ANNUAL

ENVIRONMENTAL REPORT

JANUARY 2011 TO DECEMBER 2011

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

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SECTION 1

INTRODUCTION

1.1 INTRODUCTION

The following is the Annual Environmental Report (AER) for the period January 2011 to December 2011 at Miltown Composting Ltd.

The company was granted an EPA Waste Licence No. W0270-01 on the 9th September 2010. This is the 2011 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 2011. 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 m₂.

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.

Three (3 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.

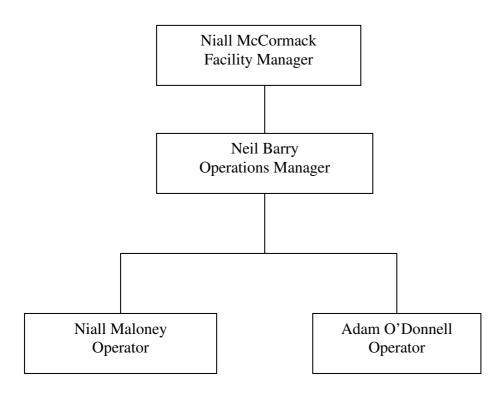
Mesophilic Stage

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 daily 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 2011



Section 2

DATA

WASTE MANAGEMENT 2.1

TABLE 2.1.1 – ANNUAL WASTE INTAKE 2011		
Waste Type	EWC Code	2011 Intake
Brown bin waste (kitchen/garden) separately collected from households	20 01 08	12,012.85
Wood waste from municipal sources	20 01 38	486.06
Sludges from treatment of urban waste water	19 08 05	254.22

2.2 ENVIRONMENTAL MONITORING

2.2.1 Groundwater Results 2011

Table 2.2.1 / 2 – Groundwater Analysis Results 2011

2.2.1 GENERAL CHEMICAL ANALYSIS RESULTS			
Parameter	GW1	GW2	GW3
Chloride (mg/l)	74.6	121.4	27.8
Conductivity (uS/cm)	602	789	310
Nitrate (mg/l)	2.49	0.54	13.71
рН	6.5	6.4	6.1
Total Nitrogen (mg/l)	4.7	<1	13.1
Ammonia (mg/l)	0.107	0.065	0.047

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	<0.5
1,1,2-Trichloroethane	<2.0	<2.0	<2.0

TABLE 2.2.2 - VOC	ANALYSIS USE	PA 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
1,2,4-Trichlorobenzene	<0.5	<0.5	<0.5

2.2.2 Dust Monitoring 2011

TABLE 2.2.3 - DUST RESULTS 2011			
Month	D1 (mg/m ² /day)	D2 (mg/m ² /day)	D3 mg/m ² /day)
January	29	188	41
February	94	53	247
March	17	17	24
April	305	123	53
May	229	94	59
June	159	134	No Result
July	82	99	41
August	295	74	37
September	100	112	35
October	159	76	593 *
November	47	88	65
December	24	30	77

* - Sample contaminated with bird droppings

2.2.3 Biofilter Monitoring 2011

TABLE 2.2.4MONITORING RESULTS FROM THE BIOFILTER 24/03/11		
Parameter	Result	
% Moisture	30.6	
pH	8.0	
Ammonia (mg/kg)	173	
Total Viable Counts @ 30°C (Solid) cfu/g	$>3.00 \text{ x } 10^6$	

TABLE 2.2.5 MONITORING RESU	LTS FROM THE BIOFILTER 23/11/11
Parameter	Result
% Moisture	72.9
pH	7.0
Ammonia (mg/kg)	19.05
Total Viable Counts @ 30°C (Solid) cfu/g	$>3.00 \text{ x } 10^6$

TABLE 2.2.6 BIOFILTER INLET EMISSION LEVELS 24/03/11		
Parameter Inlet 1 Concentration (ppm) Inlet 2 Concentration (ppm)		
Hydrogen Sulphide	<0.2	<0.2
Ammonia	20	17
Mercaptans	0.5	<0.5
Amines	Negative	Negative

TABLE 2.2.7BIOFILTER OUTLET EMISSION LEVELS 24/03/11		
Parameter	Inlet Concentration (ppm)	
Hydrogen Sulphide	<0.2	
Ammonia	<5	
Mercaptan	<0.5	
Amines	Negative	

