ANNUAL ENVIRONMENTAL REPORT

JANUARY 2010 THROUGH DECEMBER 2010

Waste Licence

Registration Number: W0123-01

Licensee: Custom Compost

Location of Activity: Ballyminaun Hill,

Gorey,

County Wexford

Attention: Office of Environmental Enforcement

EPA Headquarters

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Co. Wexford

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Custom Compost



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SECTION 1 INTRODUCTION

1.1 INTRODUCTION

In accordance with the requirements of Waste Licence, Register Number W0123-01, the following document represents the Annual Environmental Report (AER) for Custom Compost for the period January 1st 2010 through to December 31st 2010. Detailed within, is a summary of all activities on-site during this period, that may have had an influence on the environmental performance of the company, with environmental emissions/monitoring summary data clearly identified.

Custom Compost is licensed by the Environmental Protection Agency (EPA) under Waste Licence Register Number W0123-01, for;

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

under the Fourth Schedule of the Waste Management Acts, 1996 to 2003 to which the activity relates as per Class 2. Custom Compost manufacturers compost for use as a medium in the cultivation of mushrooms. Custom Compost has grown up over a number of years and is a leading supplier of mushroom compost to growers throughout the island of Ireland.

Custom Compost take their environmental responsibilities seriously and to this end the management have drawn up a time frame for implementation of their targets and objectives as outlined in Sections 3.5 and 3.6 of this report.

This report considers that Custom Compost continues to make significant improvements in the management of its environmental affairs and the protection of the local environment. A formal Environmental Management System for the facility has been established and a new Health, Safety & Environmental Manager will recruited during the year. In addition, significant improvement has been made in order to reduce odour emissions from the site by enclosing the aerated pads and bunkers and installing a high level discharge stack.

This AER reflects the company's commitment to ongoing environmental improvement at the site.

1.2 SITE DESCRIPTION

1.2.1 Description of the Site

The Custom Compost site is located at Ballyminaun Hill, Gorey, Co. Wexford (Grid Ref. 3143 E 1559 N). Surrounding land uses are primarily agricultural in nature, with single family residential development scattered throughout the surrounding area, consistent with the rural character of the area.

1.2.2 Hours of Operation and No. of Employees

On-site and off-site deliveries of wastes and raw materials are confined to the hours of 08:00 to 20:00 Monday to Friday and 8:00 to 13:00 on Saturday, as set out in the facility's waste licence. Any loading of the finished product occurring outside of these hours is restricted to within the newly constructed dispatch shed to reduce noise impacts on nearby residents. The average number of people employed at the site is 45.

1.2.3 Waste Types and Handling Procedures

Custom Compost is permitted to accept 16,000 tonnes per annum (tpa) of waste horse manure and bedding and 22,000 tpa of waste poultry litter. No waste gypsum products are currently accepted at the site. No hazardous wastes are accepted at the site.

Wastes used in the composting process are brought on-site by appropriately licensed approved vendors. Once on-site the loads are inspected, unloaded and placed in a semi-enclosed shed near the western boundary of the site.

1.2.4 Description of Compost Production

The raw materials used in production of the compost consist of straw, horse manure, poultry litter, urea, gypsum and water. These materials are stored in partially enclosed areas on the western edge of the site with the exception of straw. Briefly, compost production consists of the following steps:

- 1. Acceptance and storage of the raw materials on-site;
- 2. Mixing of the poultry litter and gypsum prior to using it in the compost production process;
- 3. Wetting of the straw bales;
- 4. Blending of all of the raw materials on the blending line;
- 5. Placing the blended compost on aerated pads for 4 to 5 days;
- 6. Placing the compost on aerated bunkers for 4 to 5 days;
- 7. Transferring the compost to indoor tunnels (Phase I tunnels) for 7 days;
- 8. Transferring the compost to indoor Phase 2 tunnels for pasteurization and conditioning for a period of 6 days;
- 9. Spawning of the compost followed by transfer to the indoor Phase III tunnels to allow colonisation of the compost by the mushroom mycelium.

During the reporting period the facility produced approximately 68,275 tonnes of Mushroom Substrate.

1.3 ENVIRONMENTAL POLICY STATEMENT

Custom Compost operates to the below environmental policy:

Custom Compost recognises that their activities impact on the environment both through routine internal operations and the actions of our staff.

It is the policy of Custom Compost to conduct its business of producing compost in such a manner that its activities minimise or eliminate any potential adverse effects on the environment through the use of integrated environmental management, procedures and planning.

Custom Compost recognises that we have a responsibility to demonstrate sound environmental awareness, management and sustainability through the implementation of the best practice where practicable.

Legislative Requirements:

At a minimum it is our aim to comply with all local and National legislative requirements and to comply fully with the EPA and all relevant authorities with respect to Waste Licence W0123-01

Non-Hazardous and Hazardous Waste:

Our target is to minimise waste by reduced consumption and operation of effective and environmentally sound waste management and recycling procedures.

Utilities Consumption:

We aim to reduce energy consumption through the effective training and awareness and the installation of energy efficient technologies where appropriate.

Continual Improvement:

We shall implement sound structures and procedures to ensure that we reduce any complaints, incidents and non-compliances arising from the facility. In order to achieve our set goals and targets we will establish milestones at which progress is reviewed. The continuous improvement loop will identify appropriate corrective actions which may be put in place to effect whatever changes are necessary to achieve the stated objectives.

We shall develop an environmental management action plan and regularly assess whether the objectives and targets are met. As a company we continually strive to mitigate any harmful effects our activities have on the environment.

Communications

This policy will be available to the public and to all persons working for, or on behalf of Custom Compost.

Training

This policy will be achieved through the implementation of an Environmental Management System. Custom Compost shall provide the necessary awareness, education, training and resources to implement this policy by means of environmental training programmes.

Section 2

SUMMARY DATA

2.1 WASTE MANAGEMENT

In accordance with *Condition 9.2* of Waste Licence Register No. W0123-01, Custom Compost records details of all wastes arriving at, and departing from, the facility. The overall waste summary record for this period is presented in tabular format below.

	Table 2.1: Outgoing Non-Hazardous Waste Disposal Record (January 2010 through December 2010)								
Month	Waste Description	EWC	Tonnes	Details of Haulage	Recovery				
		code		Contractor	/Disposal				
Jan-10	Commercial/Industrial	20 03 07	3.82	Greenstar	Disposal				
Feb-10	Commercial/Industrial	20 03 07	1.10	Greenstar	Disposal				
	Municipal Waste	20 03 01	4.76	Greenstar	Disposal				
	Scrap Metal	02 01 10	3.50	Leon Recycling	Disposal				
Mar-10	Commercial/Industrial	20 03 07	6.12	Greenstar	Disposal				
	Municipal Waste	20 03 01	0.66	Greenstar	Disposal				
Apr-10	Commercial/Industrial	20 03 07	2.24	Greenstar	Disposal				
	Municipal Waste	20 03 01	4.04	Greenstar	Disposal				
	Scrap Metal	02 01 10	8.24	Leon Recycling	Disposal				
May-10	Commercial/Industrial	20 03 07	3.72	Greenstar	Disposal				
Jun-10	Commercial/Industrial	20 03 07	5.00	Greenstar	Disposal				
	Scrap Metal	02 01 10	6.56	Leon Recycling	Disposal				
Jul-10	Commercial/Industrial	20 03 07	4.67	Greenstar	Disposal				
Aug-10	Commercial/Industrial	20 03 07	5.70	Greenstar	Disposal				
	Scrap Metal	20 01 10	4.64	Leon Recycling	Disposal				
Sep-10	Commercial/Industrial	20 03 07	2.96	Greenstar	Disposal				
Oct-10	Commercial/Industrial	20 03 07	5.08	Greenstar	Disposal				
Nov-10	Commercial/Industrial	20 03 07	3.40	Greenstar	Disposal				
Dec-10	Compactor	15 01 01	2.76	AES	Disposal				
	Open Skip	20 03 01	2.12	AES	Disposal				
Total Wa	ste Disposed		81.09 To	nnes					

Table 2.2: Outgoing Hazardous Waste Disposal Record (January 2010 through December 2010)									
Month Waste Type EWC Code			Name of Waste Disposal / Recovery Contractor	Tonnes	Disposal or Recovery				
Mar-10	Filter Bin	15 02 02	Enva Ireland Ltd	0.10	Recovery (D9)				
Sept-10	Filter Bin	15 02 02	Enva Ireland Ltd	0.12	Recovery (D9)				

Table 2.3 Non Hazardous Waste Recovery at the site from Jan 2010 to Dec 2010							
Waste Type	Horse Manure (tpa)*	Poultry manure(tpa)*					
January 2010	763.80	1,293.16					
February 2010	543.76	1,014.16					
March 2010	744.34	1,804.86					
April 2010	851.53	1,079.82					
May 2010	695.08	1,047.66					
June 2010	506.07	1,195.78					
July 2010	685.32	862.32					
August 2010	489.72	1,000.68					
September 2010	733.42	1,147.80					
October 2010	515.11	1,286.64					
November 2010	543.72	1,156.80					
December 2010	446.10	1,292.78					
Total	7,518 tpa	14,182 tpa					

^{*} EWC code for these wastes is 02 01 06.

