Carbury Compost Limited
(W0124-01)

Drummin
Carbury
Co. Kildare

Annual Environmental Report

2009

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BSc Hons Environmental Science

CONTENTS

1.0 Reporting Period

For the Year 2009.

2.0 Waste Activities

Carbury Compost Limited is licensed by the Environmental Protection Agency in accordance with the Fourth Schedule of the Waste Management Act 1996 for

Recycling or reclamation of organic substances which are not used as solvents (including composting and other biological transformation processes):

Carbury Compost Limited use chicken manure, horse manure, gypsum, ammonium sulphate, straw and water to produce Phase III mushroom substrate at its facility.

3.0 Environmental Policy

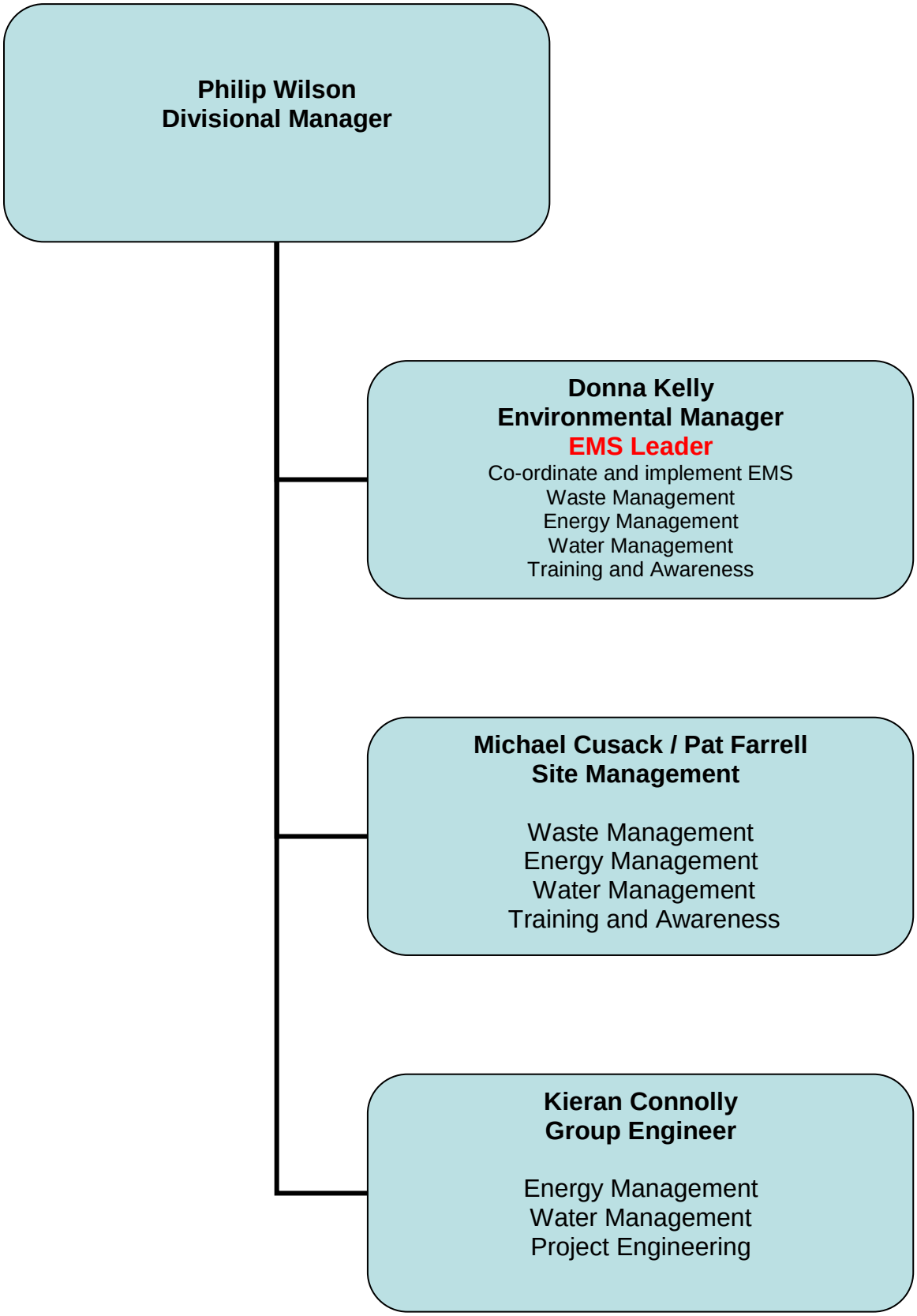
Carbury Compost Limited is a manufacturer of mushroom substrate for the growing of mushrooms, based in County Kildare. Carbury Compost understands that their activities have an impact on the environment and are committed to continual improvement of their environmental performance and the prevention of pollution.