TABLE 2.2.8BIOFILTER INLET EMISSION LEVELS 23/11/11		
Parameter	Inlet 1 Concentration (ppm)	Inlet 2 Concentration (ppm)
Hydrogen Sulphide	<0.2	<0.2
Ammonia	15	10
Mercaptans	0.5	<0.5
Amines	Negative	Negative

TABLE 2.2.9 BIOFILTER OUTLET EMISSION LEVELS 23/11/11				
Parameter Inlet Concentration (ppm)				
Hydrogen Sulphide <0.2				
Ammonia <5				
Mercaptan <0.5				
Amines	Negative			

2.2.4 PM10 Monitoring 2011

TABLE 2.2.10RESULTS OF PM10 MONITORING 2011					
Sampling LocationDateWeight Gain (g)Concentration (µg/m³)					
Location 1	20 th / 21 st January	<0.001	< 0.1		
Location 1	23 rd / 24 th November	<0.001	< 0.1		

2.2.5 Odour Monitoring 2011

TABLE 2.2.11 METEOROLOGICAL CONDITIONS Q1 - Q4						
Parameter	Parameter Quarterly Result					
Wind speed (km/hr)	10-15 5 - 8 6 - 8 18 - 2					
Wind direction	South- easterly	South- westerly	South- easterly	Westerly		

TABLE 2.2.12 ODOUR SAMPLING RESULTS Q1 2011					
Locations	On site observations	Results			
OD 01	No compost adour	$67 ou_F/m^3$			
At Sensitive Receptor	No compost odour	0700 <u>E</u> /III			
OD 02					
300 meters downwind	No compost odour	$61 \text{ ou}_{\text{E}}/\text{m}^3$			
of compost yard					

TABLE 2.2.13 CHEMICAL ANALYSIS Q1 2011						
Sample	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 2011					
LocationsOn site observationsResults					
OD 01	Agricultural odour	$288 \text{ ou}_{\text{F}}/\text{m}^3$			
At Sensitive Receptor	Agricultural bubui	200 00 <u>E</u> /11			
OD 02					
300 meters downwind	No compost odour	$133 \text{ ou}_{\text{E}}/\text{m}^3$			
of compost yard					

TABLE 2.2.15 CHEMICAL ANALYSIS Q2 2011							
SampleHydrogen SulphideAmmoniaMercaptenAmines							
OD 01	<0.2	<5	<0.5	Negative			
OD 02	OD 02 <0.2 <5 <0.5 Negative						

TABLE 2.2.16ODOUR SAMPLING RESULTS Q3 2011					
Locations On site observations Results					
OD 01 At Sensitive Receptor	No distinct odour	$124 \text{ ou}_{\text{E}}/\text{m}^3$			
OD 02 50 meters downwind of compost yard	Compost odour	$782 \text{ ou}_{\text{E}}/\text{m}^3$			

TABLE 2.2.17 CHEMICAL ANALYSIS Q3 2011					
SampleHydrogen SulphideAmmoniaMercaptenAmines					
OD 01	<0.2	<0.2 <5		Negative	
OD 02	<0.2	<5	<0.5	Negative	

TABLE 2.2.18 ODOUR SAMPLING RESULTS Q4 2011					
Locations On site observations Results					
OD 01 At Sensitive Receptor	No distinct odour	$109ou_E/m^3$			
OD 02	No distinct odour	91 ou _E /m ³			

TABLE 2.2.19 CHEMICAL ANALYSIS Q4 2011					
SampleHydrogen SulphideAmmoniaMercaptenAmines					
OD 01	<0.2 <5		<0.5	Negative	
OD 02	<0.2	<5	<0.5	Negative	

2.2.6 Noise Monitoring 2011

TABLE 2.2.20 DAY-TIME NOISE MEASUREMENT RESULTS					
Location No.	Measurement Period (min)	L _{eq} dB(A)	L ₁₀ dB(A)	L ₉₀ dB(A)	L _{F Max} dB(A)
NSL	30	46	45	35	76
N2	30	58	57	56	85

