facility is recorded on arrival using the Genesys software system. The vehicle is then directed to the tipping area inside the shed where the load is inspected. Any non-conforming material such as recyclables or large bulky items are segregated out from the pile, reloaded into a skip and transferred to the Oxigen Ballymount Facility (W0208-01) for recovery.

3. QUANTITY AND COMPOSITION OF WASTE RECOVERED, RECEIVED AND DISPOSED OF DURING THE REPORTING YEAR 2011

3.0 Quantity and Composition of Waste Recovered, Received and Disposed of during the Reporting Year 2011

3.1 Waste received at the facility consisted of household and commercial municipal solid waste, food waste and small quantity of plastic. This material was either baled for transfer to landfill or temporarily stored prior to transfer for recycling or recovery. The waste received at Robinhood during the reporting period was recorded in tonnes. The breakdown of quantities received as per each EWC type is listed in Table 3.1.1.

Table 3.1.1 Tonnage of Waste Received by Material Type

Waste Type	EWC Code	Weight (Tonnes)
Mixed Municipal Waste	20 03 01	76,866.04
Organic Fines	19 12 12	1,438.98
Sterilised Medical Waste	19 02 03	338.24

3.2 All waste transferred from the Oxigen Robinhood Facility was transferred to EPA approved permitted or licensed facilities. The majority of waste removed from the facility was baled municipal waste which was transferred to Derryclure Lanfill, Tullamore, Co Offaly. Other waste consigned was sent for further recovery.

Table 3.2.1 Tonnage of Waste Removed from the facility by Destination and Material

Waste Type	EWC Code	Weight (Tonnes)	Name of Facility & Permit/Licence No.	Process carried out at destination
Mixed Municipal Waste	19 12 12	15,460.66	Drehid Waste Management Facility, Carbury, Co. Kildare. W0203-03	Landfill
Mixed Municipal Waste	20 03 01	47.96	Kyletalesha Landfill, Co. Laois W020-02	Landfill
Mixed Municipal Waste	20 03 01	2,411.18	Scotch Corner Landfill, Annyally, Castleblaney, Monaghan. W0020-01	Landfill
Mixed Municipal Waste	20 03 01	55,952.89	Derryclure Landfill, Tullamore, Co. Offaly. W0029-02.	Landfill
Mixed Municipal Waste	20 03 01	2,624.07	Whiteriver Landfill, Dunleer, Co. Louth. W0060-02	Landfill
Organic Fines	19 12 12	3,100.16	Enrich Environmental Ltd., Larch hill Stud, Kilcock, Co. Meath. WMP2004/57	Recovery
Mixed Municipal Waste	20 03 01	78.26	Indaver, Carranstown, Duleek, Co Meath W0167-02	Waste to Energy

4. EMISSIONS FROM THE FACILITY

4.Emissions from the Facility

4.1 Environmental monitoring results for the reporting period are outlined in the following sections. The results have been summarised in the tables below and the original monitoring reports are available on site. The sampling points for the environmental monitoring are unchanged and the results show that there is a high level of compliance with the standards set in the licence. An environmental monitoring results summary is also presented in the 2011 PRTR Returns Worksheet.

Tables 4.1.1 and 4.1.2 Monthly Foul Water Results 2011

Parameter	Units	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Temperature	*C	10.5	12.9	13.1	15.4	14.8	15.7	15.4	18.9	15.4	20.6	15.9	11.1
pH	pH Units	7.84	7.17	7.63	7.43	7.29	7.43	6.89	6.2	6.22	7.05	6.51	6.72
BOD	mg/l	294	169	120	149	260	80	145	326	212	118	125	884
COD	mg/l	1660	452	280	209	575	186	239	505	513	287	401	1877
Total Suspended Solids	mg/l	71	145	59	91	50	4	860	154	95	230	67	476
Oils, Fats & Grease	mg/l	<1	13	7	7.6	64	<1	20	11	11	11	5	26
Mineral Oils	mg/l	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Detergents	mg/l	0.268	0.588	0.418	0.521	0.15	0.1	0.43	0.18	0.048	0.009	0.127	0.157

	Unit	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
Sulphates (as SO4)	mg/l	50.2	49.9	50.7	62.9	60.3	40.9	70	110.9	65.2	70.3	67	437.7
Flow Rate	m3/hr										0.18		0.23

4.2 Schedule B.2 and C.2.2 of Waste Licence W0152-03 requires that emissions to surface water are analysed on the monthly basis. The samples are analysed for Biological Oxygen Demand, Suspended Solids, Ammonia and Mineral Oils. The results are presented below. TSW1 is located at a border of the facility and the samples that are analysed at this point are representative of what came onto the site. TSW2 is located at the far end of the facility, the water that is sampled at this point flows through the site and the interceptor before arriving at TSW2. Therefore, in order to get an accurate reading for emissions contributed by Oxigen, we have taken the difference between the emissions at TSW1 and TSW2.

Table 4.2.1 Monthly Surface Water Results 2011

Parameters	Units	Monitoring Point	Jan	Feb	March	April	May	June	July	August	September	October	November	December
BOD	mg/l	TSW1	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry
		TSW2	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry
		Increase/Decrease	0	0	0	0	0	0	0	0	0	0	0	0
Suspended Solids	mg/l	TSW1	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry
		TSW2	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry
		Increase/Decrease	0	0	0	0	0	0	0	0	0	0	0	0
Ammonia (as N)	mg/l	TSW1	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry
		TSW2	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry
		Increase/Decrease	0	0	0	0	0	0	0	0	0	0	0	0
Mineral Oils	mg/l	TSW1	Dry	Dry	0	0	0	0	Dry	Dry	Dry	Dry	Dry	Dry
		TSW2	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry
		Increase/Decrease	0	0	0	0	0	0	0	0	0	0	0	0

4.3 Schedule B.1 and C.6 of Waste Licence W0152-03 requires that dust emissions are monitored on a quarterly basis. The results are displayed below.

