# ANNUAL

# ENVIRONMENTAL REPORT

JANUARY 2013 TO DECEMBER 2013

Licence Number:	W0270-01
Licensee:	Miltown Composting Systems Ltd
Location of Activity:	Milltownmore
	Fethard
	Co. Tipperary
Attention:	<b>Office of Environmental Enforcement</b>
	EPA Regional Inspectorate Kilkenny
	Seville Lodge
	Callan Road
	Kilkenny

### **CONTENTS**

#### **SECTION 1: INTRODUCTION**

- 1.1 Introduction
- 1.2 Site Description
  - 1.2.1 Description of Activity
  - 1.2.2 Organisational Chart 2013

### SECTION 2: SUMMARY DATA

#### 2.1 Waste Management

Table 2.1.1Annual Intake 2013

#### 2.2 Environmental Monitoring

- 2.2.1 Groundwater Monitoring
  - Table 2.2.1General Chemical Analysis
  - Table 2.2.2 VOC Analysis USEPA 524.2
- 2.2.2 Dust Monitoring 2013
  - Table 2.2.3 Dust Results
- 2.2.3 Biofilter Monitoring 2013
  - Table 2.2.4Monitoring results from the Biofilter26/03/13
  - Table 2.2.5Monitoring results from the Biofilter27/09/13
  - Table 2.2.6Inlet emission levels 26/03/13
  - Table 2.2.7Outlet emission levels 26/03/13
  - Table 2.2.8Inlet emission levels 27/09/13
  - Table 2.2.9Outlet emission levels 27/09/13
- 2.2.4 PM10 Monitoring 2013
  - Table 2.2.10 Results of PM10 Monitoring
- 2.2.5 Odour Monitoring 2013
  - Table 2.2.11 Meteorological Conditions
  - Table 2.2.12 Odour Sampling Results Q1 2013
  - Table 2.2.13 Chemical Results Q1 2013
  - Table 2.2.14 Odour Sampling Results Q2 2013
  - Table 2.2.15 Chemical Results Q2 2013
  - Table 2.2.16 Odour Sampling Results Q3 2013
  - Table 2.2.17 Chemical Results Q3 2013
  - Table 2.2.18 Odour Sampling Results Q4 2013
  - Table 2.2.19 Chemical Results Q4 2013
- 2.2.6 Noise Monitoring 2013
  - Table 2.2.20 Day-time Results

2.2.7 Surface water 2013 Table 2.2.21 Surface water results 2013 for SW1
2.2.8 Non-Compliances 2013
Table 2.2.23 Details of Non-Compliances 2013 - Water
Table 2.2.24 Details of Non-Compliances 2013 - Air
Table 2.2.25 Details of Non-Compliances 2013 - General (Audit 14/03/13)

#### 2.3 Resource Usage

Table 2.31Resource Usage 2013

- 2.4 Environmental Incidents and Complaints
- 2.5 Environmental Spending
- 2.6 Environmental Training

#### SECTION 3: ENVIRONMENTAL MANAGEMENT SYSTEM

#### 3.1 Environmental Management Programme for 2014

- EOT 1.1/5 Objectives and Targets 2013 Review
- EOT 2.1/5 Objectives and targets 2013 EMP

#### Appendices

Appendix 01 PRTR ScanAppendix 02 Environmental training records

# **SECTION 1**

## **INTRODUCTION**

## 1.1 INTRODUCTION

The following is the Annual Environmental Report (AER) for the period January 2013 to December 2013 at Miltown Composting Ltd.

The company was granted an EPA Waste Licence No. W0270-01 on the 9<sup>th</sup> September 2010. This is the 2013 Annual Environmental Report of Miltown Composting Ltd and detailed within is a summary of all activities on-site during this period that has had an influence on the environmental performance of the company. Current guidance from the Agency requires that the AER is referenced per calendar year.

This AER reflects company's commitment to achieving objectives of a documented ongoing improvement programme at the site.

### 1.2 SITE DESCRIPTION

#### **Site Location**

The site is located in the townland of Milltownmore, approximately 6 km to the east of Fethard and 10 km to the south west of Cashel. The site is accessed by a private road off the Rosegreen to Fethard third class public road.

#### Layout

The site encompasses approximately 5.9 hectares. It is at an elevation of approximately 139m Ordnance Datum (OD) and slopes gently to the east from a high point in the west.

It is occupied by the three main composting buildings-Sheds 1, 2 and 3- paved open yards; weighbridge, office; canteen/changing room; storage shed; wetlands, biofilter and former cattle sheds. The base for a proposed lined slurry storage lagoon is located to the west of the cattle sheds and is currently used to store building materials. The area to the north of the shed is undeveloped and formerly used for animal grazing. The re is a series of constructed wetlands in the south west of the site. (See Appendix 1 – Site Layout Drawing)

#### **Site History**

The site was originally used for agricultural purposes. The cattle sheds and Shed 1 were originally constructed to house pigs, cattle, meat and bone meal and animal feed. In 2004 South Tipperary Council granted planning permission and a Waste Permit for composting (in-vessel and maturation) to be carried out in Shed 1.