Through the implementation of an Environmental Management System to Phase 3 of BS8555 Carbury compost Ltd will work to:

- Ensure compliance with all environmental legislation and other requirements
- Being committed to improving waste management practices
- Develop objectives and targets and action plans to help improve environmental performance
- Advise and train employees to meet their environmental undertakings.

This policy is available to the public and to all persons working for or on behalf of the organization.

4.0 Management Structure



5.0 Decommissioning and Aftercare

Section *2.5* of Carbury Compost Ltd's Environmental Liabilities Risk Assessment, conducted by WYG Environmental in September 2007 outlines the *Provisions for Site Closure,* and is included below:

2.5 Provisions for Site Closure

Operations at the facility are ongoing with an open-ended lifespan. In the event of a decision to close the facility a closure plan will be developed. This plan will allow for removal of all raw materials, intermediate materials and compost from the site and cleaning of all surfaces where materials/compost had been handled or stored. A monitoring programme will be carried out on environmental media including air and water to ensure that all emissions from the facility have ceased.

It is assumed that upon closure of the site, the premises will be suitable for industrial or other use and will have a re-sale value, which will cover the costs of removal of materials/compost, site cleaning and monitoring.

When operations cease at the site it is expected that the bulk of the site infrastructure will be sold on to a prospective buyer as an asset. This will include the site buildings, offices, compost tunnels, fencing, gates, lighting, fire alarms and drainage/sewage infrastructure. The potential buyer may also require other plant equipment. However, if not, these will be sold off to other potential buyers separately or dismantled and disposed off site at a licensed facility. Other plant equipment includes generator, site machinery, oil storage tanks and bunds. All trucks will be removed off site and sold separately or disposed of appropriately.

When Operations cease at the site any residual compost/waste will be removed and disposed at relevant licensed recovery/disposal facilities. The entire site floors and walls will be power swept and washed to clear all debris and dust. Silt traps will be dislodged and interceptors cleaned out. The waste from the cleaning operations will be disposed to relevant licensed facilities. It is not anticipated that any specialist recovery or disposal will be required.

A monitoring programme of all potential emissions including surface water, foul waters and dust will be carried out after this process in order to ensure that emissions from the site have ceased. The monitoring programme will be designed to include at least two rounds of sampling carried out within two months of the decommissioning of the facility and at least two weeks apart.

Potential nuisances at the site are limited to operational emissions such as odour, dust and noise. After closure and cleaning of the site as described above and when operations have ceased and assuming confirmation from the monitoring programme that all emissions have ceased, it is expected that there will be no requirement for long term aftercare management at the site.

For more details please refer to the ELRA submitted to the EPA on 1st October 2007.

6.0 Capacity of the Facility

In 2009 Carbury Compost Limited produced:

70, 805 Tonnes - Mushroom Substrate (Phase III).

7.0 Waste Management

7.1 Waste Received:

Table 7.1.1 Type and quantity of Waste received in Carbury Compost Limited 2009

Waste Type	EWC Code	Quantity (Tonnes)
Chicken Manure	02 01 06	13,482
Horse Manure	02 01 06	15,671
Gypsum	17 08 02	2, 618

7.2 Waste Recovered:

See **Table 7.1.1** above.