Table 4.3.1 Quarterly Dust Results 2011

Monitoring Station	Units	ELV	May	June	Sept	Oct	Dec
D1	mg/m2/day	350	1922.2 (grit in jar)	38.9	60.2	N/A	43.1
D2	mg/m2/day	350	116.1	44.2	24.9	33.8	21.3
D2	mg/m2/day	350	273.3	43.7	37.6	43.4	N/A

4.4 Schedule B.1 and C.1.2 of Waste Licence W0152-03 requires that certain emissions to air are monitored. Ammonia, Hydrogen Sulphide and Mercaptans are monitored on the monthly basis while amines, odour units and particulates and monitored bi-annually. The results are displayed below.

Table 4.4.1 Monthly Air Emissions Results 2011

Monitoring Point	Parameter	Jan	Feb	March	April	May	June	July	August	Sept	Oct	Nov	Dec
Emmission Point A	Mercaptan	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Hydrogen Sulphide	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Ammonia	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Emmission Point B	Mercaptan	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Hydrogen Sulphide	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Ammonia	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Emmission Point C	Mercaptan	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Hydrogen Sulphide	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Ammonia	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5

Table 4.4.2 Particulates Results 2011

	May					September				
Monitoring Point	**Sampling Times**		**Particulates Conc µg /m3**			**Sampling Times**		**Particulates Conc µg /m3**		
	Start	Finish	Average	Min	Max	Start	Finish	Average	Min	Max
A1	9.15am	10.15am	15	1	59	9.42am	10.42am	24	3	81
A2	10.21am	11.21am	22	2	101	10.51am	11.51am	31	2	126
A3	11.38am	12.38pm	28	2	99	12.02pm	13.02pm	25	1	115

There are no emissions limit values for particulates specified in the Licence for the facility. Particulate levels are low and are at the background concentrations for the area.

Table 4.4.3 Odour Results 2011

Monitoring Point	Average Odour Unit	May	September
A1	ou/m3	2	2
A2	ou/m3	1	2
A3	ou/m3	2	2

There are no emissions limit values for odour units specified in the Licence. The odour units are low at all locations. Generally at 5 ou/m^3 people become consciously aware of the presence of an odour and levels greater than this are strong enough to lead to complaints being made.

4.5 Schedule B.4 and C.5 of Waste Licence W0152-03 requires that noise monitoring is carried out on an annual basis. The annual noise monitoring for 2011 was carried out on the 22nd November 2011. The locations of the monitoring points are mapped in 4.1 and the results of the noise monitoring are detailed below.