In 2007 Miltown moved the maturation process to Sheds 2 and 3. In January 2008 there was a fire at the site, when the compost turner went on fire. The turner was destroyed and the fabric of Shed 3 was damaged. The Council issued a revised Waste Permit in May 2008 and this is valid until May 2013. In March 2009 the Council granted planning permission for the retention of the offices, canteen/changing room, underground leachate storage tanks, and weighbridge.

#### **Operational & Waste Acceptance Hours**

The normal operational hours are 06.00 to 18.00 Monday to Saturday. The facility will not normally open on Sundays. Materials are normally accepted between the hours of 08.00 and 18.00.

#### **1.2.1 DESCRIPTION OF ACTIVITY**

#### **Overview**

The facility is a composting plant that accepts a broad range of compostable materials including source segregated household kitchen waste; catering wastes; non-hazardous industrial and municipal waste water sludges and organic fines generated in the treatment of mixed municipal solid waste (MSW).

The treatment process, depending on the nature of the source material, can involve initial screening to remove contaminants, blending with bulking agents, composting in separate enclosed tunnels and open bays, maturation in windrows and post treatment to remove impurities.

Due to the modular lay-out, the tunnels/bays can be operated independently, which provides flexibility in treating the different organic waste streams. The finished product can, depending on quality, either be used for horticultural and agricultural purposes, or as landfill cover.

#### Site Layout/Buildings & Hardstanding

Waste reception, blending and in-vessel composting is carried out in Shed No 1, which occupies an area of 1,700 square meters (m2). Maturation is carried out in Sheds 2 and 3, which occupy 2,840 m<sub>2</sub>.

The site office is a portacabin located at the north-west corner of Shed 1. A small canteen/changing room is located to the south west of Shed 1. There is an open fronted shed to the west of the canteen, which is used for the storage of green waste bulking materials. A Container located at the northern side of the canteen is used to store lubricating/hydraulic oil and the power washer.

The open yards to the east and west of Shed 1, south of Shed 2 and west of the cattle sheds are paved with concrete. The biofilter is located on the southern side of Shed 1 and is accessed by an unpaved road running along the southern side of Sheds 1 and 2.

#### **Composting Process**

#### Waste Reception Areas

In the reception area, the MSW fines may, depending on composition be shredded to enhance the composting process. The source segregated household and catering organic waste may be screened to remove contaminants. The wastewater treatment sludges are mixed with a bulking agent e.g. shredded green waste to improve porosity.

#### Thermophilic Stage

The materials are transferred from the reception area to the vessels using the telescopic loaders. The material placed in each of the vessels is assigned an individual batch number to allow performance monitoring during the treatment stages and ensure the maintenance of accurate records.

Five (5 No.) temperature probes are placed within the waste mass before the sheeting is placed over the top of the vessel. There is a computerised process control system, located in the site office, which records the temperature in each vessel to ensure that optimum composting conditions are maintained. In addition to the constant temperature monitoring, oxygen levels are monitored daily using a hand held probe. The moisture level is assessed either visually or using a hand held moisture meter. In order to comply with the Animal By-Products Regulations a 'two barrier' system is operated in the MSW/kitchen/catering waste processing area. The objective is to ensure a maximum particle size of 40mm and achieve a sustained temperature of 60°C over two separate 48 hour periods.

The MSW fines as delivered typically have a particle size less than 40mm. Large items are manually removed before the materials are composted. Maintaining the temperature at 60°C for the two separate time periods is done by composting the same batch in two different vessels.

In the first vessel, or Barrier 1, the process usually takes one week. When completed, the material is removed to a second vessel-Barrier 2-where it is thoroughly mixed and again composted until the temperature requirements are met. To avoid cross contamination different buckets are used on the front end loader to move the materials into and out of the vessels.

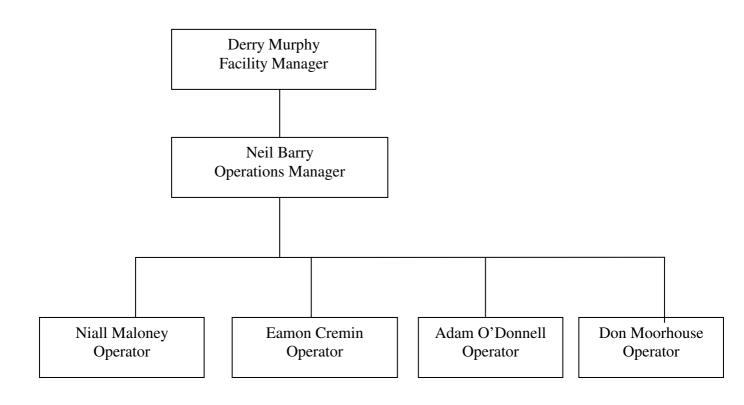
#### Mesophilic Stage

When the material has completed the thermophilic stage it is removed from the vessel and transferred to Sheds 2 and 3 where it is formed into windrows. Depending on the source of the materials it may be blended with shredded green waste to improve porosity. The windrows are formed using the telescopic loader and are turned as required using either the specialized turner or the loader.