No hazardous wastes are accepted at the facility at any time.

All Waste accepted at the Facility is for on-site recovery, through the composting method.

Volumes of waste accepted at the facility during the reporting period are below the maximum specified tonnages detailed in Section 1.2.3 for horse manure (16,000 tpa) and poultry litter (22,000 tpa).

2.2 ENVIRONMENTAL MONITORING

All environmental monitoring locations are shown in Appendix 1.

2.2.1 Surface Water

In accordance with Condition 5.4, *Emissions to Surface Water*, of Waste Licence Register No. W0123-01, no processed water or contaminated surface water from the facility is allowed to be discharged to surface waters. As per Schedule E of the licence, Custom Compost was required to monitor surface water once at a single discharge point for a number of parameters (SW1). The following are the results of the surface water monitoring programmes for reporting period (January 2010 through December 2010). Monitoring was carried out on one occasion during this period (December 2010).

TABLE 2.4. SURFACE WATER MONITORING RESULTS						
Parameter	December 2010	WQS Note 1				
pН	7.4	6.0 – 9.0 ^{Note 1}				
Conductivity (µS/cm)	613	1000 Note 2				
Dissolved Oxygen (mg/l)	8.4	>6 Note 3				
Dissolved Oxygen as O ₂ % Saturation	67.2	>80% Note 1				
Temperature (°C)	5.7	25 Note 1				
Suspended Solids (mg/L)	11	25 ^{Note3}				
BOD (mg/L)	2.3	High Status: ≤ 2.2 Good Status: ≤2.6 ^{Note 1}				
COD (mg/L)	32	40 Note 2				
Nitrate (as N) (mg/L)	21.5	11.29 *Note 2				
Total Phosphorus (as P) (mg/L)	0.126	-				
Ammonical Nitrogen as N (mg/l)	12.5	High Status: ≤ 0.04 Good Status ≤0.065 ^{Note 1}				
Sulphate (as SO ₄) (mg/L)	99	200 Note 2				

WQS = Water Quality Standard

Note 1: European Communities Environmental Objectives (Surface Waters) Regulations, 2009 (S.I. No. 272 of 2009).

Note 2: European Communities (Quality of Surface Water Intended for the Abstraction of Drinking Water) Regulations, 1989. Limit values for A1 waters are shown. (S.I. 294 of 1989).

Note 3: European Communities (Quality of Salmonid Waters) Regulations, 1988 (S.I. No. 293 of 1988)

* Converted Water Quality Standard for Nitrite and Ammonia as N (mg/l).

Figures in bold indicate an exceedance of the regulation value.

The surface water monitoring point is identified as SW-1 on Figure 1 (A) in Appendix 1.

The results for surface water in 2010 show variance in the levels of a number of parameters from the 2009 results. On the day of sampling the weather was dry (and frosty) and had been fairly dry for several days previous. However, some snow had been melting during the previous days giving rise to additional flow in the surface water drains. There was a medium flow of water in the ditch along the southern boundary which was free flowing with no stagnant water observed (See Figure 1 (B) in Appendix 1). There was a medium flow of water in the ditch at SW-1 at the time of sampling. As a result the characteristics of the water were different from when previously sampled in June 2009.

The pH value, at 7.4, was within the normal range for surface water and is within the legislative limits for pH. The Conductivity, measured at 613 μ S/cm, was lower than previously measured (776 μ S/cm, June 2009) indicating a reduction in the concentration of dissolved inorganic salts. The Dissolved Oxygen concentration, at 8.4 mg/l (67 % saturation), was about normal and well above any level that could be considered as harmful to aquatic life. The Suspended Solids were found at a concentration of 11 mg/l, which is well below the legislative limit of 25 mg/l for Suspended solids.

The BOD and COD values found in SW-1 at 2.3 mg/l and 32 mg/l respectively, were both well within the normal levels found in uncontaminated surface waters. The level of BOD and COD were both lower than the results observed in June 2009 (3.8 mg/l and 38 mg/l, respectively). Sulphate detected in the sample at 99 mg/l is within the normal levels found in surface water and reduced from the previous years result of 196 mg/l in June 2009.

The concentration of Nitrate, Ammonia and Phosphorus at 21.5 mg/l, 12.5 mg/l and 0.126 mg/l respectively are higher than would normally be expected in uncontaminated surface waters. In general, these nutrients often arise in surface and ground waters due to run off following the addition of natural and artificial fertilisers to farmland. In particular, elevated nitrate levels of around 9 mg/l are often found in the groundwater of the south eastern region so a background level of around 9 mg/l could be expected in the surface water depending on the origins of the water. It is likely that at times of dry weather, when there is a very low flow in the surface water ditch, that most of the flow originates from groundwater springs. It is also noted that there are old land drains, flowing from the lands to the East and North of the site, which make its way

into the drains that feed to SW-1. The level of 21.5 mg/l Nitrate indicates contamination from a nutrient rich source.

The ammonia level of 12.5 mg/l is higher than that recorded in 2009 (2.22 mg/l) and indicates the likelihood of some localised contamination arsing from the site which needs further investigation.

The annual inspection of the puraflow on-site sewerage treatment system was conducted on 18th November 2010 and it was noted that the peat fibres needed to be replaced. (See Appendix 2). This could be a reason behind the high Ammonia result. The fibre media was replaced in January 2011 and the next Surface Water sample will be taken after the system is flushed through.

2.2.2 Groundwater

No emissions to groundwater are allowed from the site. In accordance with Condition 3.17.1, *Groundwater*, of Waste Licence Register No. W0123-01, Custom Compost was required to install three monitoring points (upgradient and downgradient of the facility) to allow for sampling and analysis of groundwater as specified in Schedule E.7, *Groundwater Monitoring*. In addition, subject to the agreement of the well owners, all private wells within 250 m of the facility were required to be included in the monitoring programme. No privately owned groundwater wells were identified within 250 m of the site.

To comply with this, Custom Compost refurbished an existing borehole about midway along the southern boundary of the site (GW-2) and installed a borehole at the northern boundary of the site (GW-3). The existing groundwater well (GW-1) at the southwest corner of the site will serve as the third groundwater monitoring point. It should be noted that as part of the upgrades to the existing wells Custom Compost attached a dedicated dipping tube to the pumps at GW-1 and GW-3 to increase the ease of future water level monitoring.

The three boreholes are identified as GW-1 (Custom Compost Small Well, in use), GW-2 (borehole adjacent to the straw storage area, not in use) and GW-3 (borehole adjacent to the trailer park, in use) on Figure 2 in Appendix 1.

Table 2.5 overleaf includes the results for the groundwater parameters specified in Schedule E.7 of the facility's waste licence.

		TAF	BLE 2.5 G	ROUNDV	VATER M	IONITOR	ING RESU	ULTS JAN	N 2010 TO	DEC 201	.0		
Sampling period		bruary 20 Quarter 1			May 2010 Quarter 2			ugust 201 Quarter 3			cember 20 Quarter 4		GTV Note 2
Parameter	GW1	GW2	GW3	GW1	GW2	GW3	GW1	GW2	GW3	GW1	GW2	GW3	IGV
Flow direction	Down gradient	Down gradient	Up gradient	Down gradient	Down gradient	Up gradient	Down gradient	Down gradient	Up gradient	Down gradient	Down gradient	Up gradient	-
Groundwater level (m) ^{Note 1}	24.00	7.36	27.16	28.96	9.13	33.72	38.03	12.71	52.21	33.80	11.56	35.76	-
pH (pH Units)	6.5	6.2	5.7	6.6	6.2	6.2	6.6	6.1	6.1	6.5	6.1	6.1	6.5-9.5
COD (mg/l)	<15	<15	<15	<15	<15	<15	<10	<10	<10	<10	<10	<10	-
Ammonia (as N) (mg/l)	0.028	0.110	0.045	0.071	0.087	0.020	0.037	0.035	0.018	0.034	0.037	0.036	0.05- 0.136*
Nitrate (as NO ₃ -mg/l)	40.1	26.0	38.4	41.9	30.1	31.8	39.4	15.4	29.6	39.2	18.1	32.6	37.5*
Sulphate (as SO ₄) (mg/l)	16.6	53.9	11.2	16	53.3	9.9	16.3	57.3	9.4	16.6	56	9.3	187.5
Total Coliform (cfu/100ml)	0	212	0	0	0	0	3	0	0	17	0	0	O Note 3
Faecal Coliforms (cfu/100ml)	0	2	0	0	0	0	0	0	0	0	0	0	O Note 3

Note 1: The groundwater level was measured before sampling form the top of to the "liner" to the water level. (GW-1 dip tube 0.4 m above top of liner and GW-3 dip tube 0.29 m above top of liner, no dip tube in GW-2).

Note 2: GTV = Groundwater Threshold Values refers to "European Communities Environmental Objectives (Groundwater) Regulations, 2010 (S.I. No. 9 of 2010)". "Threshold Values" have been established for pollutants that are causing a risk to groundwater bodies. Exceedance of a relevant threshold value at a representative monitoring point triggers further investigation to confirm whether the criteria for poor groundwater chemical status are being met.