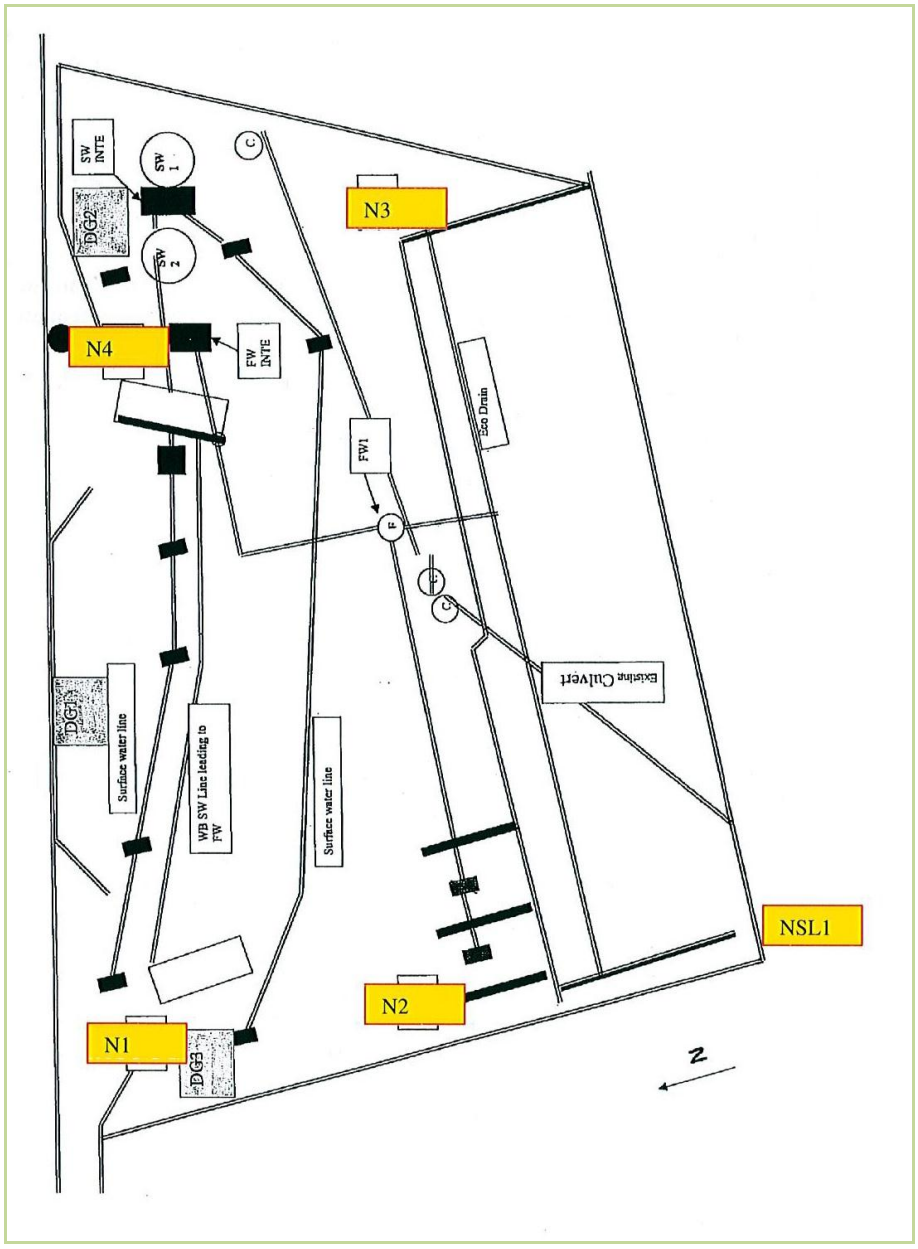
Table 4.5.1 Annual Noise Results 2011

Location	Sampling Interval	Duration (mins)	LAEQ	LA10	LA90	Wind Speed m/s	Sampling Notes
Day Time Measurement							
N1	0927-1027hrs	60	64.1	65.9	54.3	0.8-1.6	Traffic passing on the road brings levels up to 75dB at times. Activity can be heard ~52-56bD at times.
N2	1031-1131hrs	60	58.7	61.2	52.1	0.2-1.6	Activity is audible at this location between 50 and 60 dB. Traffic on road up to 61 dB
N3	1138-1238hrs	60	65.2	68.4	58.7	0.1-2.1	Air abatement unit running throughout monitoring period reaching up to 67dB. Lorries entering the plant reach up to 75-80dB.
N4	1242--1342hrs	60	63.9	66.2	57.1	0.2-1.5	Plant can be heard at between 50-60dB. Traffic from road is main noise source reaching up to 75dB. Trucks moving around the site reach 75-80dB.
NSL1	0815-0915hrs	60	59.6	61.5	53.7	0.1-1.7	Traffic reaches up to 65dB at times. Oxigen barely audible above background.
Night Time Measurement							
NSL1	0112-0212hrs	60	44.1	45.9	38.4	0.1-0.5	Passing Traffic and distant traffic is the main source of noise. The Plant is not operating at the time.

The noise limits for the operation are laid out in the Licence. The daytime limit is L_{Aeq} <55dB over 30 minutes and the night time limit is L_{Aeq} <45dB over 30 minutes.

Traffic movements not associated with the operation were the main contributing factor to the L_{Aeq} levels. The background noise levels excluding the impact from traffic at up to 53.0 dB is a better indication of noise emanating from the operation. Plant activity was below 55 dB at all locations. Night time noise levels at NSL1 are greater than the night time limit of 45dB due to passing traffic. The plant is closed at night and so makes no noise contribution.

Fig 4.1 Monitoring Locations



5. RESOURCE AND ENERGY CONSUMPTION SUMMARY

5.0 Resource and Energy Consumption Summary

Gas oil and Electricity are the two forms of energy used on site. This energy is used to power machinery such as the baler and to fuel vehicles such as the front end loader and shunter. Electricity is also used in the day to day running of the canteen and office.

Table 5.1 Summary Table of Resource Consumption for the Reporting Period

Site Energy Usage 2010	Quantity	Units
Gasoil	69,850	Litres
Electricity	287,111	kWh
Water	420.000	Litres

5.2 Diesel Consumption

The diesel consumption at the facility increased slightly in 2011 when compared to the previous year. Table 5.2.1 indicates the total diesel used each month in 2011.. The quantity used in 2011 was 69,850 litres compared to 62,146 litres used in 2010. This was largely due to an increase in tonnage accepted on site and increase the use of machinery. Figure 5.2.1 shows the diesel usage trend over the two year period by month. Figure 5.2.2 shows the usage per tonne processed for both years.

Table 5.2 1 Total Diesel used in 2011

	Litres Used
January	4,733
February	5,370
March	6,543
April	6,918
May	7,173
June	5,705
July	5,156
August	7,400
September	7,510
October	7,170
November	5,230
December	942
Total	69,850

Figure 5.2.1 Diesel Consumption 2010 - 2011

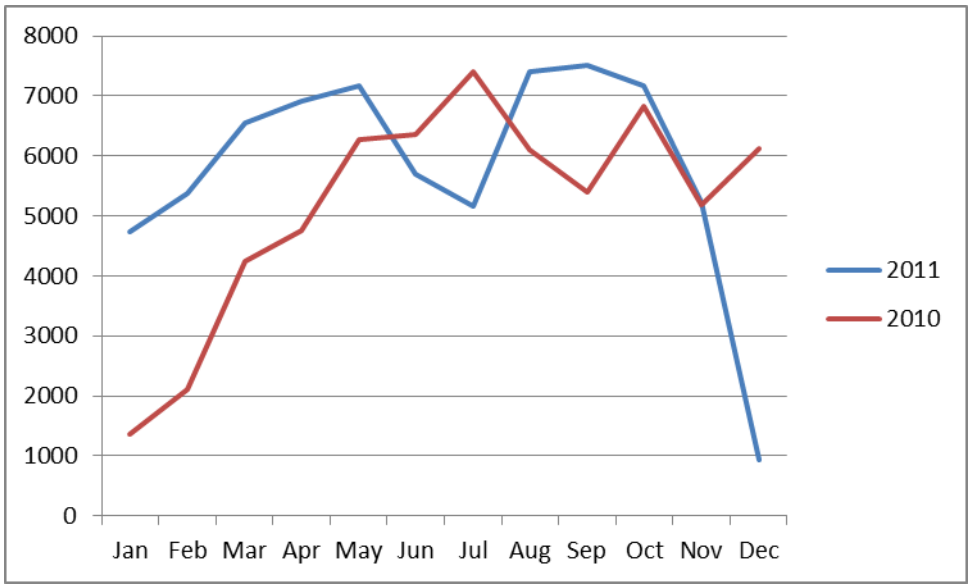
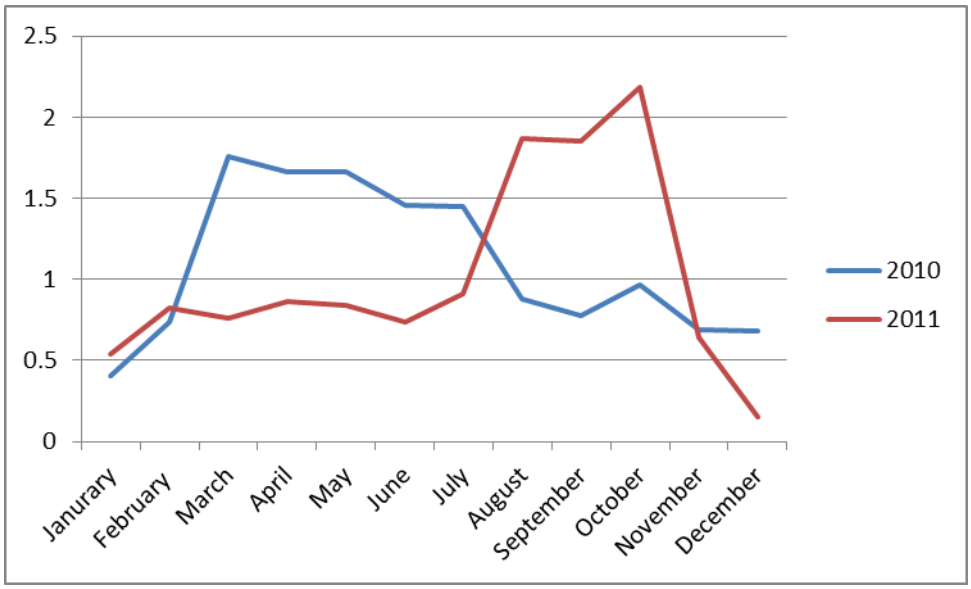