7.3 Waste Disposed:

See 'Onsite treatment & offsite transfers of waste' in Appendix A.

8.0 Water Usage

Water is provided for Carbury Compost Ltd by three groundwater wells on site. A total of 81,067 m^3 of water was used in 2009 - an average of 6,756 m^3 of water per month, or 1,559 m^3 per week. This is 2.4% increase in well water usage compared to 2008.

Mains water is supplied by Kildare County council. For the 12 month period from 30/09/2008 to 30/09/2009, 2,940 m^3 of water was used from the mains water supply.

9.0 Emissions

9.1 Water Monitoring:

Carbury Compost Limited is required to monitor three types of water i.e. surface water, groundwater and effluent. Surface water sampling locations include SW1, RW1 and RW2. Three groundwater monitoring locations exist; GW1, GW2 and GW3. One effluent monitoring point is situated on site; ETP-1.

Monitoring was carried out: - on surface waters in January, April, July and October of 2009.
- on effluent in January and July of 2009.
- on groundwaters in March and September of 2009.

9.2 Airborne Micro-Organism Monitoring:

Four Airborne Micro-Organism monitoring locations exist on the Carbury site; AB1, AB2, AB3 and AB4. During sampling, four locations are monitored: AB1 located upwind of the facility, with AB2, AB3 and AB4 situated downwind of the facility.

Monitoring was carried out: - July 2009.

9.3 Dust Monitoring:

Four dust monitoring locations exist on the Carbury site, D1, D2, D3 and D4. Time period required to complete dust monitoring is 30 (+/- 2) days.

Monitoring was carried out: - April, August and September of 2009.

9.4 Noise Monitoring:

Monitoring was carried out: - May 2009.
- September 2009.

9.5 Boiler Emissions Monitoring:

Monitoring was carried out: - September 2009.

9.6 Biological Survey of the Cushaling River::

Monitoring was carried out: - May 2009.

10.0 Results and Interpretation

10.1 Surface waters

Table 10.1.1 Surface Water Monitoring Results for Carbury Compost Limited 2009

	SW1			
	29.01.09	**15.04.09**	**28.07.09**	**29.10.09**
pH	7.31	7.22	7.29	7.24
Conductivity	601	615	543	653
D.O (mg/l)	1.70	2.10	1.30	6.60
Temp (^oC)	8.4	14.8	17.5	-
Suspended Solids (mg/l)	20.4	27.2	17.1	28.0
BOD (mg/l)	7.0	4.0	3.2	2.6
COD (mg/l)	91	53.4	73	77.0
Nitrates (mg/l N)	5.1	1.78	1.67	2.95
Total P (mg/l P)	0.58	0.67	0.72	0.57
Ammonia (mg/l N)	1.393	1.393	1.440	1.650
Sulphate (mg/l SO4)	55	57	24	53

Table 10.1.2 River Water Monitoring Results for Carbury Compost Limited 2009

	RW1 d/s				RW2 u/s			
	29.01.10	**15.04.09**	**28.07.09**	**29.10.09**	**22.01.08**	**15.04.09**	**28.07.09**	**29.10.09**
pH	7.55	7.56	7.49	7.44	7.53	7.59	7.51	7.44
Conductivity	449	484	491	487	450	484	468	478
D.O (mg/l)	3.40	3.80	4.40	8.50	3.60	3.80	4.60	8.70
Temp (^oC)	7.9	14.8	17.2	-	7.9	14.8	17.2	-
Suspended Solids (mg/l)	11.2	10.8	4.8	3.2	12.4	11.2	6.4	3.2
BOD (mg/l)	2.5	2.6	2.5	2.0	2.2	2.4	2.3	2.1
COD (mg/l)	31	52.7	61.2	65.0	33	53.9	61.2	68.0
Nitrates (mg/l N)	2.7	1.35	1.33	1.80	2.4	1.41	1.36	1.65
Total P (mg/l P)	<0.05	0.11	0.17	0.42	<0.05	0.10	0.38	0.31
Ammonia (mg/l N)	0.042	0.044	0.016	0.042	0.034	0.032	0.073	0.019
Sulphate (mg/l SO4)	17	26	11	14	17	24	9	14

As per Schedule ***E.5 Surface Water*** of the Waste Licence, surface water monitoring was conducted during 2009. Results are displayed in **Tables 10.1.1 and 10.1.2** above. Water leaving the effluent treatment plant (puroflo) is discharged into the piped stream and enters the Cushaling River at SW1. Sampling points RW1 and RW2 are located 30m downstream and 30m upstream of SW1 respectively.