Note 3: EPA Report "Towards Settling Guideline Values For The Protection Of Ground Water In Ireland Interim Report" Table 3.1 "Interim Guideline Values for Characterisation List of Parameters".

* Converted GTV for Ammonia as N mg/l.

< = Less than

The recorded pH results for each of the boreholes are generally low and range from 5.7 pH Units for GW-1 to 6.6 pH Units for GW2 and GW-3. The pH results are just below the groundwater threshold value of 6.5 to 9.5, but have been consistently between around 6.0 – 6.5 over the past several years. COD remained below the limit of detection for COD throughout 2010 with levels of <15 mg/l for Quarter 1 and 2 and <10 mg/l for Quarter 3 and 4. Sulphate levels recorded range from 9.3 mg/l for GW-3 to 57.3 mg/l for GW-2. All results found for sulphate are well below the threshold value of 185 mg/l for Sulphate.

In Quarter 1 of 2010, the Ammonia values in GW-1 and GW-3 were low, while GW-2 was slightly elevated at 0.110 mg/l, but below the threshold limit of 0.136 mg/l. This value is also lower in comparison to the value of 0.17 mg/l obtained in December 2009. In the second quarter, Ammonia was detected at GW-2 at 0.087 mg/l which is lower than the value of 0.110 mg/l obtained in February 2010 and has shown a declining tendency over the past few monitoring events. In the third and fourth quarters, the Ammonia value in all wells remained below the threshold limit of 0.136 mg/l. The Ammonia concentration of the down-gradient borehole, GW-2, continued to show a low ammonia level compared with the previous monitoring events. The ammonia concentration decreased from 0.110 mg/l (Quarter 1, 2010) to 0.037 mg/l (Quarter 4, 2010).

The microbiological results of the groundwater monitoring indicate some mild contamination of the groundwater in GW-1 in Quarter 3 and 4 and in GW-2 for Quarter 1 of 2010. No contamination was found in GW-3 in 2010. The values obtained in GW-2 for Quarter 1 are lower compared to those obtained in December 2009 (415 cfu/100ml and 15 cfu/100ml for Total and Faecal Coliforms, respectively). Total Coliform bacteria were detected in GW-1 at 3 cfu/100ml and 17 cfu/100ml for Quarter 3 and 4, respectively. This value is insignificant as the coliform results for all wells have varied over the years with occasional slightly elevated results followed by low or zero results. In particular, GW-2 which had slightly elevated total and faecal coliforms in February 2010, showed zero coliforms for the remainder of 2010.

GW-2 is a relatively shallow well with a low water yield, consequently it is more likely to be affected by localised surface water contamination than a deep bore, high yield well. In addition, it is located in an area where there is a lot of vehicular activity (loading, unloading and moving straw bales) which causes the surface soil to be regularly disturbed. During very wet weather the area adjacent to the well can become very muddy which might increase the risk of contamination of the local groundwater. The company have carried out some remediation work adjacent to GW-2 by clearing

an area around the well, to restrict the storage of bales close to the well and provided drainage channels to reduce the risk of localised stagnant water from seeping into the well along the well lines. The improved Ammonia and Coliform results obtained in GW-2 throughout 2010 may be as a result of the remediation work carried out by the company and the drier weather in the spring and summer months.

Nitrate levels recorded throughout the year vary, with GW-1 exceeding the threshold value of 37.5 mg/l for Nitrate as NO₃ for all four monitoring events. The Nitrate concentration in GW-3 exceeded the limit in Quarter 1. Nitrate levels in groundwater in the South East region of Ireland are known to be elevated and this is evident in the upgradient well, GW-3, with values ranging from 29.6 mg/l (as NO₃) in Quarter 3 to 38.4 mg/l (as NO₃) in Quarter 1 -2010. As the groundwater monitoring results indicate that the nitrate contamination was evident at the upgradient borehole it is likely that a source of contamination is likely upgradient of the site and may have resulted from local agricultural practices in the area. The average levels recorded in GW-1, GW-2 and GW-3 are 40.15 mg/l, 22.40 mg/l and 33.10 mg/l, respectively.

The nitrate levels recorded in all three wells are significant and are illustrated in Figure 2.1 below.

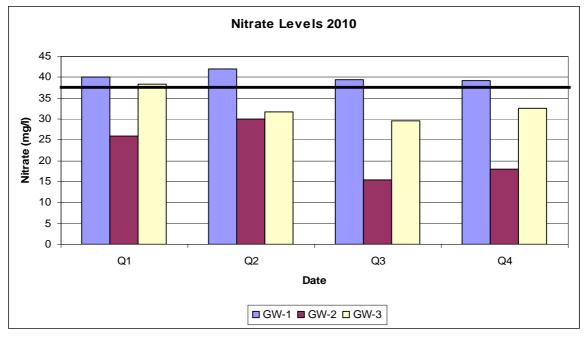


Figure 2.1 Nitrate Levels 2010

2.2.3 Air

In accordance with Schedule D.2, *Dust Deposition Limits*, and Schedule E.1.1, *Monitoring Locations*, of Waste Licence Register No. W0123-01, monitoring and analysis of dust and airborne microbe (bio-aerosol) emissions is required at the site. The following are the results for 2010. The dust monitoring points are identified on Figure 3 in Appendix 1.

As part of the dust monitoring, dust deposition gauges were established at four locations around the site boundary. The locations of the dust monitoring points are as follows:

- **D1** North West Corner of the Site;
- **D2** South West Corner of the Site;
- **D3** South East Corner of the Site; and
- **D4** North East Corner of the Site.

The dust gauges were exposed for a period of approximately one month after which they were returned to the laboratory for analysis. The sampling periods for the dust monitoring were 31/05/2010 to 29/06/2010 (Month 1), 29/06/2010 to 28/07/2010 (Month 2) and 28/07/2010 to 27/08/2010 (Month 3). Results of the dust monitoring are shown in Table 2.6.

TABLE 2.6. DUST MONITORING RESULTS (mg/m²/day)							
Location Month 1 Month 2 Month 3 ELV							
D1	198	208	85	350			
D2	117	114	344 ^{Note 1}	350			
D3	120	160	115	350			
D4	160	142	68	350			

Note 1: This sample, location D2 from 28/07/2010 to 27/08/2010, contained a reddish/brown liquid and pieces of straw.

The Dust Deposition levels measured at all locations were below the licence limit of 350 mg/m²/day. Station D2 is located close to the straw storage area, adjacent to a fence with small trees and bushes nearby. In 2010, the sampling point was relocated above 4 metres away from the fence, to reduce the incidence of algal growth and bird interference which occurred in 2009.

When the jar at Station D2 was initially installed, in May 2010, there was a good separation from the straw bales. However, by July, the straw bales were stacked quite close to the sampling location which could have resulted in localised contamination of the jar. In addition, some tidying work was also carried out in the area which could have caused localised interference with the sample. The location of Station D2 will be re-examined for 2011 to ensure no localised interference.

It is also possible that the harvesting of crops, barley, in the adjacent fields could have caused the unusual elevated dust deposition at Station D2 in July. The dust deposition rate recorded for all four analysis events are illustrated in Figure 2.2 below.

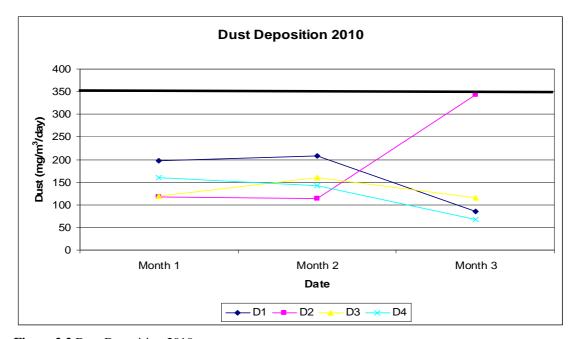


Figure 2.2 Dust Deposition 2010

A bio-aerosol survey was conducted on the 11th of August 2010 when the site was fully operational. Table 2.7 contains the results of the bio-aerosol survey.

The bio-aerosol monitoring points are identified on Figure 4 in Appendix 1.

Location AB1 was upwind of the site processing areas, located at the site entrance. No *Aspergillus fumigatus* was recorded at this location and levels of mesophillic bacteria were recorded at between 170 - 191 cfu/m³. The upwind results give an indication of the background level of bioaerosols present naturally in the environment.

Location AB2 is a sensitive receptor situated directly north of the site, up to 100 m from the processing area. Tall hedgerow also exists between the site and this location. No *Aspergillus fumigatus* was recorded at this location and a level of 35 cfu/m³

mesophillic bacteria was recorded. However, these levels are lower than typical levels recorded at composting plants. This would suggest that the site is not having an impact on the sensitive receptor.

The location AB3 was situated at the eastern boundary of the composting facility. No *Aspergillus fumigatus* was recorded at this location. Mesophillic bacteria levels of between 42 - 92 cfu/m³ were recorded.

AB4 is located within the composting yard near the south boundary of the site. Both *Aspergillus fumigatus* and mesophillic bacteria were recorded at this location. *Aspergillus fumigatus* showed levels of between 0 - 7 cfu/m³ and mesophillic bacteria levels of between 7,131 – 18,565 cfu/m³ were recorded..