Figure 5.2.2 Litres used per tonne process 2011



5.3 Electricity Consumption

The electricity consumption at the facility decreased significantly in 2011 when compared to pervious years. This was largely due to the decommissioning of the baler. Figure 5.3.1 shows the total energy consumption in 2011 when compared to 2010. Figure 5.3.2 shows total consumption as a four year trend and Fig 5.3.3 illustrated electricity usage per tonne processed from 2009 to 2011.

Figure 5.3.1 Electricity Usage 2011

	KwH
January	17395
February	19409
March	30045
April	25808
May	28613
June	28778
July	26827
Aug	29983
Sept	29635
Oct	26598
Nov	13185
Dec	8824

Fig 5.3.2 Electricity Usage Trend 2008 – 2011

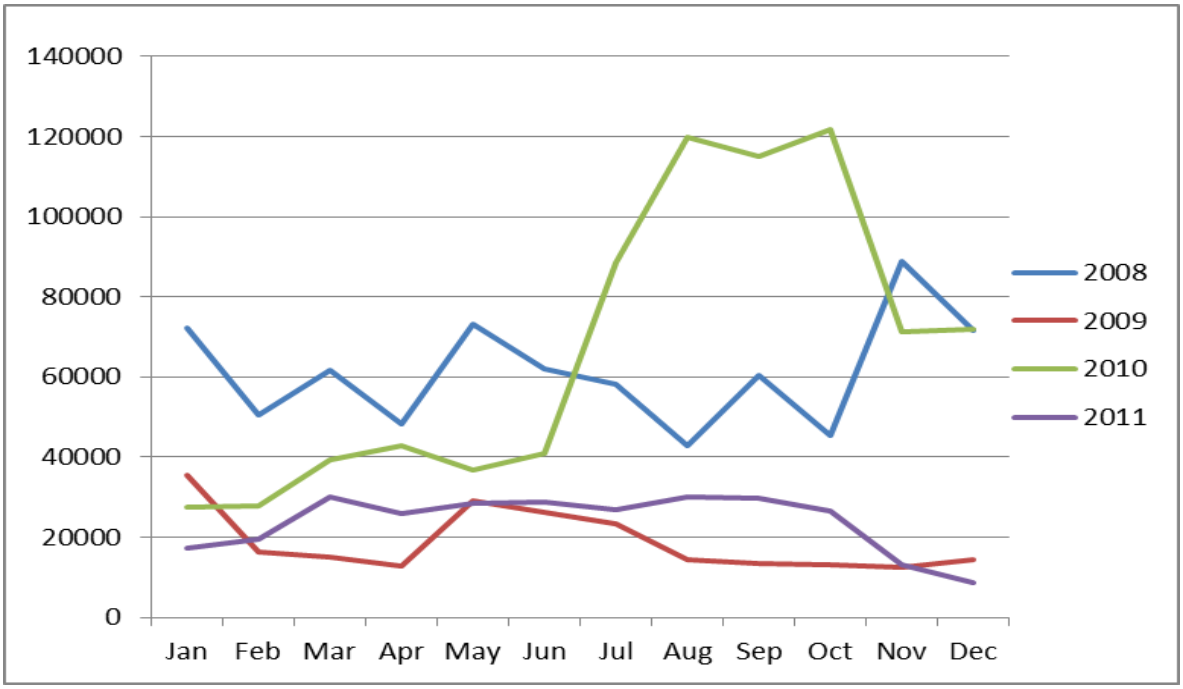
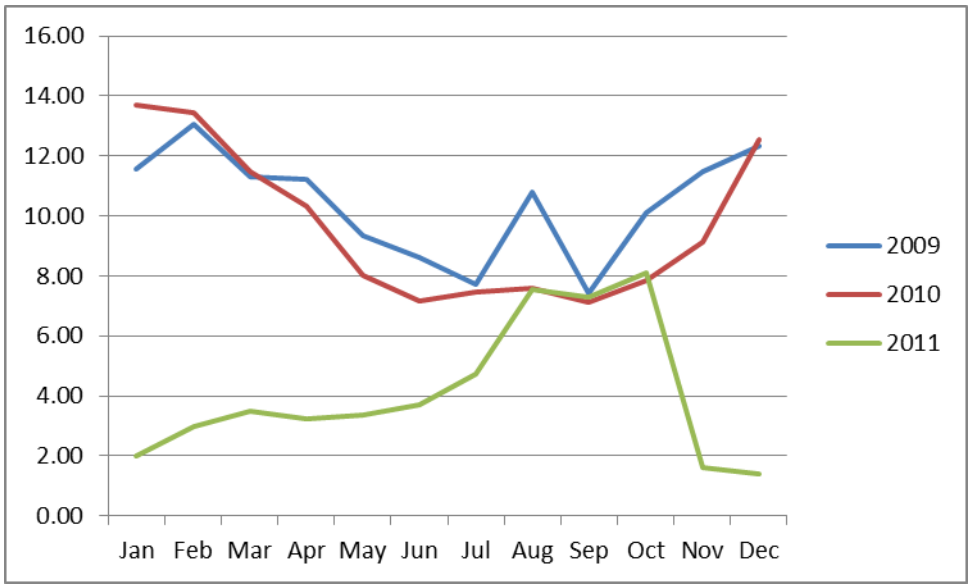