Temperature, oxygen and moisture content are regularly monitored and moisture and the turning regime amended as required to ensure optimum conditions. The mesophilic stage can take up to 6 weeks.

When complete the compost may, depending on the nature of the source material, be screened to remove contaminants. These are stored on-site in a skip pending consignment to off-site disposal/treatment facilities.

## **1.2.2 Organisational Chart 2013**



Section 2

DATA

#### WASTE MANAGEMENT 2.1

TABLE 2.1.1 – ANNUAL WASTE INTAKE 2013		
Waste Type	EWC Code	2013 Intake
		Tonnes
Brown bin waste (kitchen/garden)	20 01 08	9506.56
separately collected from households	20 01 00	9500.50
Waste from the mechanical treatment of	19 12 07	905.76
wood waste	17 12 07	905.10
Garden and park waste from municipal	20 02 01	399.2
sources	20 02 01	
Organic Fines	19 12 12	8260.9
Food processing - materials unsuitable for	02 07 04	146.74
consumption or processing	02 07 04	140.74
Food processing -wastes from washing		
cleaning and mechanical reduction of raw	02 07 01	70.68
materials		

## 2.2 ENVIRONMENTAL MONITORING

## 2.2.1 Groundwater Results 2013

Table 2.2.1 / 2 – Groundwater Analysis Results 2013

2.2.1 GENERAL CHEMICAL ANALYSIS RESULTS			
Parameter	GW1	GW2	GW3
Chloride (mg/l)	77	188.5	31.8
Conductivity (uS/cm)	589	794	289
Nitrate (mg/l)	2.04	0.82	10.39
рН	6.6	6.4	6.1
Total Nitrogen (mg/l)	2.8	1.2	9.8
Ammonia (mg/l)	0.044	0.207	0.033

TABLE 2.2.2 - VOC ANALYSIS USEPA 524.2			
VOC's (µg/l)	GW1	GW2	GW3
Dichlorodifluoromethane	<10	<10	<10
Chloromethane	<0.5	<0.5	<0.5
Vinyl chloride	<0.5	<0.5	<0.5
Bromomethane	<0.5	<0.5	<0.5
Chloroethane	<0.5	<0.5	<0.5
Trichlorofluoromethane	<0.5	<0.5	<0.5
1,1-Dichloroethene	<0.5	<0.5	<0.5
Dichloromethane	<0.5	<0.5	<0.5
trans-1,2-Dichloroethene	<0.5	<0.5	<0.5
1,1-Dichloroethane	<0.5	<0.5	<0.5
2,2-Dichloropropane	<0.5	<0.5	<0.5
cis-1,2-Dichloroethene	<0.5	<0.5	<0.5
Bromochloromethane	<0.5	<0.5	< 0.5
Chloroform	<1	<1	<1
1,1,1-Trichloroethane	<0.5	<0.5	<0.5
Carbon Tetrachloride	<0.5	<0.5	<0.5
1,1-Dichloropropene	<0.5	<0.5	<0.5
Benzene	<0.1	<0.1	<0.1
1,2-Dichloroethane	<0.1	<0.1	<0.1
Trichloroethene	<0.1	<0.1	<0.1
1,2-Dichloropropane	<0.5	<0.5	<0.5
Dibromomethane	<0.5	<0.5	<0.5
Bromodichloromethane	<2.0	<2.0	<2.0
Toluene	<0.5	<0.5	11.2
1,1,2-Trichloroethane	<2.0	<2.0	<2.0