In conclusion, the recorded concentrations of both mesophillic bacteria and *Aspergillus* fumigatus from the Custom Compost site is similar to previous monitoring events and is not impacting on nearby sensitive receptors.

Note

Bioaerosols are constantly present in the ambient atmosphere as a consequence of dust from soil and the natural breakdown of vegetation. Measured ambient levels of bacteria and fungi vary over a wide range. A recent review reported on a number of studies that highlighted airborne fungi levels of 0 to 94,000cfu/m³ and airborne bacteria to range from 2 to 17,600cfu/m³ (1).

	Table 2.7. Bioaerosol Monitoring Results								
Sample	Location	Aspergillus (cfu		Mesophillic Bacteria (cfu/m³)					
	Sample 1 Sample 2		Sample 1	Sample 2					
AB-1	Upwind (Site Entrance)	0	0	191	170				
AB-2	Downwind (House, sensitive receptor)	0	0	35	35				
AB-3	Downwind (Back of Site, East boundary, near Pasteurisation Tunnels)	0	0	42	92				
AB-4	AB-4 Downwind (Site Yard near Bale Storage, South Boundary)		0	7,131	>18,565				
Control		()	7					
Typical rep	orted concentrations at Custom Compost	0- 1	,000	1,000 – 1,000,000					

2.2.4 Noise

In accordance with Condition 5.5, *Noise Emissions*, of Waste Licence Register No. W0123-01, there shall be no clearly audible tonal or impulsive component in the noise emissions from the facility at any sensitive noise location. To comply with this Custom Compost are required to carry out bi-annual noise assessments of the site at several monitoring locations. The noise monitoring points are identified on Figure 5 in Appendix 1.

The first bi-annual noise survey was completed on the 11th November 2009 and 26th and 27th January 2010 in order to survey day and night time noise, respectively. Table 2.8 contains the results of the noise survey.

Location B1/NSL1 was surveyed for daytime and night time noise. The daytime noise at this location recorded a L_{Aeq} of 58 dB(A), which is slightly above the daytime limit of L_{Aeq} 55dB(A), and was dictated by site and road traffic. During the night time measurement, a tonal noise was detected. The source of this noise being a centrifugal type fan used as aeration for the bunkers and pads and it was located between the rear of the Phase 3 tunnel filling hall and bunkers. The tone would appear to be recent since it was not identified in the previous noise survey. The noise was of a high frequency nature and due to a motor or fan bearing fault. The faulty fan, identified as the source of the tone, was repaired in early 2010. An additional noise survey was carried out on 15th March 2010 at B1/NSL1 to confirm that any remedial measures had the desired effect. In this instance, two measuring points were adopted, the first being 2 metres distance from the aeration fan and the second at location NSL1. Therefore, as is evident in Table 2.8, after completing the repairs to the aeration fan, the 800Hz tone, identified at location NSL1 during the January 2010 noise survey, has been eliminated. Furthermore, the night time noise measurement recorded at 47 dB (A) is only slightly above the limit set at 45 dB (A) and is due to plant noise at the time of the survey.

Location B2/NSL2 was also surveyed and the day (55 dB (A)) and night time (42 dB (A)) noise at this noise sensitive location meets the day and night time license noise criterion of 55dB(A) L_{Aeq} and 45dB(A) L_{Aeq} respectively. Plant noise in not audible at this location, as is evident on the site map in Figure 5.

The third noise sensitive location NSL3 is a roadside noise sensitive dwelling located on the Ballycanew Road, 250 m south of the Custom Compost south west corner site boundary. The day and night time noise measured at this noise sensitive location was entirely due to road traffic. The daytime result at 64 dB (A) has exceeded the limit of

55 dB (A) and the night time result (46 dB (A)) recorded at this location is slightly above the limit of 45 dB(A).

Two remaining locations B3 and B4 were also surveyed for day time and night time noise. There are no limits set out in the Waste licence for noise locations B3 and B4 as they are not noise sensitive locations. As a result of plant noise and the movement of various site vehicles location B3 recorded a high average L_{Aeq} of 67 dB(A) for day time and 63 dB(A) for night time noise and B4 recorded average measurements of 59 dB (A) and 62 dB (A) for day and night time, respectively. Noise at Location B4 is also due to plant and site traffic. Measurements at site boundary locations B3 and B4 serves to detect any tones associated with plant noise in this area; and in this instance the measurements indicate that the 800Hz tone detected at B1/NSL1 was not due to plant operating in this immediate area.

Table 2.8 First Bi-Annual Noise Survey Daytime and Night time noise							
Location	Date &	Noise Parameters			Comment	Tonal	
Location	Time	L_{Aeq}	L _{AF90}	L_{AF10}	Comment	Tollar	
B1/NSL1	11/11/09 15:14	58	53	59	Site & road traffic.	No	
B1/NSL1	27/01/10 00:42	47	45	48	Plant noise.	At 800 Hz	
B2/NSL2	11/11/09 14:38	55	52	55	Public road traffic, plant noise.	No	
B2/NSL2	26/01/10 22:18	42	39	41	Public road traffic, plant noise.	No	
В3	11/11/09 15:53	67	65	68	Plant noise.	No	
В3	27/01/10 00:05	63	62	63	Plant noise.	No	
B4	11/11/09 16:28	59	55	62	Plant noise.	At 630 Hz	
B4	26/01/10 23:29	62	61	64	Plant noise.	At 20 & 31.5 Hz	
NSL3	11/11/09 14:01	64	46	61	Public road traffic.	No	
NSL3	26/01/10 22:53	46	36	40	Public road traffic.	No	
B1/NSL1	15/03/10 23:08	83	-	-	REPEAT NOISE SURVEY.	No	
B1/NSL1	15/03/10 23:17	46	-	-	REPEAT NOISE SURVEY.	No	

Note: The heading location "B" denotes a site boundary point and "NSL" signifies noise sensitive location. Daytime and night time noise samples were a minimum of 30 minutes duration.

The second bi-annual noise survey was completed on the 19th August 2010 and 25th August 2010 in order to survey day and night time noise respectively. Table 2.9 below contains the results of the noise survey.

Table 2.9 Second Bi-Annual Noise Survey Daytime and Night time noise						
Location	Date &	Noise Parameters			Comment	Tonal
Location	Time	L _{Aeq}	L _{AF90}	L _{AF10}	Comment	Tonai
B1/NSL1	19/08/10 10:51	55	48	58	Truck movements in yard, fans audible.	No
B1/NSL1	25/08/10 00:44	45	44	45	Artic arrives and parks, fans audible.	No
B2/NSL2	19/08/10 13:43	55	49	54	Local road traffic.	No
B2/NSL2	25/08/10 00:09	38	36	38	Local road traffic, fans just audible.	No
В3	19/08/10 11:27	67	59	71	Plant noise.	No
В3	25/08/10 01:54	60	60	61	Plant noise.	Yes at 20Hz & 31.5Hz
B4	19/08/10 13:04	58	52	59	Plant noise.	No
B4	25/08/10 01:20	63	62	63	Plant noise.	Yes at 200Hz
NSL3	19/08/10 10:11	64	42	59	Local road traffic and dog barking.	No
NSL3	24/08/10 23:31	48	33	40	Local road traffic.	No

Note: The heading location "B" denotes a site boundary point and "NSL" signifies noise sensitive location. Daytime and night time noise samples were a minimum of 30 minutes duration.

Location B1/NSL1 was surveyed for daytime and night time noise and recorded L_{Aeq} of 55 dB(A) and 45 dB(A), respectively. Both the daytime and night time results recorded at this location are on the limits of 55 dB(A) and 45 dB(A) as stated in the Waste Licence (W0123-01). Daytime noise at this location was influenced by dumper and fork truck movements in the yard and also by main road traffic. Night time noise at B1/NSL1 was due to the arrival and parking of a custom compost articulated truck along with distant road traffic, with fan noise being audible at times.

Location B2/NSL2 was also surveyed for daytime and night time noise and recorded L_{Aeq} of 55 dB(A) and 38 dB(A), respectively, and these noise levels do not exceed their respective limits of 55 dB (A) and 45dB (A). Day and night time noise at this noise sensitive location was influenced by road traffic on the adjacent public roadway. Fan noise was just audible during the night time measurement.

The third noise sensitive location NSL3 is a roadside noise sensitive dwelling located on the Ballycanew Road, 250 m south of the Custom Compost south west corner site

boundary. The average daytime noise recorded a L_{Aeq} of 64 dB(A) is above the daytime limit from the licence of a noise sensitive location of L_{Aeq} 55dB(A). The average night time noise for NSL3, L_{Aeq} 48 dB(A), is above the night time noise limit of 45 dB(A). This location is subjected to the noise of public road traffic during the day and night time noise monitoring events.

There are no limits set out in the Waste licence for B3 and B4 as they are not noise sensitive locations. As a result of plant noise and site traffic location B3 recorded a high average L_{Aeq} of 67 dB(A) for day time and 60 dB(A) for night time noise. Location B4 also recorded high L_{Aeq} values as the noise was mostly dictated by plant operations and site traffic at this location. Daytime noise measured a L_{Aeq} of 58 dB(A) and night time noise measured a L_{Aeq} of 63 dB(A) at B4. Tonal noise present at locations B3 and B4 was not detected at any of the noise sensitive locations.