Fig 5.3.3 Electricity usage per tonne processed 2009 – 2011



5.4 Energy Efficiency Audit Report Summary

The tyre monitoring program was implemented in April 2011and has proven very successful company wide. This program set out tyre pressure guidelines for all vehicles in the fleet. All vehicles are checked daily by supervisors and spot checks also takes place by management periodically. Oxigen Environmental have replaced all new tyres with high quality tyres supplied by a third party contractor. All vehicles are audited by the contractor on a monthly basis to ensure that all vehicles comply with statutory regulations and to ensure tyre life maximisation. The implementation of the tyre program had resulted in major saving for the company as a whole. A financial saving of over 40%, a increase of 30-40 % in tyre life, and also a 6% saving in fuel is expected by end 2012.

Oxigen are committed to reducing the energy usage per tonne at the facility and are always looking for ways to reduce their drain on natural resources. In 2011, there was a significant reduction in the use of electricity on site. This can be attributed to the decommissioning of the baler at the facility.

An audit of lighting will be carried out in 2012 and all lights inside the waste transfer building will be replaced with high efficiency LED bulbs.

6. PROCEDURES DEVELOPED IN 2010

6.1 Procedures Developed in 2011

Environmental Management Systems Procedures Log

In accordance with the conditions of licence no. W0152-03, and in order to achieve the objectives and targets set out in the Oxigen Robinhood Facility Environmental Management System, procedures were developed by Oxigen in 2006. In order to improve the Environmental Management System (EMS) and to achieve ISO 14001 Standard Certification, the EMS was reviewed and amended in 2008. In May 2009, Oxigen was independently assessed and certified to the ISO14001 Standard by Certification Europe. Some amendments were made to the EMS. The full title and written summary of each new procedure developed in 2011 is detailed below. All the procedures are available for inspection at the facility.

OXEP 32 Fines Sampling Procedure

This procedure was developed in April 2011 to ensure that standard principles are followed by all staff for the collection of composite samples of C&D fines which are send for external laboratory analysis. Standard sampling techniques used are in line with published procedure 'Characterisation of Waste - Sampling of waste materials - Part 2: Guidance on sampling techniques' as drawn up by the Technical Committee CEN/TC 292 in 2006.

7. PROPOSED DEVELOPMENT/INFRASTRUCTURAL WORKS 2011

7.1 Proposed Development/Infrastructural Works 2011

Oxigen Environmental intend to install automatic odour neutraliser misters around the doors of the waste transfer building to reduce the potential odour nuisance in the area. Plastic curtains will also be erected at the doors to reduce the surface area for fugitive emission from the facility

There are currently no Specified Engineering Works applied for in 2012.

Any proposed development of the facility will be submitted in writing to the Agency during the course of the year as required.

8. ENVIRONMENTAL MANAGEMENT PROGRAM (EMP)

8.1 Environmental Management Program (EMP)

As part of the overall EMS at the facility, an Environmental Management Plan is in place in order to achieve the objectives and targets set out for the coming year and to ensure the facility is operating to high environmental standards.

8.2 Report on Previous Year

A summary report for the EMP that was submitted in the AER for 2010 is discussed in this section. The objectives and targets for 2011 were as follows:

8.2 Objectives and Targets for the Coming Year 2012

Objective 1	Applicable Environmental Aspect	Method of Achieving Target	Responsibility	Progress
To reduce the risk of odour nuisance from the Robinhood site.	Odour	**Target 1:** To increase efficiency of the odour control system by employing professional odour and air quality consultancy service to monitor the odour system. **Target 2:** To source and install virgin carbon for the filter of the odour control system **Target 3:** To increase resource at the facility to employ full time staff to manually open and close all shed doors to reduce the amount of time that doors are open are kept to a minimum. **Target 4:** To source and install new rapid shutter door to help keep opening times to a minimum.	The Facility Manager, Operations Manager and Environmental Compliance Officer	1. Odour monitoring Ireland commenced monitoring at the Robinhood site in March 2011. OMI have continued to monitor, advise and provide guidance in relation to the odour abatement system. Oxigen will continue to liaise with OMI in 2012. 2. Virgin Carbon was installed at the site in May 2011 3. A member of staff is assigned to monitor door at all times and ensure that door opening times are kept to a minimum. 4. Rapid Open Stutter doors were installed at the facility in June 2011.

Objective 2	Applicable Environmental Aspect	Method of Achieving Target	Responsibility	Progress
To increase level of energy efficiency	Natural Resources	**Target 1:** To introduce a tyre pressure monitoring system within Oxigen to ensure that all vehicles have correct tyre pressure to increase fuel efficiency. This will increase the life of lyres and reduce the level of waste tyres produces as a result of operations.	The Facility Manager and Operations Manager	The tyre monitoring program was implemented in April 2011and has proven very successful company wide. The new program has increased the life of vehicle tyres by 30-40 % and also has resulted in a 6% saving in fuel.

Objective 3	Applicable Environmental Aspect	Method of Achieving Target	Responsibility	Progress
To reduce the risk of pest and fly nuisance	Pests	**Target 1:** Install new bait boxes on site with barcode scanning function. This will allow more efficient pest management and online monitoring of inspections.	The Facility Manager and Operations Manager are responsible for the achievement of this target	In April 2011, EPC implemented a new barcoding system at the Robinhood Site. All visits with regard to pest control are logged and signed off using a handheld device at time of site action. All visits to site have a time and date stamp and a description of level of pest activity. The activity log can be accessed by Oxigen and all records are available to the Agency upon request.