TABLE 2.2.2 - VOC	ANALYSIS USE	EPA 524.2 (CONT	(INUED)
VOC's (µg/l)	GW1	GW2	GW3
1,1,1,2-Tetrachloroethane	<2.0	<2.0	<2.0
m,p-Xylene	< 0.5	<0.5	< 0.5
Styrene	<2.0	<2.0	<2.0
Isopropylbenzene	< 0.5	<0.5	< 0.5
Propylbenzene	<0.5	<0.5	<0.5
2-Chlorotoluene	<0.5	<0.5	<0.5
4-Chlorotoluene	<0.5	<0.5	<0.5
1,2,4-Trimethylbenzene	<0.5	<0.5	< 0.5
P - Isopropyltoluene	<0.5	<0.5	<0.5
1,4-Dichlorobenzene	< 0.5	<0.5	< 0.5
1,2-Dichlorobenzene	< 0.5	<0.5	< 0.5
Naphthalene	<2.0	<2.0	<2.0
1,3-Dichloropropane	<0.5	<0.5	<0.5
cis-1,3-Dichloropropene	<2.0	<2.0	<2.0
trans-1,3-Dichloropropene	<2.0	<2.0	<2.0
Dibromochloromethane	<1.0	<1.0	<1.0
Chlorobenzene	< 0.5	<0.5	< 0.5
Ethyl Benzene	< 0.5	<0.5	< 0.5
o-Xylene	< 0.5	<0.5	< 0.5
Bromoform	<1.0	<1.0	<1.0
1,2,3-Trichloropropane	<2.0	<2.0	<2.0
Bromobenzene	<0.5	<0.5	< 0.5
Tert-Butylbenzene	<0.5	<0.5	<0.5
Sec-Butylbenzene	<0.5	<0.5	< 0.5
1,3,5-Trimethylbenzene	<0.5	<0.5	<0.5
1,2- Dibromo-3-chloropropane	<2.0	<2.0	<2.0
Hexachlorobutadiene	<5.0	<5.0	<5.0
1,2,3-Trichlorobenzene	<0.5	<0.5	<0.5
1,3-Dichlorobenzene	<0.5	<0.5	<0.5
Tetrachloroethene	<0.1	<0.1	<0.1
n-butylbenzene	<0.5	<0.5	<0.5
Acetone	<2	<2	<2
Methyl Iodide	<0.5	<0.5	<0.5
Carbon disulphide	<0.5	<0.5	<0.5
Allyl Chloride	<0.5	<0.5	<0.5
Nitrobenzene	<0.5	<0.5	<0.5
Propanenitrile	<10	<10	<10
MtBE	<0.5	<0.5	<0.5
2 Butanone	<5	<5	<5
2 Hexanone	<1	<1	<1
Hexacloroethane	<5	<5	<5
1,2,4-Trichlorobenzene	<0.5	<0.5	<0.5

## 2.2.2 Dust Monitoring 2013

TABLE 2.2.3 - DUST RESULTS 2013			
Month	<b>D1</b> (mg/m <sup>2</sup> /day)	<b>D2</b> (mg/m <sup>2</sup> /day)	D3 mg/m <sup>2</sup> /day)
June	88	94	24
September	88	71	71
November	29	59	76

## 2.2.3 Biofilter Monitoring 2013

TABLE 2.2.4   MONITORING RESU	ULTS FROM THE BIOFILTER 26/03/13
Parameter	Result
% Moisture 74.1	
pH	6.9
Ammonia (mg/kg)	219
Total Viable Counts @ 30°C (Solid) cfu/g	1.8 x 10 <sup>6</sup>

TABLE 2.2.5MONITORING RESULTS FROM THE BIOFILTER 27/09/13	
Parameter	Result
% Moisture 75.4	
pH	7.2
Ammonia (mg/kg)	167.15
Total Viable Counts @ 30°C (Solid) cfu/g	$>3 \times 10^{6}$

TABLE 2.2.6BIOFILTER INLET EMISSION LEVELS 26/03/13		
Parameter	Inlet 1 Concentration (ppm)	Inlet 2 Concentration (ppm)
Hydrogen Sulphide	<0.2	<0.2
Ammonia	20	15
Mercaptans	0.5	<0.5
Amines	Negative	Negative

TABLE 2.2.7BIOFILTER OUTLET EMISSION LEVELS 26/03/13	
Parameter	Inlet Concentration (ppm)
Hydrogen Sulphide	<0.2
Ammonia	<5
Mercaptan	<0.5
Amines	Negative

TABLE 2.2.8BIOFILTER INLET EMISSION LEVELS 27/09/13		
Parameter	Inlet 1 Concentration (ppm)	Inlet 2 Concentration (ppm)
Hydrogen Sulphide	<0.2	<0.2
Ammonia	10	20
Mercaptans	0.5	<0.5
Amines	Negative	Negative

TABLE 2.2.9BIOFILTER OUTLET EMISSION LEVELS 27/09/13	
Parameter	Inlet Concentration (ppm)
Hydrogen Sulphide	<0.2
Ammonia	<5
Mercaptan	<0.5
Amines	Negative

## 2.2.4 PM10 Monitoring 2013

TABLE 2.2.10RESULTS OF PM10 MONITORING 2013						
Sampling Location	Date	Weight Gain (g)	Concentration $(\mu g/m^3)$			
Location 1	$18^{\text{th}} / 19^{\text{th}}$ June	<0.001	< 0.1			
Location 1	10 <sup>th</sup> / 11 <sup>th</sup> December	<0.001	< 0.1			

## 2.2.5 Odour Monitoring 2013

TABLE 2.2.11       METEOROLOGICAL CONDITIONS Q1 - Q4					
Parameter	Quarterly Result				
Wind speed (km/hr)	10-12	4-6	3-5	10-15	
Wind direction	Easterly	Westerly	South - easterly	Southerly	