2.2.5 **Odour**

Please revert to Objectives and Targets for 2011 (Section 3.6) for further proposed infrastructural works to improve odour abatement at the facility.

2.2.6 Meteorological

Daily records are kept of the meteorological conditions at the site as outlined in Schedule E.6 of the Waste Licence. These records are maintained by Mr. Pat Miskella in the facility's site office.

2.3 ENERGY AND WATER CONSUMPTION

The summary details of energy and water use at the facility for the period January 2010 through December 2010 are detailed in Table 2.10 and Table 2.11, below.

TABLE 2.10 ENERGY CONSUMPTION AT THE FACILITY 2008 - 2010					
Parameter	2008 ^{Note 1}	2009 ^{Note 2}	2010 ^{Note 3}		
€Spent on Energy	€1,359,093	€1,203,312	€1,014,136		
Electricity Day Time	3,813,034 kwh	4,093,200 kwh	4,068,915 kwh		
Electricity Night Time	2,042,426 kwh	2,156,670 kwh	2,172,868 kwh		
Road Diesel	334,143 Litres	320,259 Litres	326,45,0 Litres		
Gas Oil	359,574 Litres	373,900 Litres	367,042 Litres		

Note 1: Usage values for road diesel, gas oil and electricity are to end December 2008

Note 2: Usage values for road diesel, gas oil and electricity are to end December 2009

Water used at the site can be separated into three sources: 1) groundwater pumped from the on-site and nearby wells; 2) municipal supply; and 3) water reclaimed from the yard surface from rainwater runoff. The total water use figure presented below includes only the water pumped from the well and taken from the municipal supply. Determining the amount of water reclaimed from the yard surface is not feasible, as water on the yard surface is continuously recycled as part of the composting process. It is also proposed to convert the existing goodie water tank into an uncontaminated tank for storing roof water runoff arising from the roofs at the facility. Please refer to section 3.6 Objectives and Targets for January to December 2010.

TABLE 2.11 WATER CONSUMPTION DECEMBER 2008 - DECEMBER 2010						
Parameter 2008 2009 2010						
Total Water Use	92,220 m ³	82,528 m ³	94,268 m ³			
Estimated Quarterly Use	23,055 m ³	20,632 m ³	23,567 m ³			

Of the 94,628 m³ of water used in 2010, 94,065 m³ are from the groundwater well and 203 m³ are from the municipal supply.

2.4 NUISANCE CONTROLS

In compliance with the following conditions of the Waste Licence, environmental nuisances are controlled to ensure they cause minimal impact on the immediate area.

- **Condition 3.9** requires the installation of a wheel cleaning facility at the site to prevent migration of dust/waste off the site. A wheel cleaning facility has been in place and in operation since prior to the facility being licenced by the Agency.
- **Condition 3.13.1(e)** requires that dirty yard areas be cleaned at least twice daily and records of such be maintained. Cleaning of the yard by sweeping is conducted twice daily by designated individuals and is subsequently recorded on a sheet maintained in the site office.
- Condition 6.2 requires that the facility roads and surfaces are maintained in a clean condition. Routine cleaning procedures are in place at the site. The areas outside the yard are swept and then washed with a high powered hose regularly to remove debris from the facility roads and surfaces. Cleaning of these roadways and surfaces occurs on a regular basis as needed, but no less than once per week. Cleaning of the yard area is conducted as outlined above.
- **Condition 6.3** requires that a pest control programme be implemented at the facility. A pest control programme has been in place at the site for many years and is supplied by Pest Guard Environmental Services, Dublin 8. There was no report of nuisance caused by pests within the reporting period.
- Condition 6.5.1 refers to minimisation of airborne dust nuisance at the facility. Procedures associated with raw materials acceptance at the facility and regular cleaning of the facility minimises airborne dust nuisance at the site. Dust deposition monitoring at the site confirms that these measures are adequately reducing airborne dust emissions from the site. There was no report of nuisance caused by dust within the reporting period.
- Condition 7.8.1 requires that the licensee carry out a daily inspection of the facility and its immediate surrounds for nuisances caused by litter, vermin, birds, flies, dust and mud. Daily inspections for these nuisances are carried out by Mr. Pat Miskella, or a nominated deputy, and the results recorded as required by Condition 9.3(f). There was no report of nuisance caused by litter, vermin, birds, flies, dust and mud within the reporting period.

Condition 7.8.1 also requires that a daily assessment of odour and weather conditions is undertaken. This assessment is undertaken and recorded by Mr. Pat Miskella, or a nominated deputy, as required by Condition 9.3(f).

2.5 ENVIRONMENTAL NON-COMPLIANCES, COMPLAINTS AND INCIDENTS

2.5.1 Complaints

All complaints are recorded in accordance with Condition 9.4 of Waste Licence no. W0123-01, which requires Custom Compost to maintain a written record of all complaints relating to the operation of the facility including:

- *date and time of the complaint;*
- name of the complainant;
- *details of the nature of the complaint;*
- actions taken on foot of the complaint and the results of such actions; and,
- the response made to each complainant.

Table 2.12 contains a summary of the numbers and types of complaints that were recorded during the period covered by this report. The full written record is available for review in the Custom Compost offices.

Table 2.12 Summary of Complaints Received for the Custom Compost Facility						
Category	20	09	2010			
	Complaints Rec'd by Custom Compost	Complaints Rec'd by EPA	Complaints Rec'd by Custom Compost	Complaints Rec'd by EPA		
Noise	0	0	0	0		
Odour	96	6	141	19		
Water	0	0	0	0		
Dust	0	0	0	0		
Procedural	0	0	0	0		
Misc.	0	0	0	0		
Total	96	96	141	19		
Yearly Total	10)1	16	60		

2.5.2 Incidents

Under Condition 10.2 of Waste Licence No. W0123-01, Custom Compost is required to notify the EPA in the event of an incident occurring on the facility and submit a written record of the incident to the EPA as well as a written record of any actions taken in response to the incident.

There were no incidents to report for the period January through to December 2010.

2.5.3 Non-Compliances

Table 2.13 outlines the dates of site inspections, audits and compliance status

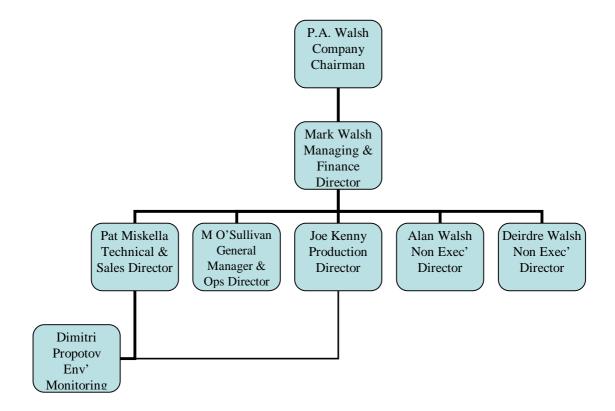
	TABLE 2.13 EPA CORRESPONDENCE/AUDITS/INSPECTIONS						
Date of	Report Type	Inspector(s)	Description				
Issue				(Y/N)			
03/02/2010	Site	Dr. Magnus	Odour assessment of the environs of the facility (29/01/2010). In the opinion of the Inspector, no	Y			
	Inspection	Amajirionwu	odours that gave rise to significant impairment of, or significant interference with amenities or the				
			environment beyond the site boundary, were detected during the course f the odour assessment.				
13/04/2010	Site	Dr. Magnus	Odour assessment of the environs of the facility (31/03/2010). No odours that gave rise to	Y			
	Inspection	Amajirionwu	significant impairment of, or significant interference with amenities or the environment beyond				
			the site boundary were detected.				
09/04/2010	Telephone	Andrew Cox	Complaint received by EPA from Mr Byrne on 09/04/2010 regarding odours from the facility.	N/A			
	Complaint						
23/04/2010	Telephone	Andrew Cox	Complaint received by EPA from Mr Sean Byrne on 23/04/2010 regarding odours from the	N/A			
	Complaint		facility.				
28/04/2010	Site	Dr. Magnus	Odour assessment of the environs of the facility (27/04/2010). Moderately strong odour detected at	N			
	Inspection	Amajirionwu	Location 4, at the entrance to the Byrnes residence. Moderately strong odour detected at Location				
			5 on the North East road, at the Molloy's residence				
02/06/2010	Site	Dr. Magnus	This inspection was conducted on 31/05/2010 to determine the progress made by the licensee	N			
	Inspection	Amajirionwu	towards the collection of all air emissions from the following sources: (i) goodie/process water				
			storage tanks, (ii) bale breaking/blending line, and (iii) manure storage. While the Agency notes				
			the progress made in enclosing the Phase I process and installing the associated stack, it				
			emphasises the urgency required to ensure that works are completed in accordance with Condition				
			3.11.3.				
			The Inspector confirmed that the odours detected off-site were consistent with the characteristic of				
			the odour detected on-site.				
			The Licensee has failed to provide a system for the collection of air emissions from the goodie				
			water tank, bale breaking/blending line and manure storage.				