TABLE 2.2.21 NIGHT-TIME NOISE MEASUREMENT RESULTS					
Location No.	Measurement Period (min)	L _{eq} dB(A)	L ₁₀ dB(A)	L ₉₀ dB(A)	L _{F Max} dB(A)
NSL	15	38	38	31	68
N2	15	62	62	61	68

2.2.7 Surface Water 2011

Table 2.2.22 - Surface water Results 2011 for SW1						
Sample ID	Sample IDBOD (mg/l)Suspended Solids (mg/l)Ammonia (mg/l)					
SW1 10/10/11	3	10	4.18			
SW1 26/10/11	3	79	13			

2.2.8 Non-Compliances 2011

Table 2.2.23 Details of Reported Non-compliance 2011 – Water					
Date	Date Non-compliance Cause Corrective Action				
25/10/12	Storm Water	Ammonia at 15 mg/l	Cover yard and improve house keeping		

Table 2.2.24 Details of Non-compliance 2011 – Air					
Date Non-Compliance Failure Details / Cause Corrective Action					
No Non-compliances reported in 2011.					

Table 2.2.	Table 2.2.25 Details of Non-compliance 2011 – General Audit				
Date	Non-Compliance	Corrective Action			
12/07/11	Safe Access to monitoring points	Safe access provided in October 2011			
12/07/11	Chemical Storage	The IBC was removed, all chemicals stored within bunded areas			
12/07/11	High level liquid alarms	High level liquid alarms fitted			
12/07/11	Discharge to surface water	SEW for covering of yard provided, sweeping programme of yard implemented			
12/07/11	Waste records	All waste records updated and new records kept on file			

2.3 **RESOURCE USAGE**

The summary details of energy and water usage at the plant for the period January 2011 to December 2011 is detailed in Table 2.10 below.

Resources	Quantities
Diesel	57079 litres
Electricity	224100 Kw/Hrs
Hydraulic, Transmission &	2200 litres
Engine Oil	2200 Ittles
Detergent	40 litres
Anti Freeze	100 litres

2.4 ENVIRONMENTAL INCIDENTS AND COMPLAINTS

2.4.1 There were no incidents to report for the period January 2011 to Dec 2011.

Incident	Date / Time	Location	Persons Contacted	Corrective Actions

2.4.2 There were no complaints to report for the period January 2011 to Dec 2011.

2.5 ENVIRONMENTAL SPENDING

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

<u>January 2011 – December 2011</u>	€
EPA fees	7612
Waste Licence Management	17473
Total Spending	25085

2.6 ENVIRONMNETAL TRAINING

Niall McCornack – Certtificate in Compost Facility Operation from CRE/SligoIT (May2011)

Staff Environmental Training – current status of facility waste licence – 09/03/2011 – with Tony Nugent

Environmental Management Programme for 2011.

Review of Objectives and Targets for the period January to December 2011

Tables EMP 1.1 to 1.5 reviews the Objectives and Targets set for 2011. 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 2012. 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 2012

Item No	OBJECTIVE	TARGET	RESPONSIBLE PERSON
1	Water Pollution Prevention	 Maintain checklist for alarms and daily records Cover open area between sheds 1,2 and3. Assess SW1 following installation of cover. 	D.Murphy
2	Energy Management	 Carry out Energy Audit. Investigate potential for Anaerobic Digestion (AD) Plant. Study possibility of installing a CHP plant in conjunction with AD plant. 	D.Murphy
3	E.M.S	 Maintain EMS documentation. Update procedures to reflect operational and control change. Maintain EMP by means of Bi-annual assessment. 	D.Murphy
4	Licence Management	 Prepare proposal for and finalise Hydrogeological Study. Assess nuisance control procedures and practices. Undertake all environmental monitoring as per licence. 	D.Murphy
5	Incoming waste / Finished product	 Investigate new waste types for inclusion in compost process Research new sustainable outlets for the finished products 	D.Murphy

Water Pollution Prevention

Objective	Target	Target Date	2011 Review	Person Responsible
	Complete Fire-water Retention Assessment.	March 2011	Complete	ОСМ
Water Pollution Prevention	Prepare proposal for use of checklist to replace alarms.	April 2011	Complete	Niall McCormack
	Install new sanitary wastewater treatment system.	March 2011	Complete	Niall McCormack