8.2 Objectives and Targets for the Coming Year 2012

Objective 1	Applicable Environmental Aspect	Method of Achieving Target	Responsibility	Completion Date
To reduce the risk of odour nuisance from the Robinhood site.	Odour	**Target 1:** To improve building fabric by sealing all cracks to reduce fugitive emissions from the waste transfer station.	The Facility Manager, Operations Manager and Environmental Compliance Officer.	22/06/2012
		Target 2: To source and install virgin carbon for the filter of the odour abatement system		30/04/12
		Target 3: To Source plastic curtains over the doors to reduce the surface area of door opening to minimise the potential for odour nuisance.		15/02/2012
		Target 4: To source and install automated odour neutralizer spraying system at the doors to activate once the door opens to allow enter of a waste vehicle.		51/03/2012

Objective 2	Applicable Environmental Aspect	Method of Achieving Target	Responsibility	
To increase level of energy efficiency	Natural Resources	**Target 1:** To source and install new lighting system using energy efficient lights	The Facility Manager and Operations Manager	18/05/2012

Objective 3	Applicable Environmental Aspect	Method of Achieving Target	Responsibility	
To reduce the risk of local nuisance.	Local Nuisance/ Release to water	**Target 1:** Implement new wheel cleaning regime at the Robinhood site to minimise the potential for residue on the roads surround the facility.	The Facility Manager and Operations Manager are responsible for the achievement of this target	18/05/2012

9. TANK AND PIPELINE TESTING AND INSPECTION REPORT

9.1 Tank and Pipeline testing and inspection report

9.2 A survey of the complete drainage system at the facility was carried out by P.C. Drain Cleaning Ltd., on the 25th June 2008 and all drains were found to be in good working order. Details of the drainage survey including maps and reports were submitted to the Agency on the 23rd July 2008. The next drainage survey is to take place in Summer 2012.

9.3 Portable bunds are maintained on site for the storage of hydraulic oil, engine oil, waste oil, diesel, coolants and waste chemicals. These bunds have all been certified for integrity by the suppliers for a period of 3 years from the date of purchase.

10 .COMPLAINTS SUMMARY & REPORTED INCIDENTS

10.1 Complaints Summary & Reported Incidents

All the issues relating to the complaints and incidents are summarised below were rectified and closed out. The detailed complaints register is available for inspection at the facility.

a. Complaints Summary

Number	Date	Communication Method	Issue
1	05.01.201	Fax from EPA	Odour
2	07.01.2011	Telephone call from EPA	Odour
3	11.02.2011	Fax from EPA	Odour
4	01.03.2011	Telephone call from EPA	Odour
5	08.03.2011	Telephone call from EPA	Odour
6	18.03.2011	Fax from EPA	Odour
7	14.03.2011	Telephone call from EPA	Odour
8	22.03.2011	Telephone call from EPA	Odour
9	23.03.2011	Fax from EPA	Truck with no net cover - litter
10	29.03.2011	Email direct from complainant	Odour
11	06.04.2011	Telephone call from EPA	Odour
12	26.04.2011	Telephone call from EPA	Litter
13	27.04.2011	Telephone call from EPA	Odour
14	03.05.2011	Telephone call from EPA	Odour
15	03.05.2011	Telephone call from EPA	Odour
16	06.05.2011	Telephone call from EPA	Odour
17	24.05.2011	Telephone call from EPA	Odour
18	17.05.2011	Telephone call from EPA	Flies
19	03.06.2011	Fax from EPA	Odour
20	03.06.2011	Fax from EPA	Odour
21	03.06.2011	Fax from EPA	Odour
22	27.07.2011	Telephone call from EPA	Odour
23	02.08.2011	Fax from EPA	Odour
24	22.08.2011	Telephone call from EPA	Odour
25	25.08.2011	Telephone call from EPA	Odour
26	25.08.2011	Telephone call from EPA	Odour
27	25.08.2011	Telephone call from EPA	Odour
28	25.08.2011	Telephone call from EPA	Road Condition & Flies
29	15.09.2011	Telephone call from EPA	Odour
30	23.09.2011	Email from complainant	Odour

31	26.09.2011	Email from complainant	Odour
32	26.09.2011	Email from complainant	Odour
33	27.09.2011	Email from EPA	Odour
34	01.10.2011	Telephone call from EPA	Odour
35	03.11.2011	Telephone call from EPA	Odour
36	07.11.2011	Telephone call from EPA	Odour
37	09.11.2011	Email from EPA	Odour
38	14.11.2011	Telephone call from EPA	Odour
39	17.11.2011	Telephone call from EPA	Odour

b. Reported Incidents Summary

There were no environmental incidents reported to the EPA during 2010.

11. REVIEW OF NUISANCE CONTROLS

11.0 Review of Nuisance Controls

Eastern Pest Control (EPC) carried out pest control at the facility. During the summer months EPC sprayed the inside of the shed with a pesticide fog to control fly activity. This was carried out at regular intervals throughout 2011. EPC made a total of 50 visits to the site during the year to monitor the situation and put in place any control measures that were necessary.

Rodent activity at the facility is also controlled by EPC, bait boxes are placed at key locations around the site. There were 11 visits to the site in total in 2011. There were no sightings of rodents at the facility during 2011. In 2011, a new barcode scanning function will be installed at the bait boxes points to monitor the inspection online.

Daily site inspections are carried out by the Facility Manager/Compliance Officer which highlight any nuisances on site such as litter, pests, noise, birds, flies, odour or dust. Should any such nuisances be recorded, then appropriate measures are undertaken.