All results for SW1 (**Table 10.1.1**) were within specified limits. Results downstream of SW1 were quite consistent with results upstream of SW1 (**Table 10.1.2**), indicating no adverse impact from the discharge point on the quality of the Cushaling River.

10.2 Effluent

Table 10.2.1 Effluent Monitoring Results for Carbury Compost Limited 2009

	ETP1	
	21.01.09	**16.07.09**
pH	6.48	6.04
BOD	2	17
Suspended Solids	9	20
Total Ammonia (mg/l N)	2.36	1.44
Orthophosphate (as P)	0.92	0.94
Total P (mg/l P)	1.5	0.99
Oils, Fats, Grease	3	4

As per Schedule ***E.8 Effluent Treatment Monitoring*** of the Waste Licence, Effluent Treatment Plant discharge monitoring was conducted during 2009. Results of which are displayed in **Table 10.2.1** above. All results fell within licence limits.

For total discharge loadings for 2009 see 'Releases to Water' in Appendix A.

10.3 Ground water

Table 10.3.1 Groundwater Monitoring Results (GW1) for Carbury Compost Limited 2009

	GW1	
	04.03.09	**10.09.09**
pH	7.37	6.99
TOC	<5	<5
Ammonia (mg/l N)	0.260	0.256
Nitrates (mg/l N)	1.1	1.1
Sulphate (mg/l SO4)	36	24
Conductivity	583	587
Total Coliforms (per 100ml)	Absent	Absent
Faecal Coliforms(per 100ml)	Absent	Absent

Table 10.3.2 Groundwater Monitoring Results (GW2) for Carbury Compost Limited 2009

	GW2	
	04.03.09	**10.09.09**
pH	7.12	7.03
TOC	<5	<5
Ammonia (mg/l N)	0.124	0.108
Nitrates (mg/l N)	7.4	7.4
Sulphate (mg/l SO4)	44	42
Conductivity	716	759
Total Coliforms (per 100ml)	Absent	Absent
Faecal Coliforms(per 100ml)	Absent	Absent

Table 10.3.3 Groundwater Monitoring Results (GW3) for Carbury Compost Limited 2009

	GW3	
	04.03.09	**10.09.09**
pH	7.22	7.04
TOC	<5	<5
Ammonia (mg/l N)	0.356	0.461
Nitrates (mg/l N)	1.1	1.1
Sulphate (mg/l SO4)	42	21
Conductivity	576	577
Total Coliforms (per 100ml)	Absent	Absent
Faecal Coliforms(per 100ml)	Absent	Absent

As per Schedule ***E7 Groundwater Monitoring*** of the Waste Licence Groundwater monitoring was conducted on two occasions during 2009. Results are displayed in **Tables 10.2.1**, **10.3.2** and **10.3.3** above. Ammonia levels appear to have risen in GW3 from 0.356mg/l in March 2009, to 0.461mg/l in September 2009. The situation will be assessed further in 2010 by conducting more monitoring. A fourth borehole has been drilled in the NE corner of the site. It is planned to begin monitoring of this well during 2010.