	TABLE 2.13 EPA CORRESPONDENCE/AUDITS/INSPECTIONS					
Date of Report Type Inspector(s)		Inspector(s)	Description			
Issue				(Y/N)		
03/06/2010	Telephone	Andrew Cox.	Complaints received by EPA from Mr & Mrs Sean Byrne on 03/06/2010 and 04/06/2010 regarding	N/A		
04/06/2010	Complaint	Dr. Magnus	odours from the facility.			
		Amajirionwu				
23/06/2010	Telephone	Dr. Magnus	Complaints received by EPA from Mr Sean Byrne and Mrs Kathleen Parry on 21/06/2010 and from	N/A		
	Complaint	Amajirionwu	Ms Meave Murphy on 22/06/2010 regarding odours from the facility.			
14/07/2010	Telephone	Andrew Cox.	Complaints received by EPA from Mrs Noleen Byrne on 14/07/2010 and on 20/07/2010 regarding	N/A		
20/07/2010	Complaint		odours from the facility.			
21/07/2010	Site	Dr. Magnus	Odour assessment of the environs of the facility (28/06/2010). Moderately strong odour detected at	N		
	Inspection	Amajirionwu	Location 4, at the entrance to the Byrnes residence. Moderately strong odour detected on the North			
			East road, at the Molloy's Residence (Location 5).			
03//08/2010	Site	Dr. Magnus	Odour assessment of the environs of the facility (30/07/2010). No odours that gave rise to	Y		
	Inspection	Amajirionwu	significant impairment of, or significant interference with amenities or the environment beyond the			
			site boundary were detected.			
31/08/2010	Site	Dr. Magnus	Odour assessment of the environs of the facility (30/08/2010). Moderately strong odour detected on	N		
	Inspection	Amajirionwu,	the West Road at the Jones' residence (Location 5). Moderate odour detected at the entrance to the			
			Byrne's Residence (Location 4).			
08/09/2010	Telephone	Dr. Magnus	Complaints received by EPA from Mr & Mrs Byrne on 03/09/2010, 06/09/2010 and 08/09/2010	N/A		
	Complaint	Amajirionwu	regarding odours from the facility.			
30/09/2010	Site	Dr. Magnus	Odour assessment of the environs of the facility (29/09/10). Moderate odour detected at Location 9.	N		
	Inspection	Amajirionwu,				
31/08/2009	Site	Dr. Magnus	Odour assessment of the environs of the facility (28/08/2009). Moderate odour detected at Location	N		
	Inspection	Amajirionwu	9, at the entrance to the Crushing and Recycling Facility along the Ballycanew/Gorey Road.			
07/10/2010	Telephone	Andrew Cox	Complaints received by EPA from Mr Sean Byrne on 07/08/2010 and 08/10/2010 regarding odours	N/A		
08/10/2010	Complaint		from the facility.			

Section 3 MANAGEMENT OF THE ACTIVITY

3.1 MANAGEMENT STRUCTURE

The organisational structure of Custom Compost is in accordance with the following organisational chart. All staff members are required to be aware of their environmental duties and responsibilities and to complete such duties according to agreed procedures. The Technical and Sales director (Mr. Pat Miskella) is primarily responsible for Environmental Management activities at the site.



Written details as to the management structure and each individual's responsibilities have been submitted to the Agency as required under Condition 2.2 of the site's waste licence. These details are summarised below:

Pat Miskella, Technical Director: is responsible for all compliance issues relating to the Waste Licence, including interpretation of results of all sampling and monitoring.

Michael O'Sullivan, General Manager & Operations Director: has overall responsibility for the day to day operation of the facility.

Joe Kenny, Production Director: is responsible for facility plant and maintenance in relation to compliance issues.

Dimitri Protopopov, Monitoring Technician: is being trained in areas of Environmental and Process monitoring.

3.2 ENVIRONMENTAL SPENDING

The itemised spend on environmental issues at Custom Compost for the period January 2010 through to December 2010 is listed below.

Table 2.14 Environmental Spend January to December 2010	€
EPA fees	13,619
Waste Licence No. 123-1 Management	
 emissions monitoring, airborne microbes monitoring, dispersion modelling, hydrological assessments, Process Water Management, odour assessment and other required environmental reporting. 	17,722
Environmental Capital Costs	1,427
Environmental Improvements to the Site	
- Site improvements, eg: remedial work to concrete yard	7,185
- Rainwater Harvesting	5,136
Consultancy	
- wind assessment	1,400
Recovery / Disposal of waste	11,819
Costs associated with staff management of environmental issues	75,000
Miscellaneous	1,001
Total Spending	€134,330

3.3 ENVIRONMENTAL TRAINING AND PROCEDURES

3.3.1 Environmental Procedures in Place

In Compliance with Waste Licence Reference number W0123-01 (Condition 2.3.1) an Environmental Management System has been established at Custom Compost. All procedures and forms are controlled by record numbers and all records are stored in the Technical / Environmental Directors office. A list of all procedures and related forms in the Environmental Management System has been included in Appendix 3. A summary of the scope of each procedure implemented during the reporting period is as follows:

Communication Procedure

The scope of this procedure is to ensure an effective system of communication is available for internal and external reporting and employee awareness, and to ensure that the concerns of external bodies and the general public are addressed in an appropriate manner.

Environmental Objectives & Target Procedure

The purpose of this procedure is to establish, maintain and document specific Environmental performance objectives and targets at each relevant function and level within the organisation with a view to minimising and, where possible, eliminating all adverse impacts on the Environment. In addition, to set programmes to ensure that the objectives and targets are achieved.

Non-Conformance, Corrective / Preventive Action

The purpose of this procedure is to describe how actions are determined to eliminate the causes and potential causes of non-conformances.

Surface Water Management

This procedure defines how the facility should manage all its Surface Water, including procedures for the rainwater collection and drainage system and management of all process water.

Environmental Monitoring

The Environmental monitoring procedure has been developed to ensure that Custom Compost is performing environmental monitoring in compliance with the Conditions of Waste Licence No. W0123-01.

Waste Management Procedure

The waste management procedure details the requirements for handling, storage and disposal of waste on site.

Nuisance Control Procedure

This procedure documents the procedures in place in relation to odour, noise, dust, vermin and any other potential nuisance. It ensures that they do not give rise to nuisance at the facility or in the immediate area of the facility.

<u>Incident Investigation and Reporting Procedure</u>

This procedure details the appropriate response and action which should be taken in relation to an Environmental Incident.

Bunding Procedure

The Bunding Procedure details the capacity of the bunds at Custom Compost and outlines the frequency for bund integrity testing.

Environmental Management System Documentation

The Documentation procedure defines the method for the generation and control of environmental records used by Custom Compost.

Annual Environmental Report

The purpose of this procedure is to ensure that an Annual Environmental Report is submitted to the Agency at the end of each reporting year. It also details the requirements of the Report.

Environmental Audits

Environmental Management system (EMS) determines whether the system is operating in compliance with the Environmental Policy and Waste Licence W0123-01.

Management Review

The purpose of the Management Review procedure is to ensure the continued sustainability and effectiveness of the Environmental Management System.

Reporting

The purpose of the reporting procedure is to ensure all reports pertaining to the Licence are forwarded to the Agency in the correct manner and on time.

3.3.2 Environmental Training

A training needs matrix identifying all the environmental training required for all Custom Compost employees has been documented. This training shall include all Environmental Procedures implemented for the site, the requirements of the Waste Licence and will also address Energy awareness issues. This Environmental awareness training programme has commenced on site based on the matrix. It is planned that this formal training programme will continue in 2011.

3.4 PUBLIC INFORMATION

Condition No. 3.3.1 requires the installation of a Facility Notice Board at the facility that is legible to persons outside the main entrance and includes the following information, as per Condition 3.3.2:

- 1. The name and telephone number of the facility;
- 2. The name of the licence holder;
- 3. An emergency out of hours contact telephone number;
- 4. The waste licence reference number; and
- 5. Where and when environmental information relating to the facility can be obtained.

A Facility Notice Board containing the required information is situated at the site entrance.

Also, Condition 2.4 of the Waste Licence requires that Custom Compost,

"inform and involve the local community concerning the Environmental performance of the facility and to ensure that members of the public can obtain information at the facility".

As part of compliance with this condition, Custom Compost sent a letter to all the local residents on the 20th of August 2010 to inform them of the results of the independent assessment carried out to determine the effectiveness of the odour control infrastructure installed in 2008 and early 2009. A copy of the letter sent out to the local residents is included in Appendix 4.

3.5 REVIEW OF OBJECTIVES AND TARGETS FOR THE PERIOD JANUARY 2010 THROUGH DECEMBER 2010

The review of the Objectives and Targets for 2010 is presented in tabularised form, overleaf. A number of the listed Objectives and their subsequent targets are cyclical as the company attempts to achieve continuous environmental improvement.