Odour is the most significant aspect at the Robinhood facility. In 2011, the Carbon was replaced in the odour abatement system in May 2011. New synthetic filters are now being used at the facility and have proven to be more effective than previous filters used on site. Oxigen Environmental are working closely with Odour Monitoring Ireland to ensure that operations at the Robinhood facility does not give rise to odour nuisance. Extensive works to the building fabric and doorways will be carried out in 2011 to reduce fugitive emission from the facility in line with objective for 2012 set out in section 8.2.

12. FINANCIAL PROVISIONS

12. Financial Provisions

At present Oxigen Environmental have sufficient turnover and company assets to offset environmental liabilities in the event that they may be incurred during the course of the Facility Operations or in the event that the facility is closed. This will include the covering of costs associated with abatement installation, control & monitoring; closure & remediation of the site; clean-up following a plausible accident/incident and/or long-term aftercare for residual environmental liabilities. Oxigen Environmental has Pollution Cover of up to €13M with Brit Insurance, Policy No: F10028792E.

13 PROGRAMME FOR PUBLIC INFORMATION

13 Programme for Public Information

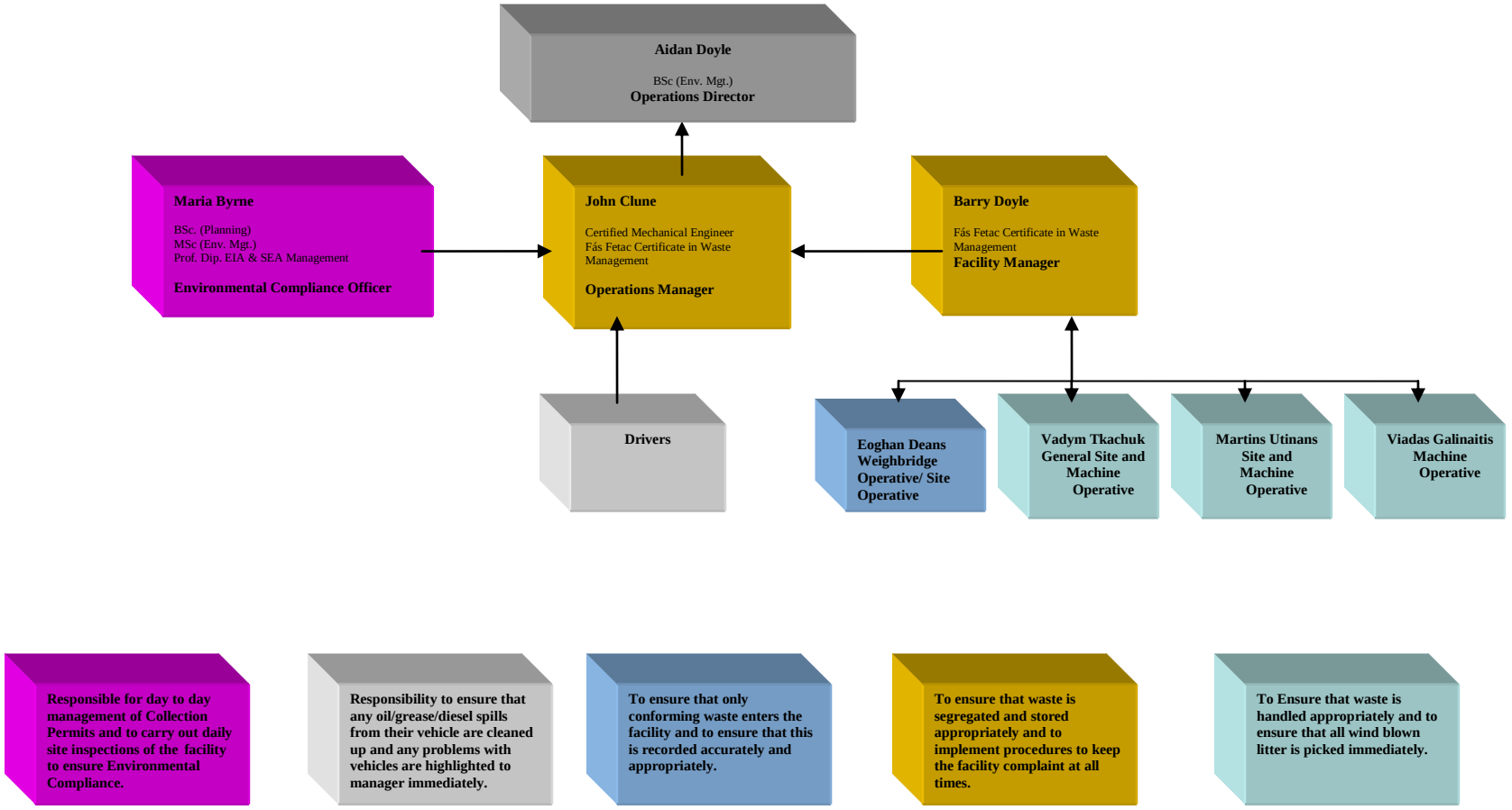
A program for public information is in place at the facility. During the reporting period there were no requests from the public to inspect any of the records and files listed in the submission.

The lists of documents available for inspection in the Communication Folder are as follows:

- Waste Licence W0208-01
- Environmental Policy
- Unacceptable Waste List
- Pest/Vermin Control Records
- Waste Licences/Permits of Facilities
- Environmental Monitoring Results for the current year
- Complaints Register

Members of the public who wish to inspect these files may do so at any reasonable time by making an appointment either with the Facility Manager or Compliance Officer at the telephone number posted on the main facility entrance sign erected in accordance with Condition 2.2.2.7.