TABLE 2.2.12ODOUR SAMPLING RESULTS Q1 2013					
Locations	On site observations	Results			
OD 01					
350 meters downwind	No distinct odour	$52 \text{ ou}_{\text{E}}/\text{m}^3$			
of compost yard					
OD 02	No distinct odour	$57 \text{ ou}_{\text{F}}/\text{m}^3$			
At Sensitive Receptor	no disunct odour	J∕ Ou <sub>E</sub> /III			

TABLE 2.2.13 CHEMICAL ANALYSIS Q1 2013					
SampleHydrogen SulphideAmmoniaMercaptenAmines					
OD 01	<0.2	<5	<0.5	Negative	
OD 02	<0.2	<5	<0.5	Negative	

TABLE 2.2.14ODOUR SAMPLING RESULTS Q2 2013					
Locations	On site observations	Results			
OD 01	No distinct odour	$45ou_F/m^3$			
At Sensitive Receptor		450u <sub>E</sub> /III			
OD 02					
250 meters downwind	Slight sweet odour	$144 \text{ ou}_{\text{E}}/\text{m}^3$			
of compost yard					

TABLE 2.2.15 CHEMICAL ANALYSIS Q2 2013					
SampleHydrogen SulphideAmmoniaMercaptenAmines					
OD 01	<0.2	<5	<0.5	Negative	
OD 02	<0.2	<5	<0.5	Negative	

TABLE 2.2.16       ODOUR SAMPLING RESULTS Q3 2013					
Locations	On site observations	Results			
OD 01	Slight sweet odour	391 ou <sub>F</sub> /m <sup>3</sup>			
At biofilter unit	Slight sweet bubu	591 Ou <sub>E</sub> /III			
OD 02					
250 meters downwind	No distinct odour	91 $ou_E/m^3$			
of compost yard					

TABLE 2.2.17 CHEMICAL ANALYSIS Q3 2013						
Sample	SampleHydrogen SulphideAmmoniaMercaptenAmines					
OD 01	<0.2	<5	<0.5	Negative		
OD 02						

TABLE 2.2.18       ODOUR SAMPLING RESULTS Q4 2013					
Locations	On site observations	Results			
OD 01	Slight compost odour	$425 \text{ ou}_{\text{F}}/\text{m}^3$			
At biofilter unit	onghe compose odour	125 Oug/III			
OD 02					
250 meters downwind	No distinct odour	$85 \text{ ou}_{\text{E}}/\text{m}^3$			
of compost yard					

TABLE 2.2.19 CHEMICAL ANALYSIS Q4 2013					
SampleHydrogen SulphideAmmoniaMercaptenAmines					
OD 01	<0.2	<5	<0.5	Negative	
OD 02         <0.2         <5         <0.5         Negative					

## 2.2.6 Noise Monitoring 2013

TABLE 2.2.20       DAY-TIME NOISE MEASUREMENT RESULTS						
Location	Measurement No.	Measurement Period (min)	L <sub>eq</sub> dB(A)	L <sub>10</sub> dB(A)	L <sub>90</sub> dB(A)	L <sub>F Max</sub> dB(A)
NSL	1	30	56	45	36	78
NSL	2	30	44	40	34	60
NSL	3	30	48	45	38	61
N2	1	30	65	57	45	87
N2	2	30	59	57	42	74
N2	3	30	58	56	43	74

2.2.7	Surface	Water	2013
-------	---------	-------	------

Table 2.2.21 - Surface water Results 2013 for SW1					
Sample ID	Sample IDBOD (mg/l)Suspended Solids (mg/l)Ammonia (mg/l)				
SW1 27/07/13	70	137	8.23		
SW1 18/12/13	25.1	23.2	4.22		

## 2.2.8 Non-Compliances 2013

Table 2.2.23 Details of Reported Non-compliance 2013 – Water					
Date         Non-compliance         Cause         Corrective Action					
No Non-compliances reported in 2013					

no non-compliances reported in 2013.

Table 2.2.24    Details of Non-compliance 2013 – Air					
Date         Non-Compliance         Failure Details / Cause         Corrective Action					
No Non-compliances reported in 2013.					

Table 2.2.	Table 2.2.25         Details of Non-compliance 2013 – General Audit			
Date	Non-Compliance	Corrective Action		
14/3/13	Off-site preclearance and characterisation of waste	SOP MC01 WASTE Acceptance and characterisation procedure revised 11/04/2013 to ensure that off-site pre-clearance and characterisation records are maintained		
14/3/13	waste acceptance procedure	Waste acceptance revised 11/04/2013 to ensure that all sludges and other non-municipal waste types are appropriately analysed and characterised prior to acceptance on-site for treatment		

#### 2.3 **RESOURCE USAGE**

The summary details of energy and water usage at the plant for the period January 2013 to December 2013 is detailed in Table 2.31 below.