10.4 Airborne Micro-Organisms

Table 10.4.1 Airborne Micro-Organism Results for Carbury Compost Limited 2009

Monitoring Location	Mesophillic Bacteria cfu/m^3		Aspergillus fumigatus cfu/m^3	
	Sample 1	Sample 2	Sample 1	Sample 2
AB1 Upwind	56	42	0	7
AB2 Nearest Sensitive Receptor Upwind	21	28	0	0
AB3 Downwind of Bale Breaking Line	2968	1668	424	495
AB4 Downwind	106	42	21	0
Control Sample	0	-	0	-
Typical Reported Concentrations at Compost Facilities	10,000 - 10,000,000		0 - 10,000	

As per Schedule ***E.3 Airborne Microbes*** of the Waste Licence, Airborne Micro-Organism monitoring was conducted on 23.07.09. Results of which are displayed in **Table 10.4.1** above.

A South Westerly wind was evident on the day and four sampling locations were chosen accordingly, two upwind of the facility (AB1 and AB2), and two downwind of the facility (AB3 and AB4). At each sample location two samples for Mesophillic Bacteria analysis and two samples for Aspergillus fumigatus analysis were taken. At location AB4, a control sample was also taken.

A small concentration of Mesophillic Bacteria was recorded at AB1, upwind of the facility; Sample 1 - 56 cfu/m^3 and Sample 2 – 42 cfu/m^3. A small concentration of Aspergillus fumigatus was recorded in one sample; Sample 2 - 7 cfu/m^3. These results give an indication of the presence of bioaerosols naturally in the environment. AB2 (upwind) also showed the presence of small concentrations of Mesophillic Bacteria; Sample 1 - 21 cfu/m^3 and Sample 2 – 28 cfu/m^3. No Aspergillus fumigatus was recorded at location. Higher concentrations of Mesophillic Bacteria (2968 cfu/m^3 and 1668 cfu/m^3) and Aspergillus fumigatus (424 cfu/m^3 and 495 cfu/m^3) were recorded at AB3, downwind of the bale breaking line. AB4 recorded levels of Mesophillic Bacteria at 106 cfu/m^3 and 42 cfu/m^3 and Aspergillus fumigatus at 21

cfu/m^3. These results are lower than the typical concentrations present at compost facilities. It can hence be concluded that Carbury Compost Ltd is not adversely impacting on the environment in relation to airborne micro-organisms. For more details please refer to monitoring report submitted to the EPA on 09 September 2009.

10.5 Dust

Table 10.5.1 Dust Monitoring Results for Carbury Compost Limited 2009

Monitoring Location	Survey Period 11/04/09 - 09/05/09	Dust Deposition (mg/m2/day)
D1	28 Days	80.4
D2		40.2
D3		103.4(1)
D4		114.8(1)

Note 1: Organic material present.

Table 10.5.2 Dust Monitoring Results for Carbury Compost Limited 2009

Monitoring Location	Survey Period 12/08/09 - 10/09/09	Dust Deposition (mg/m2/day)
D1	29 Days	33.3
D2		83.2
D3		44.4
D4		38.8

Table 10.5.3 Dust Monitoring Results for Carbury Compost Limited 2009

Monitoring Location	Survey Period 15/09/09 - 14/10/09	Dust Deposition (mg/m2/day)
D1	29 Days	83.2
D2		83.2
D3		116.4
D4		94.2

Tables 10.5.1, **10.5.2** and **10.5.3** above display dust deposition results from monitoring conducted at Carbury Compost Ltd in April/May 2009, August/September 2009 and September/October 2009. All results are below the limit of 350 mg/m^2/day. For more details please refer to the monitoring reports submitted to the EPA on 12 June 2009 and 06 November 2009.

10.6 Noise

Table 10.6.1 Noise Monitoring Results for Carbury Compost Limited May 2009

Day-time Results - 11th May 2009

Monitoring Location	Survey Start Time	$L_{Aeq, 30\ mins}$ dB	$L_{A10, 30\ mins}$ dB	$L_{A90, 30\ mins}$ dB	Main Noise Sources
NSL 1 N12	11.40 - 12.10	62.4	65.4	55.8	There was regular intermittent traffic and occasional birdsong audible during the noise survey. The generators and compressor on the Carbury food plant were audible but not dominant