Energy management

Objective	Target	Target Date	2011 Review	Person Responsible
	Carry out Energy Audit	June 2011	Not Complete Postponed until 2012	Niall McCormack - OCM
Energy Management	Investigate potential for Anaerobic Digestion (AD) Plant.	2014	Not due until 2014	Niall McCormack
	Study possibility of installing a CHP plant in conjunction with AD plant.	2016	Not due until 2016	Niall McCormack

Water Pollution Prevention

Objective	Target	Target Date	2011 Review	Person Responsible
E.M.S	Maintain EMS documentation.	2011	Complete	Niall McCormack
	Update procedures to reflect operational and control change.	March 2011	Complete	Niall McCormack
	Maintain EMP by means of Bi-annual assessment.	June / Dec 2011	Complete	Niall McCormack

Licence Management

Objective	Target	Target Date	2011 Review	Person Responsible
	Prepare proposal for and finalise Hydrogeological Study.	March 2011	Proposal complete - awaiting EPA correspondance	ОСМ
Licence Management	Assess nuisance control procedures and practices.	April 2011	Complete	Niall McCormack
	Undertake all environmental monitoring as per licence.	March 2011	Complete	Matrix Env

Miltown Composting Ltd.

Incoming waste / Finished product

Objective	Target	Target Date	2011 Review	Person Responsible
Incoming waste / Finished	Investigate new waste types for inclusion in compost process	2011	Complete	Niall McCormack
product	Research new sustainable outlets for the finished products	2011	Complete	Niall McCormack

Water Pollution Prevention

Objective	Target	Target Date	Method
	Maintain checklist for alarms and daily records	Continuous 2012	Fill in the daily checklist and site alarms
Water Pollution Prevention	Cover open area between sheds 1,2 and3.	Q2 2012	Install a cover between sheds 1,2 and 3 to prevent rain water falling on compost area
	Assess SW1 following installation of cover.	Q3 2012	Carry out sampling of SW1 as per licence requirements

Energy Management

Objective	Target	Target Date	Method
	Carry out Energy Audit	June 2012	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.	2012	Update EMS to reflect change over to waste licence from waste permit
E.M.S	Update procedures to reflect operational and control change.	March 2012	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 2012	Assess biannually to ensure targets are achieved.

Licence Management

Objective	Target	Target Date	Method
	Prepare proposal for and finalise Hydrogeological Study.	May 2012	Prepare and submit a proposal detailing the methodology for a hydrogeological study.
Licence Management	Assess nuisance control procedures and practices.	and practices. 2012 quarterly visits of	Review procedures. Ensure quarterly visits of nuisance control company occurs.
	Undertake all environmental monitoring as per licence.	2012	1 x Noise Survey 4 x Odour Assessment 12 x Dust Monitoring 2x Biofilter Analysis 1 x Bioaerosol Study 1 x PM10 Survey