Resources	Quantities
Diesel	67913 L
Electricity	224750 Kw/Hr
Hydraulic, Transmission &	3660 L
Engine Oil	2000 2
Detergent	20
Grease	16kg
Anti Freeze	100

#### 2.4 ENVIRONMENTAL INCIDENTS AND COMPLAINTS

**2.4.1** There were no incidents to report for the period January 2013 to Dec 2013.

Incident	Date / Time	Location	Persons Contacted	Corrective Actions

**2.4.2** There were no complaints to report for the period January 2013 to Dec 2013.

### 2.5 ENVIRONMENTAL SPENDING

The itemised spend on environmental issues at Miltown Composting Limited is listed below.

<u>January 2013 – December 2013</u>	<u>€</u>
EPA fees	9750.96
Waste Licence Management	35205
Capital Spending (Env Improvements)	140000
Total Spending	184955.96

## 2.6 ENVIRONMNETAL TRAINING

See Attachment 4 for details of environmental training for 2013

**Environmental Management Programme for 2014.** 

#### **Review of Objectives and Targets for the period January to December 2013**

Tables EMP 1.1 to 1.5 reviews the Objectives and Targets set for 2013. A number of the listed Objectives and their subsequent targets are cyclical as the company attempts to achieve continuous environmental improvement.

Tables EMP 2.1 to 2.5 set out the Objectives and Targets for 2014. A number of the listed Objectives and their subsequent targets are cyclical as the company attempts to achieve continuous environmental improvement.

# MILTOWN COMPOSTING LTD

# **ENVIRONMENTAL OBJECTIVES AND TARGETS 2014**

Item No	OBJECTIVE	TARGET	<b>RESPONSIBLE PERSON</b>
1	Water Management	<ul> <li>Maintain checklist for alarms and daily records</li> <li>Assess possibility of covering for final unroofed yard</li> <li>Investigate options for fire water retention facility</li> </ul>	D.Murphy
2	Energy Management	<ul> <li>Carry out Energy Audit.</li> <li>Investigate potential for Anaerobic Digestion (AD) Plant.</li> <li>Study possibility of installing a CHP plant in conjunction with AD plant.</li> </ul>	D.Murphy
3	E.M.S	<ul> <li>Maintain EMS documentation.</li> <li>Update procedures to reflect operational and control change.</li> <li>Maintain EMP by means of Bi-annual assessment.</li> </ul>	D.Murphy
4	Licence Management	<ul> <li>Prepare proposal for and finalise Hydrogeological Study.</li> <li>Assess nuisance control procedures and practices.</li> <li>Undertake all environmental monitoring as per licence.</li> </ul>	D.Murphy
5	Incoming waste / Finished product	<ul> <li>Investigate new waste types for inclusion in compost process</li> <li>Research new sustainable outlets for the finished products</li> </ul>	D.Murphy

## Water Pollution Prevention

Objective	Target	Target Date	2013 Review	Person Responsible
Water Pollution Prevention	Maintain checklist for alarms and daily records	Continuous 2013	Complete	Derry Murphy
	Assess SW1 following installation of cover.	Q2 2013	Complete	Derry Murphy
	Upgrade SW1 sampling point and associated piping.	Q2 2013	Complete	Derry Murphy

## Energy management

Objective	Target	Target Date	2013 Review	Person Responsible
Energy Management	Carry out Energy Audit	June 2013	Not Complete Postponed until 2014	Derry Murphy - OCM
	Investigate potential for Anaerobic Digestion (AD) Plant.	2014	Not due until 2014	Derry Murphy
	Study possibility of installing a CHP plant in conjunction with AD plant.	2016	Not due until 2016	Derry Murphy

## Water Pollution Prevention

Objective	Target	Target Date	2013 Review	Person Responsible
E.M.S	Maintain EMS documentation.	2013	Complete	Derry Murphy
	Update procedures to reflect operational and control change.	March 2013	17/04/2013 new procedure -SOPMC10 'oil interceptor maintenance procedure' 3 SOP's updated 9/5/13	Derry Murphy
	Maintain EMP by means of Bi-annual assessment.	June / Dec 2013	Complete	Derry Murphy

## Licence Management

Objective	Target	Target Date	2013 Review	Person Responsible
Licence Management	Prepare proposal for and finalise Hydrogeological Study.	May 2013	New proposal due 2014	Derry Murphy
	Assess nuisance control procedures and practices.	Continuous 2013	Pest control now undertaken every 6 weeks	Derry Murphy
	Undertake all environmental monitoring as per licence.	2013	Complete	Matrix Env

## Miltown Composting Ltd.

## **Incoming waste / Finished product**

Objective	Target	Target Date	2013 Review	Person Responsible
Incoming waste / Finished	Investigate new waste types for inclusion in compost process	2013	Complete Organic fines added May 2013	Derry Murphy
product	Research new sustainable outlets for the finished products	2013	Complete	Derry Murphy

## Water Pollution Prevention

Objective	Target	Target Date	Method
Maintain checklist for alarms and daily records		Continuous 2014	Fill in the daily checklist and site alarms
Water Pollution Prevention	Assess possibility of covering for final unroofed yard	Q3 2014	Investigate the costings and planning requirements of covering the final unroofed yard
	Investigate options for fire water retention facility	Q3/4 2014	Investigate possible locations for fire water retention facility.