Night-time Results - 11th May 2009

Monitoring Location	Survey Start Time	$L_{Aeq, 30\ mins}$ dB	$L_{A10, 30\ mins}$ dB	$L_{A90, 30\ mins}$ dB	Main Noise Sources
NSL 1 N12	22.21 - 22.51	58.6	60.8	50.7	Intermittent traffic, fans and compressor

Table 10.6.2 Noise Monitoring Results for Carbury Compost Limited September 2009

Day-time Results - 8th Sept 2009

Monitoring Location	Survey Time	$L_{Aeq, 30\ mins}$ dB	$L_{A10, 30\ mins}$ dB	$L_{A90, 30\ mins}$ dB	Main Noise Sources
NSL 1 N12	16.52 - 17.22	64.0	68.6	49.3	There was regular traffic along the R402 during the noise survey. The fans at the Carbury Compost facility and compressor at the Greenfield facility were audible but not dominant at this location

Night-time Results - 8th Sept 2009

Monitoring Location	Survey Time	$L_{Aeq, 30\ mins}$ dB	$L_{A10, 30\ mins}$ dB	$L_{A90, 30\ mins}$ dB	Main Noise Sources
NSL 1 N12	22.46 - 23.01	53.9	52.1	45.6	Occasional traffic along R402. The fans at Carbury Compost facility and compressor at the Greenfield facility were dominant at this location

Noise monitoring was carried out in May and September 2009, results of which are displayed in **Tables 10.6.1 and 10.6.2** above respectively. The L_{Aeq} results indicate the influence of non site related traffic on noise levels at NSL1. The L_{A90} is a good measure of background noise levels, without the influence of traffic. In May the day-time noise was measured at 55.8dB; slightly above the limit of 55dB. On this occasion, the night-time noise was measured at 50.7dB; exceeding the limit of 45dB. Following this report Carbury undertook a number of mitigation measures to reduce noise levels. These measures included the decommissioning of a number of fans from the aeration pads along the northern boundary of the site, plus the installation of a concrete buffer along the aeration pads at Midlands. The owner of the Greenfield facility beside Carbury Compost also aided noise reduction by placing a buffer around a noisy compressor. The second round of noise monitoring conducted in September showed an improvement in noise levels. On this occasion day-time noise was measured at 49.3dB (compared to 55.8dB in May), and night-time noise was measured at 45.6dB (compared to 50.7dB in May).

10.7 Boiler Emissions

Table 10.7.1 Boiler Emission Results for Carbury Compost Ltd, September 2009.

Efficiency	84.3%
Oxides of sulphur	89 mg/m^3
Nitrogen oxides	357 mg/m^3
CO	14 mg/m^3

Results in **Table 10.7.1** above shows that SO2 concentration was measured at 89 mg/m^3 (Limit: 1700 mg/m^3), with NOx measured at 357 mg/m^3 (Limit: 750 mg/m^3) and CO measured at 14 mg/m^3 (Limit: 200 mg/m^3). For total boiler emissions for 2009 see 'Releases to Air' in Appendix A.

11.0 Resource and Energy Consumption

Electricity consumption in 2009 was 7,365,273 kWh. There was an increase of 862,544 kWh in 2009 from the 2008 figure of 6,502,729 kWh (13.3 % increase).

Fuel consumption in 2009 was 3,903,492 kWh. There was a decrease of 153,997 kWh in 2009 from the 2008 figure of 4,057,489 kWh (3.8 % decrease).

12.0 Proposed Development of Carbury Compost Limited

The new development is almost complete.

Currently in place are:

- New enclosed bunkers for the production of phase 1 mushroom substrate
- A new building to facilitate the indoor storage of chicken manure, horse manure and gypsum
- A telemetry system for the continuous monitoring required under Condition 3.16.1
- New hard surfaced area for manoeuvring of vehicles and storage of straw

Work to be completed includes:

- The new stack for the dispersion of all air collected.
- New tanks to deal with clean water and potent water.

Section 13.0 below outlines the work carried out in 2009. Carbury Compost are currently undertaking the move from the conventional composting process to the new composting process within the bunkers.