Incoming waste / Finished product

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

Appendix 1

PRTR Scans

REFERENCE YEAR 2011 I FACILITY IDENTIFICATION Parent Company Name Millown Composting Systems Limited Parent Company Name Millown Composting Systems Limited PRTR Identification Number W0270 Licence Number W0270-01 Waste or IPPC Classes of Activity No. class. name Recycling or reclamation of organic substances which are not us as solvents (including composting and other biological 4.2 transformation processes). Address 1 Miltownmore Address 2 Fethard Address 2 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 Position Consultant AER Returns Contact Fax Number AER Returns Contact Fax Number Address 4 Country Ireland Country Ireland Coordinates of Location 7.76889 52.45236	Sheet : Facility ID Activities	AEI	R Returns Workbook 23/3/2012 8
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Sheet : Releases to Air		AE	R Returns Workboo	k				23/3/2012 8:58
								2
4.1 RELEASES TO AIR	Link to previous years emissions data							
SECTION A : SECTOR SPECIFIC PRTR PC	RELEASES TO AIR			F	llease enter all quantiti	es in this section in KGs		
	POLLUTANT			ETHOD	rease enter an quantit	es in this section in KGs	QUANTITY	
No. Annex II	Name	M/C/E	Method Code	Method Used Designation or Description	Emission Point 1	T (Total) KG/Year	A (Accidental) KG/Year	
	* Select a row by double-clicking on the Pollutant Name (Column B) then click the delete button				(0.0 0.1	0.0	0.0
SECTION B : REMAINING PRTR POLLUTA								
	RELEASES TO AIR POLLUTANT		ME	ETHOD	lease enter all quantiti	es in this section in KGs	QUANTITY	
				Method Used				
No. Annex II 06	Ammonia (NH3)	M/C/E	Method Code OTH	Designation or Description Dreagar Tube	Emission Point 1	T (Total) KG/Year	A (Accidental) KG/Year	F (Fugitive) KG/Year 0.0
	* Select a row by double-clicking on the Pollutant Name (Column B) then click the delete button						0.0	0.0
SECTION C : REMAINING POLLUTANT EM								
	RELEASES TO AIR POLLUTANT		ME	F	lease enter all quantiti	es in this section in KGs	QUANTITY	
				Method Used				
Pollutant No. 215	Name Hydrogen sulphide	M/C/E	Method Code OTH	Designation or Description Dreagar Tube	Emission Point 1	T (Total) KG/Year	A (Accidental) KG/Year 0.0	F (Fugitive) KG/Year 0.0
220	Mercaptans * Select a row by double-clicking on the Pollutant Name (Column B) then click the delete button	M	ОТН	Dreagar Tube		0.0 0.0		0.0
Additional Data Deguasted from La				and the second secon	100710711-0010-700011-0000-0000-0000-00		-	
Additional Data Requested from La	ndfill operators							
flared or utilised on their facilities to accompany the	house Gases, landfill operators are requested to provide summary data on landfill gas (Methane) figures for total methane generated. Operators should only report their Net methane (CH4)							
emission to the environment under T(total) KG/yr fo	Section A: Sector specific PRTR pollutants above. Please complete the table below:							
Landfill:	Miltown Composting Systems Limited							
Please enter summary data on the quantities of methane flared and / or								
utilised				Method Used Designation or F	acility Total Capacity n			
	T (Total) kg/Year	M/C/E	Method Code	Description	per hour			
Total estimated methane generation (as p site mode					N/A			
Methane flare	d 0.				C	0 (Total Flaring Capacity)		
Methane utilised in engine Net methane emission (as reported in Section		2			C	0 (Total Utilising Capacity)		
A abov					N/A			
					A TRANSPORT			
j PRTR# : W0270 j Facility Name : Miltown C	omposting Systems Limited Filename : W0270_2011.xls Return Year : 2011							Page 1 of 1

Sheet : Treatment Transfers of Waste		AER Returns Workbook			23/3/2012 8:58
5. ONSITE TREATMENT & OFFSITE TRANSF	FERS OF WASTE I INCINE W0276 I Pacity Harrer Mitzen Consor Please enter all quantities on this sheet in Tonnes	ng Systema Lenbert P. lemane W0270, 2011 de Robert Yvar - 201			23/03/2012-05-55 3
	Quantity (Tonnes per Year)	Method Used	Licence/Permit No of <u>Non Ha</u> Recover/Disposer Re	table : Address of Next Name and License / Permit No. and setination Facility Address of Final Recover / tx_typage: Address of contribusposer Disposer (HAZARDOUS WASTE ONLY)	Actual Address of Final Destination i.e. Final Recovery / Disposal Site (HAZARDOUS WASTE ONLY)
Transfer Destination Code Ha	azardous Description of Waste	Treatment Locat Operation M/C/E Method Used Treat	nent	ne,Donohill,Co.	
Within the Country 19 05 01 No	non-composted fraction of municipal and a 426,04 similar wastes select a row by double-dicking the Description of Waste than click the delate button	D1 M Weighed Offsite in	reland Co,W074-03 Tipperary	א,".",Ireland	
		(opr.: 2011			Page 4 of 4
PRTR# : W0270 Facility Name : Miltown Cor	mposting Systems Limited Filename : W0270_2011.xls Return	ear: 2011			Page 1 of 1