## **Energy Management**

Objective	Target	Target Date	Method
	Carry out Energy Audit	Q2 2014	Undertake Energy Audit as per EPA requirements.
Energy Management	Investigate potential for Anaerobic Digestion (AD) Plant.	2014	Carry out a review of AD plants and the feasibility of installing a plant at the Milltown Compost Site
	Study possibility of installing a CHP plant in conjunction with AD plant.	2016	Further to the review of the AD plant a further review of a CHP plant to be carried out.

## **Environmental Management System**

Objective	Target	Target Date	Method
	Maintain EMS documentation.	Q2 2014	Review all EMS procedures
E.M.S	Update procedures to reflect operational and control change.	Continuous 2014	Continuous review of procedures to reflect any changes which occur in terms of site operations or processes.
	Maintain EMP by means of Bi- annual assessment.	June / Dec 2014	Assess biannually to ensure targets are achieved.

## Licence Management

Objective	Target	Target Date	Method
	Prepare proposal for and finalise Hydrogeological Study.	2014	Prepare and submit a proposal detailing the methodology for a hydrogeological study.
Licence Management	Assess nuisance control procedures and practices.	Continuous 2014	Review procedures. Ensure 6 weekly visits of nuisance control company occurs.
	Undertake all environmental monitoring as per licence.	2014	1 x Noise Survey 2 x Odour Assessment 12 x Dust Monitoring 2 x Biofilter Analysis 1 x Bioaerosol Study 1 x PM10 Survey

## Incoming waste / Finished product

Objective	Target	Target Date	Method
Incoming waste / Finished	Investigate new waste types for inclusion in compost process	Continuous	Continue to investigate new waste streams for inclusion in the compost process
product	Research new sustainable outlets for the finished products	Continuous	Prepare marketing campaign to source sustainable outlets for the finished product

# Appendix 1

**PRTR Scans** 

Sheet : Facility ID Activities



Environmental Protection Agency

AER Returns Workbook

31/3/2014 15:50

| PRTR# : W0270 | Facility Name : Miltown Composting Systems Limited | Filename W0270\_2013 xls | Return Year : 2013 |

Guidance to completing the PRTR workbook

## **AER Returns Workbook**

REFERENCE YEAR 2013

#### 1. FACILITY IDENTIFICATION

Parent Company Name	Miltown Composting Systems Limited
Facility Name	Miltown Composting Systems Limited
PRTR Identification Number	W0270
Licence Number	W0270-01

#### Waste or IPPC Classes of Activity

No.	ciass_name
	Recycling or reclamation of organic substances which are not used
	as solvents (including composting and other biological
4.2	transformation processes).

Address 1	Miltownmore
Address 2	Fethard
Address 3	County Tipperary
Address 4	
	Tipperary
Country	Ireland
Coordinates of Location	-7.76889 52.45236
River Basin District	IESE
NACE Code	3832
Main Economic Activity	Recovery of sorted materials
AER Returns Contact Name	Derry Murphy
AER Returns Contact Email Address	derry@miltowncomposting_ie
AER Returns Contact Position	Site manager
AER Returns Contact Telephone Number	0874125625
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	6
User Feedback/Comments	
Web Address	

#### 2. PRTR CLASS ACTIVITIES

Activity Number	Activity Name
50.1	General

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

lsi	t applicable?		and the second second
Have you been granted an			
If applicable which activity class ap		A second second second	
Schedule 2 of the n	Sector and the second sector sec		

| PRTR# : W0270 | Facility Name : Miltown Composting Systems Limited | Filename : W0270\_2013.xls | Return Year : 2013 | Page 1 of 2

#### Sheet : Facility ID Activities

#### AER Returns Workbook

31/3/2014 15:50

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) ?	

| PRTR# : W0270 | Facility Name : Miltown Composting Systems Limited | Filename : W0270\_2013.xls | Return Year : 2013 | Page 2 of 2

Air
2
50
ŝ
9
8
ĕ
e.
ŝ

AER Returns Workbook

31/3/2014 15:51

4.1 RELEASES TO AIR

1 PRTMM - VACEVR (Facility Nume. Millions Composing Steames United (Florence). VACEVE\_2013 M (Return Yele). 2013.

	RELEASES TO AIR		Please enter all quantities in this section in KGs	in KGs
	POLLUTANT	METHOD		QUANTITY
No Annevil	Name	M/C/E Method Code Destanation or Description	Emission Point 1 T (Total) KG/	Method Used Method
			0.0	0.0 0.0