13.0 Development works completed during 2009

The photographs below give a visual progression of the development works that were completed during the year.


24/9/2009


16/12/2009

14.0 Environmental Objectives and Targets for 2009

Carbury Compost Ltd's environmental objectives were formulated as part of their EMS. These objectives include:

- Prevent pollution of land and waterways
- Use natural resources efficiently
- Reduce odour from the site
- Reduce waste and handle waste responsibly

Targets have been set. Environmental Management Programmes are in place to meet the targets and achieve the objectives.

The new development, outlined in **Section 12.0** will provide for improvement in all areas outlined in Carbury Compost's objectives.

Other targets, specifically relating to Waste Licence W0124-01, that are planned for 2009 include:

- Complete the construction of the Phase I area of the new facility.
- Construct a second goodie water storage tank, with a sub floor leak detection system in place.
- Complete the required monitoring of water, dust, noise, odour, airborne micro-organisms and boiler emissions.
- Complete the Firewater Risk Assessment required as part of the company emergency response procedure.
- Drill a fourth groundwater monitoring well in the NE corner of the site.

15.0 Environmental Objectives and Targets for 2010

Objective: Prevent pollution of land and waterways

EMP No: 1	**Responsibility:** Site Manager- Michael Cusack	**Start Date:** March 2010
		Review Dates: September 2010

Target:
95% integrity of Phase I yard surface drainage by July 2010 – Phase I process will be moved indoors
Divert 100% of compost yard drainage to the storage tank by May 2010 – Phase I process will be moved indoors.
Meet parameters set by EPA on Effluent Discharge and Surface Water

Indicator:
Phase I activities indoors.
Areas of yard newly concreted.
% of compost yard drains diverting drainage to the storage tank
Monitoring records

Task No	**Details**	**Due Date**	**By Whom**	**Status**
1	Resurface Phase I area of yard and make improvements in other areas if required	**July 10**	**SC**	**Almost Complete**
2	Remove old drains and replace with new drains. Divert drains from Phase I area to the storage tank drainage system	**May 10**	**SC**	**Almost Complete**
3	Conduct all monitoring; surface water, groundwater and treated effluent discharge	**Aug 07**	**DK**	**Continual**
4	Integrity test tanks and bunds	**Dec 09**	**DK**	**Complete**
5	Drill fourth ground water monitoring borehole	**Dec 09**	**SC**	**Complete**
6	Investigate and construct new storage tank	**May 10**	**SC/KC**	**Ongoing**

Reviewed by: D. Kelly Date: 09.03.10

Objective: Use natural resources efficiently

EMP No: 2	**Responsibility:** Environmental Manager - Donna Kelly	**Start Date:** March 2010
		Review Dates: September 2010

Target: Monitor all natural resource usage (water, electricity and oil consumption).

Indicator:
KwH of electricity used per unit of production
Oil usage
Volume of water used

Task No	**Details**	**Due Date**	**By Whom**	**Status**
1	Monitor electricity, oil and water usage	**Sept 07**	**DK**	**Continual**
2	Carry out efficiency test on small boiler	**Sept 07**	**DK**	**Continual**

Reviewed by: D. Kelly Date: 09.03.10

Objective: Reduce odour from the site

EMP No: 3	**Responsibility:** Site Manager - Michael Cusack	**Start Date:** March 2010
		Review Dates: September 2010

Target:
Cover all high odour sources – Phase I material and poultry manure by April 2010
Fully aerate the Phase I material and monitor oxygen levels by April 2010
Collect all air emissions and disperse through a stack by August 2010
Monitor and analyse Hydrogen Sulphide and Dimethyl Sulphide levels beginning August 2007

Indicator:
Phase I bunkers and raw material storage hall
Oxygen monitoring record
Air collection ducting system and stack
Sulphide monitoring record