LICENCE OBJECTIVE	LICENSEE TARGETS	TARGET DATE	TARGET V ACHIEVEMENTS
Environmental Monitoring	1. Complete all required monitoring events	December 2010	Completed
EMS	Initiate the work required to achieve accreditation of the Environmental Management System to an International Standard (ISO 14001).	2010	Ongoing
Reduce Odour Emissions	1. Odour assessment to determine effectiveness of the new infrastructure & identify possible requirements for further remedial action.	2010	Completed – Early 2010
Reduce municipal/ groundwater use	 Installation of a new above ground tank to replace the goodie tank and store all process water and all contaminated water on site. To convert the existing goodie water tank into a surface water storage tank which to capture rainwater running off the roofs of the Phase I, II and III tunnels. 	December 2010	Ongoing
Environmental Awareness	 Institute a formal staff training programme for environmental issues/awareness including requirements of Waste Licence Undertake energy awareness training for all staff 	December 2010	Commenced - not completed Compoing
Energy	 Implement recommendations of the Energy Audit Monitor for effectiveness 	December 2010	Ongoing
Public Awareness	Continue regular exchange of information with neighbours to advise them about planned infrastructural improvements at the site relating to environmental issues	Ongoing	Ongoing

3.6 OBJECTIVES AND TARGETS FOR THE PERIOD JANUARY 2011 THROUGH DECEMBER 2011

A list of the Objectives and Targets for 2011 is presented in tabularised form, overleaf. A number of the listed Objectives and their subsequent targets are cyclical as the company attempts to achieve continuous environmental improvement. At the end of the year the register is reviewed and the Objectives and Targets are revised.

LICENCE OBJECTIVE	LICENSEE TARGETS	TARGET DATE
Environmental Monitoring	Complete all required monitoring events	December 2011
EMS	Initiate the work required to achieve accreditation of the Environmental Management System to an International Standard (ISO 14001).	December 2011
Environmental Resource	Recruit a part-time Environmental Officer for the site to support the management of all environmental aspects of the site.	Currently recruiting for Environmental Officer
Reduce odour emissions & municipal/ groundwater use	Submit Planning Permission to Wexford County Council to carry out further infrastructural works to improve odour abatement at the facility. This will include the installation of a new "above" ground goodie water tank with roof & own abatement system	Planning submission Early 2011
Environmental Awareness	Institute a formal staff training programme for environmental issues/awareness including requirements of Waste Licence Undertake energy awareness training for all staff	December 2011
Energy	Continue to implement recommendations of the Energy Audit Monitor for effectiveness	December 2011
Public Awareness	Continue regular exchange of information with neighbours to advise them about planned infrastructural improvements at the site relating to environmental issues	December 2011

Section 4 LICENCE SPECIFIC REPORTS

4.1 DEVELOPMENT/INFRASTRUCTURAL WORKS UNDERTAKEN IN 2010

The following is a list of development/infrastructural works undertaken at the Custom Compost facility during the reporting period:

- (1) Odour infrastructural works Installed a roof sprayer system to treat fugitive emissions from the site.
- (2) Completion of repairs to concrete yard.
- (3) Significant amount of management time spent researching future site improvements and site technology options to further improve odour abatement on site.

4.2 DEVELOPMENT/INFRASTRUCTURAL WORKS PLANNED FOR 2011

The following is a list of development/infrastructural works planned at the Custom Compost facility for the forthcoming reporting period:

(1) Submit Planning Permission to Wexford County Council to carry out further infrastructural works to improve odour abatement at the facility. This will include the installation of a new "above" ground goodie water tank with roof & own abatement system.

4.3 TANK, BUND AND PIPELINE TESTING COMPLETED DURING THE REPORTING PERIOD

There are three 20,000 litre double skinned storage tanks on site for diesel and gas oil. All three tanks were fitted with a bundman interstitial alarm. A documented weekly check of these alarms was implemented on the 2nd of August 2008 as requested by the Agency.

A twice weekly inspection of the process water pipeline which supplies the dunking tank with process water from the goodie tank was implemented. Any remedial actions identified during the inspection are documented and action is taken immediately.

The next tank, bund and pipeline testing was completed on 18th March 2011, however the report was not available before submitting this AER and will be submitted in next years report.

4.4 FINANCIAL PROVISION

An Environmental Liability Risk Assessment (ELRA) was conducted for the Custom Compost Facility as required under Condition 11.2.1 of the waste licence. This report includes an assessment of the potential risk of impacts from the Custom Compost facility to surface water, groundwater, soil, atmosphere and human health as well as a proposal for a decommissioning and aftercare plan.

Based on the findings of this study, it is considered that the installation of an environmental liabilities pollution cover of €101,500 for Custom Compost will guarantee that the liabilities arising from: a) any environmental accident occurring during the operation phase of the facility; and b) the decommissioning and closure of the facility, are financially provided for.

An escrow agreement has been put in place to cover the known environmental liabilities of the site, including the decommissioning and closure of the facility as identified in the assessment. It is considered that the lifetime of the facility shall be at a minimum 20 years. The agreement ensures that a sum of \bigcirc ,500 shall be deposited into the Escrow account over a 20 year period in order to provide the \bigcirc 0,000 required for the known environmental liabilities. The initial deposit was made on the 4th of December 2008. The second deposit was made on the 29th January 2010 and the third deposit was made on the 15th February 2011. It has been identified that the most suitable financial instrument for the unknown liabilities is a company guaranteed bond to cover \bigcirc 1,500.

4.5 ENERGY AUDIT

An Energy Audit has been carried out for the site and was completed in March 2007. In addition, a further Energy Audit was conducted via Sustainable Energy Ireland on 15th July 2009. The recommendations included in both reports shall be implemented to increase energy efficiency at the site and reduce energy consumption.

The main recommendations of both Energy Audit reports are listed in the Annual Environmental Report for the year ending 2009 and will continue to be implemented throughout 2011.

Furthermore, Custom Compost participates in the Winter Peak Demand Reduction Scheme (WPDRS) to reduce electricity consumption during peak hours in the winter months.

4.6 COMPATABILITY OF THE ON-SITE SEWERAGE TREATMENT SYSTEM

The annual inspection of the puraflow on-site sewerage treatment system was conducted in November 2010. Observations on site indicated that the peat fibres need to be replaced (See Appendix 2 for the Puraflo Wastewater Treatment System Service inspection Report) and the fibres were replaced in January 2011.

The annual service agreement for 2011 has been put in place which includes the following:

- Inspection of the septic tank and pump chamber to see if they need to be desludged.
- A check of the status of the pump chamber, confirmation that the electrical control panel is connected and operational, confirmation that the float switch is operational and confirmation that the pump is operational.
- A check of the condition of the media.
- Check for any obvious water infiltration into any part of the system.
- A check of the general appearance and condition of the system and the surrounding ground area.

SECTION 5 CONCLUDING REMARKS

5.1 MONITORING

Results of the Environmental Monitoring Programme carried out at the Custom Compost facility during 2010 indicates that exceedances were recorded for the day and night time noise limits. Three noise sensitive locations were identified and exceedances were recorded for both day time and night time noise at the noise sensitive locations 1 and 3. These exceedances were as a result of public road traffic and site activities. With regard B1/NSL1, a high frequency noise was recorded during the first bi-annual noise event and the noise source was due to a faulty fan. Once the faulty fan was repaired, a repeat noise survey identified that the tonal noise had been eliminated. In relation to the noise sensitive location NSL3, public road traffic was the only noise source detected at this location for both monitoring events in 2010. High noise levels were also detected at the site boundary locations B3 and B4 for both day time and night time noise, however there are no limits set out in the Waste Licence for these boundary locations. All other levels were deemed to be within acceptable levels.

There was no exceedance of the environmental limit value for dust at the facility during the reporting period.

Significant levels of nitrate have been detected in the ground waters both up gradient and down gradient of the facility during the monitoring period. These results are in-line with previous years and as Nitrate contamination is present in the upgradient borehole it is likely that the contamination may be as a result of agricultural practices upgradient of the site. The Ammonia levels were lower than those recorded for 2009 in GW-2, with no exceedances occurring in any of the boreholes. The microbiological results indicate some contamination of groundwater in the GW-2 (Quarter 1) and GW-1 (Quarters 3 and 4). High coliform / faecal coliform bacteria was present in GW-2, in the first quarter of 2010, but these concentrations had decreased significantly since December 2009. The coliform results for all wells have varied over the years with occasional slightly elevated results followed by low or zero results. In particular, GW-2 which had slightly elevated total and faecal coliforms in February 2010, showed zero coliforms for the remainder of 2010.

The results for surface water in 2010 show variance in the levels of a number of parameters from the 2009 results. The concentration of Nitrate and Ammonia are higher than would normally be expected in uncontaminated surface waters. The sample SW-1 has exceeded the legislative limits for Nitrate (11.29mg/l) for Category A1 surface water under the "Quality of Surface Water Intended for the Abstraction of Drinking Water Regulations, 1989". The Ammonia result is above the limit of 0.04

mg/l set out under the "European Communities Environmental Objectives (Surface Waters) Regulations, 2009" for "high status" surface water. In general, these nutrients often arise in surface and ground waters due to run off following the addition of natural and artificial fertilisers to farmland. In particular, elevated nitrate levels of around 9 mg/l are often found in the groundwater of the south eastern region so a background level of around 9 mg/l could be expected in the surface water depending on the origins of the water. It is likely that at times of dry weather, when there is a very low flow in the surface water ditch, that most of the flow originates from groundwater springs. On the other side, the results for Conductivity, BOD, COD and Sulphate have all decreased since the previous monitoring event in June 2009.