TION B : REMAINING PRTR POLLUTATIS POLLUTANT POLLUTANT MILLARS 10 AIR	METHOD and	Please onles all quantities in the section in KGs. QLANTITY Descrition Emission Point 1 Tr Troisi) KQYess A Accidentia's KGYess / F (Fugitive) KGYess
• Select a row by double-clicking on the Pollutant !		0.0 0.0

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

Bici-EA31 5, TO ARE Please enter all quantities in this section in KGs	POLLUTANT METHOD POLLUTANT	Nerris More Wend Gate Method Caste Designing Emission Point 1 (Trate), Kolfvear A (Acidemical Yeolfvear Colfvear	Narragen alle de la companya	Padace a court of device interview on the Biblin fract Name (Celtume B) theore direct the dislette Builters
		Pattutant Ne.	(j) 00	

Additional Data Requested from Landfill operators

for the purposes of the National Inventory on Greenho Tared or utilised on their facilities to accompany the fig initiasion to the environment under (toda) KGlyr for St	For the purposes of the National Inventory on Oreenboure Gases, landfill operators are requested to provide summary data on landfill gas (Mehnen) faused or dilitace on their featilities in accompany the figures for total methane generated. Operators around only sports the Nat methane (H4) emission to the environment under T(total) KG/r for section A: Sector specific PFTR politants above. Please complete the table below:					
inter summary data on the ss of methane flared and / or	Mitown Compositing Systems Limited		Mathr	of lised		
	T (Total) be/Vear	MICIE	Method Code	Designation or Desoription	Facility Total Capacity m3 per hour	
Total estimated methane generation (as per		-			NIA	
Methane fiered					0.0	(Total Flaring Capacity) (Total Utiliaing Capacity)
Methane utilised in engine/s Net methane emission (as reported in Section A above)					NIA	frankalan Bright Bright

| PRTR# : W0270 | Facility Name : Miltown Compositing Systems Limited | Filename : W0270\_2013.xis | Return Year : 2013 |

Page 1 of 1

AER Returns Workbook

Sheet : Treatment Transfers of Waste

5. ONSITE TREATMENT & OFFSITE TRANSFERS OF WASTE

Nome and License / Permit No. and Address of Final Resovers / Actual Address of Final Desimetion Inspose (HAZZARDOUS WAGTE (HAZZARDOUS WAGTE ONLY) Officient in related Co. W074-03 Co. Caryshene Bonohil Co. Officient Co. W074-03 Toperary.".instand Limenck CoCo Contactions Contractional Relythin Co. Limenic Officient Landfill, W0017-04 K.".holand Letterbane, Annyalla, Castlebl aney, Co. Monaghan, Ireland Hat Viene and Leneration Room and Leneration Room Nazi Late Viene No Nazi Late Viene No Nazi Late Viene No Nazi Late Anna Na Nazi Late Anna Na Nazi Record Daped Ballymount Cross,",",Tallaght,",",Ireland Menaghan CoCo Stotsh Offsite in Ireland Corner landfill, W020-03 Nurendale T/A Panda Offsite in Ireland Vaste W039-02 Location of Treatment Waste Treatment Operation MC/E Method Used Method Used Weighed Weighed Weighed Weighed R10 M ¥ × N R10 R10 50 non-composted fraction of municipal and 4679.7 atmilar wastes non-composted fraction of municipal and 157.78 similar wastes Description of Waste non-composited fraction of municipal and 1707.76 similar wastes quantities on this sheet in Tonne 2.56 mixed municipal wsste a row by double-clubbon the Document Quantity (Tonnes per Year) Hazardous NG No 9N Ne European Waste Code Within the Country 19 05 01 Within the Country 18 05 01 Within the Gauntry 20 03 01 Within the Country 19 05 01 Transfer Destination

| PRTR# : W0270 | Facility Name : Miltown Composting Systems Limited | Filename : W0270\_2013.xis | Return Year : 2013 |

Page 1 of 1

31/3/2014 15:51

Appendix 2 Environmental Training Records MILLTOWN COMPOSTING SYSTEMS LTD Issue Date: 16 July 2010 Safety Statement Prepared by: NRGE LTD



**Final Version** 

Page: 31

Task/Work Practice	Specific Training Provided (In-House/Outside Agency/Date)	Name of Employee
0,1 hlorcoptor maint Procedure	Konne In House by Facility Manager (OM) 25/4/13	Night I - J
Uptake of back till 3 Changes Hypone broader hostings when you have be backles traceably 2 backles traceably 2 backles to softwark on a	al Marager Our)	Cannon CREMIN Null Moloney Neil Barry.
No week through all the operating procedures sopmcol > sopmcol	in House (DM)	Fancoa Chemin Niall Moloney Neil Barry
HACCP Foundation 23/9/2013	Professor Stophyalier CAMDEN BRI	DERRY MURPHY
Ve work through all the SOPS - SOPricor -> SOPri 30/9/2013	in House By Facility Monager Longithat	Don Moore House