14. MANAGEMENT STRUCTURE


Aidan Doyle
BSc (Env. Mgt.)
Operations Director
Maria Byrne
BSc. (Planning)
MSc (Env. Mgt.)
Prof. Dip. EIA & SEA Management
Environmental Compliance Officer
John Clune
Certified Mechanical Engineer
Fás Fetac Certificate in Waste Management
Operations Manager
Barry Doyle
Fás Fetac Certificate in Waste Management
Facility Manager
Drivers
Eoghan Deans Weighbridge Operative/ Site Operative
Vadym Tkachuk General Site and Machine Operative
Martins Utinans Site and Machine Operative
Viadas Galinaitis Machine Operative
Responsible for day to day management of Collection Permits and to carry out daily site inspections of the facility to ensure Environmental Compliance.
Responsibility to ensure that any oil/grease/diesel spills from their vehicle are cleaned up and any problems with vehicles are highlighted to manager immediately.
To ensure that only conforming waste enters the facility and to ensure that this is recorded accurately and appropriately.
To ensure that waste is segregated and stored appropriately and to implement procedures to keep the facility complaint at all times.
To Ensure that waste is handled appropriately and to ensure that all wind blown litter is picked immediately.

Environmental Protection Agency

Guidance to completing the PRTR workbook

AER Returns Workbook

Version 1.1.13

REFERENCE YEAR	2011

1. FACILITY IDENTIFICATION

Parent Company Name	Oxigen Environmental Limited
Facility Name	Oxigen Environmental Ltd
PRTR Identification Number	W0152
Licence Number	W0152-03

Waste or IPPC Classes of Activity

No.	class_name
3.11	Blending or mixture prior to submission to any activity referred to in a preceding paragraph of this Schedule.
3.12	Repackaging prior to submission to any activity referred to in a preceding paragraph of this Schedule.
3.13	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.
Address 1	Robinhood Industrial Estate
Address 2	Robinhood Road
Address 3	Ballymount
Address 4	Dublin 22
	Dublin
Country	Ireland
Coordinates of Location	-6.35817 53.3189
River Basin District	IEEA
NACE Code	3821
Main Economic Activity	Treatment and disposal of non-hazardous waste
AER Returns Contact Name	
AER Returns Contact Email Address	
AER Returns Contact Position	
AER Returns Contact Telephone Number	
AER Returns Contact Mobile Phone Number	
AER Returns Contact Fax Number	
Production Volume	0.0
Production Volume Units	
Number of Installations	0
Number of Operating Hours in Year	0
Number of Employees	0
User Feedback/Comments	
Web Address	

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

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 ?	

4.1 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	Emission Point 2	Emission Point 3	T (Total) KG/Year	A (Accidental) KG/Year	F (Fugitive) KG/Year
210 - Dust		M	ALT	Beregerhoff Guage	42.6	43.05	89.13	174.78	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: Oxigen Environmental Ltd

Please enter summary data on the quantities of methane flared and / or utilised	T (Total) kg/Year	M/C/E	Method Used: Method Code	Method Used: Designation or Description	Facility Total Capacity m3 per hour	
Total estimated methane generation (as per site model)	0.0				N/A	
Methane flared	0.0				0.0	(Total Flaring Capacity)
Methane utilised in engine/s	0.0				0.0	(Total Utilising Capacity)
Net methane emission (as reported in Section A above)	0.0				N/A	

4.2 RELEASES TO WATERS

Link to previous years emissions data

SECTION A : SECTOR SPECIFIC PRTR POLLUTANTS

Data on ambient monitoring of storm/surface water or groundwater, conducted as part of your licence requirements, should NOT be submitted under AER / PRTR Reporting as this only concerns Releases from your facility

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
238	Ammonia (as N)	E	ESTIMATE	APHA-4500-NH3-D	0.32	0.32	0.0	0.0
303	BOD	E	ESTIMATE	APHA-2540B	136.79	136.79	0.0	0.0
240	Suspended Solids	E	ESTIMATE	APHA-5210-B	405.12	405.12	0.0	0.0
324	**Mineral oils**	E	ESTIMATE	GC-FID	0.053	0.053	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
76	Total organic carbon (TOC) (as total C or COD/3)	M	ALT	APHA-5220-D	111.33	111.33	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
303	BOD	M	OTH	APHA-5210-B	137.95	137.95	0.0	0.0
306	COD	M	OTH	APHA-5220-D	334.0	334.0	0.0	0.0
308	Detergents (as MBAS)	M	OTH	APHA-5540-C	0.16315	0.16315	0.0	0.0
314	Fats, Oils and Greases	M	OTH	APHA-5520-B	9.03	9.03	0.0	0.0
240	Suspended Solids	M	OTH	APHA-2540B	110.8	110.8	0.0	0.0
324	**Mineral oils**	M	OTH	GC-FID	0.01	0.01	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

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	20 03 01	No	15460.66	mixed municipal waste	D1	M	Weighed	Offsite in Ireland	Drehid Waste Management Facility,W0203-03	Carbury,.,.,Co.Kildare,Ireland		
Within the Country	20 03 01	No	47.96	mixed municipal waste	D1	M	Weighed	Offsite in Ireland	Kylrtalesha Landfill,W0020-01	Co. Laois,.,.,.,Ireland		
Within the Country	20 03 01	No	2411.18	mixed municipal waste	D1	M	Weighed	Offsite in Ireland	Scotch Corner Landfill,W0020-01	Castleblaney,Monaghan,.,.,Ireland		
Within the Country	20 03 01	No	55952.89	mixed municipal waste	D1	M	Weighed	Offsite in Ireland	Derryclure Landfill,W0029-02	Tullamore,Offaly,.,.,Ireland		
Within the Country	20 03 01	No	2624.07	mixed municipal waste	D1	M	Weighed	Offsite in Ireland	White River Landfill,W0060-02	Dunleer,Co. Louth,.,.,Ireland		
Within the Country	19 12 12	No	3100.16	other wastes (including mixtures of materials) from mechanical treatment of wastes other than those mentioned in 19 12 11	R3	M	Weighed	Offsite in Ireland	Enrich Environmental Ltd,WMP2004/57	Larch Hill Stud,Kilcock,Co. Meath,.,Ireland		
Within the Country	**20 03 01**	**No**	78.26	mixed municipal waste	D10	M	Weighed	Offsite in Ireland	Indaver,W0167-02	Carranstown,Duleek,Co. Meath,.,ireland		

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

Link to previous years waste data
Link to previous years waste summary data & percentage change