Task No	**Details**	**Due Date**	**By Whom**	**Status**
1	Undertake demolition of existing buildings	**Sept 08**	**SC**	**Complete**
2	Construct building for poultry manure storage and bunkers for Phase I process	**Dec 09**	**SC**	**Complete**
3	Design and install air handling ducting for storage hall and Phase I bunkers	**Dec 09**	**SC**	**Complete**
4	Design and construct stack for dispersion of air	**August 10**	**SC**	**Ongoing**
5	Monitor Hydrogen Sulphide and Dimethyl Sulphide levels	**August 07**	**PF/MC**	**Continual**

Reviewed by: D. Kelly Date: 09.03.10

Objective: Reduce waste and handle waste responsibly

EMP No: 4	**Responsibility:** Environmental Manager - Donna Kelly	**Start Date:** March 2010
		Review Dates: September 2010

Target:
Reduce volume waste to landfill – compare 2007/2008/2009 Waste Info
Adequate consignment notes for all hazardous waste leaving the site
100% of waste stored in labelled and leak-proof containers

Indicator:
Tonnage of waste to landfill in 2007, 2008 and 2009
Consignment notes for hazardous waste
Waste containers on site which are labelled and leakproof

Task No	Details	Due Date	By Whom	Status
1	Identify reputable contractor to collect hazardous wastes	**Sept 07**	**DK**	**Complete**
2	Request copies of all waste contractors WCP and Waste Licences	**Sept 07**	**DK**	**Complete**
3	Retain record of all waste collections for the site	**Sept 07**	**DK**	**Continual**
4	Provide leak proof, bunded and labelled tanks for collecting waste oil	**Sept 07**	**MC/DK**	**Complete**
5	Provide leakproof containment for oil filters in the garage area.	**Dec 07**	**MC/DK**	**Complete**
6	Develop waste disposal procedure for hazardous and non-hazardous wastes	**Sept 07**	**DK**	**Complete**
7	Provide recycling bins in office and canteen areas and erect recycling notices	**Mar 10**	**DK**	**Complete**

Reviewed by: D. Kelly Date: 09.03.10

Full details of objectives and targets are held in the EMS file located on-site. Other targets, specifically relating to Waste Licence W0124-01, that are planned for 2010 include:

- Complete the required monitoring of dust, noise, odour, airborne micro-organisms and boiler emissions.
- Complete the Firewater Risk Assessment required as part of the company emergency response procedure.
- Complete the survey of all new roads and surfaces on site.
- Complete the report on the assessment of the odour control measures, which have been put in place.

16.0 Complaints and Incidents

Approx. 40 complaints were received in 2009 regarding odour emissions from the facility and 2 complaints regarding noise.

Table 16.1 Complaint details for Carbury Compost Limited 2009

Complainant	No. of complaints received
William & Marie Cassidy	18
Mary Griffin	14
Paul Kelly	6
Margaret Connolly	1
Jim Connelly	1
Georgina Dempsey	1

Following the noise complaints from a nearby resident, Carbury Compost implemented several noise mitigation measures (*Section 10.6 Noise* above), then commissioned White Young & Green Environmental Ltd to conduct noise monitoring at the neighbour's residence. This was carried out in September 2009. Night-time noise was measured at 40.2dB; significantly below the limit of 45dB.

No incidents as outlined in ***Condition 8 Contingency Arrangements*** occurred during 2009.

17.0 Nuisance Controls

A pest control system is in place in Carbury Compost, run by Ecolab. Ecolab conduct regular checks on the vermin controls on the site, and a maintenance record is updated accordingly.

All Vehicles entering and leaving the site are inspected to ensure that they are appropriately covered.

Other nuisances are assessed and recorded daily.

18.0 Costs

Costs for environmental reports and monitoring completed in 2009 was c. €35,000 +VAT. Costs of new development to date is c. €14.5 million +VAT.

19.0 Staff Training

Environmental awareness refresher training was carried out at Carbury Compost Ltd during the month of November 2009. All relevant employees were included in the programme. The key areas covered included our environmental objectives and targets and how they can be achieved, response procedures, good environmental management practices and corrective action procedures. Posters and procedures are erected in target areas.