During this reporting period a number of complaints were received at the facility as a result of activities on-site. These were all due to odour emissions from the site. An increase in the number of complaints received at the facility from the previous reporting period is evident. The odour abatement infrastructural improvements works was progressed during 2009 and was completed at the end of January 2010. Furthermore, an odour model assessment on the infrastructural works to ascertain the level of improvement and to identify any possible requirements for further remedial action was undertaken in September 2009. The Custom Compost facility will continue to implement site infrastructure and technologies for further odour abatement.

5.2 TARGETS AND OBJECTIVES

The review of the objectives and targets for 2011 illustrate the commitment of Custom Compost to the environmental management of the facility. On-going improvement at the facility will ensure no negative environmental impacts occur as a result of activities at the site.

APPENDIX 1 Environmental Monitoring Location Maps

Figure 1 (A): Custom Compost Ltd, Surface Water Location (SW-1)

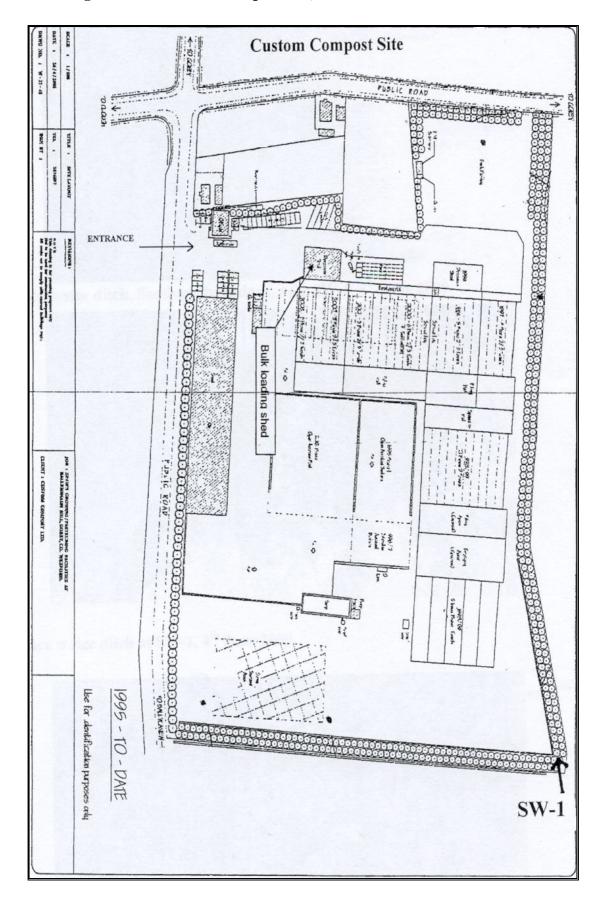


Figure 1 (B): Custom Compost Ltd, Surface Water Location (SW-1)

Surface Water Monitoring, Dec 2010 Waste Licence No. W0123-01 Custom Compost Ltd Appendix 2. Surface water ditch, Southern boundary, 14th December 2010. Surface water ditch, Southern boundary, near SW-1, 14th December 2010

Report By: Enterprise Environmental

Page 7 of 8

Job No: D125SW

Surface water ditch at SW-1, 14th December 2010

SW-1 Sampling point



Appendix 3. New roof water collection system, taken 1st September 2010



Figure 2: Custom Compost Ltd, Groundwater Locations GW-1, GW-2 and GW-3)

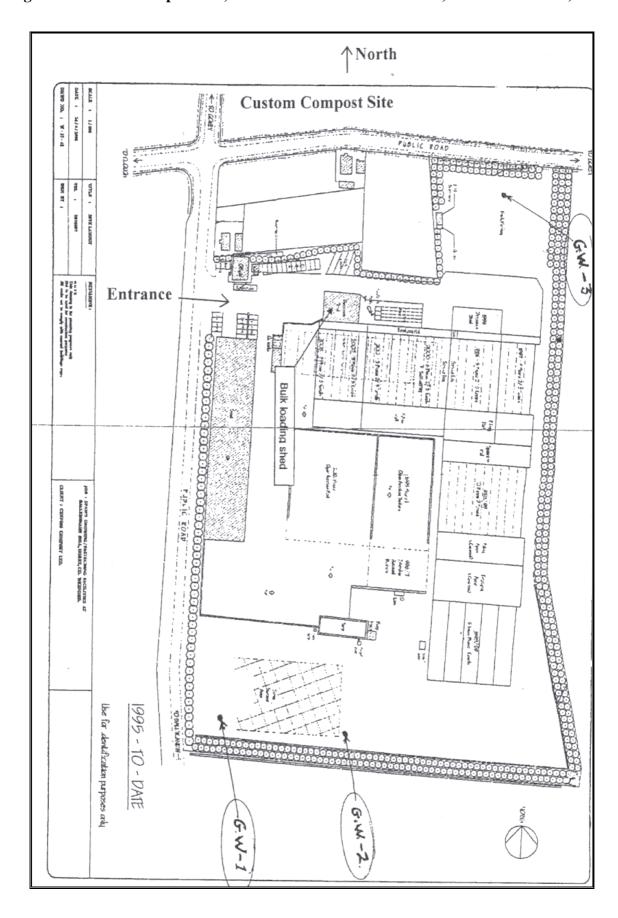


Figure 3: Custom Compost Ltd, Dust Deposition Gauge Locations (D1, D2, D3 and D4)

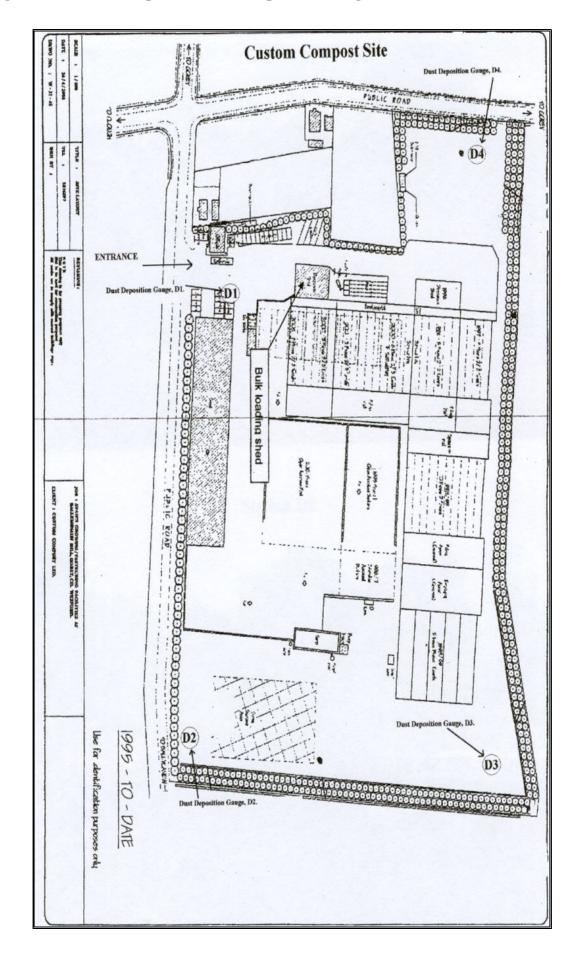


Figure 4: Custom Compost Ltd, Bio-aerosol Monitoring Locations (AB1, AB2, AB3 and AB4)

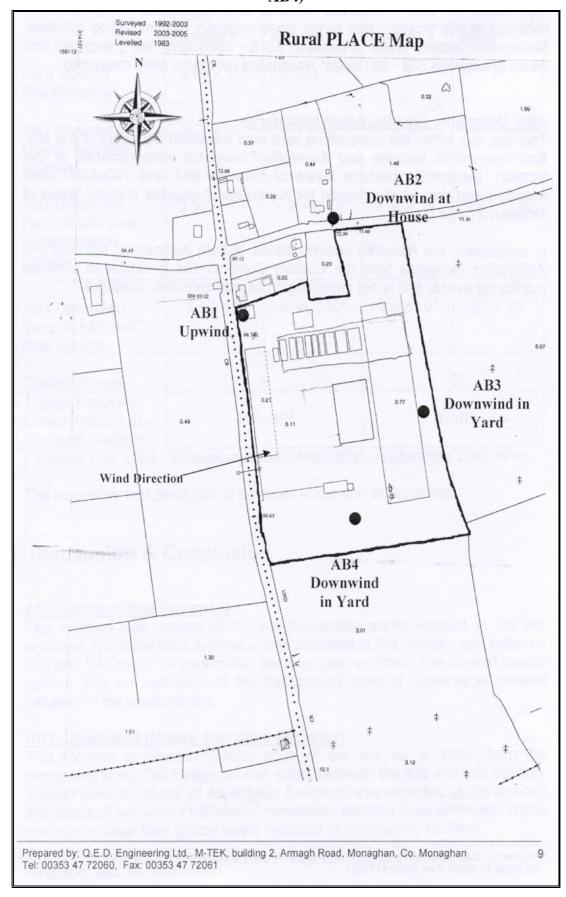
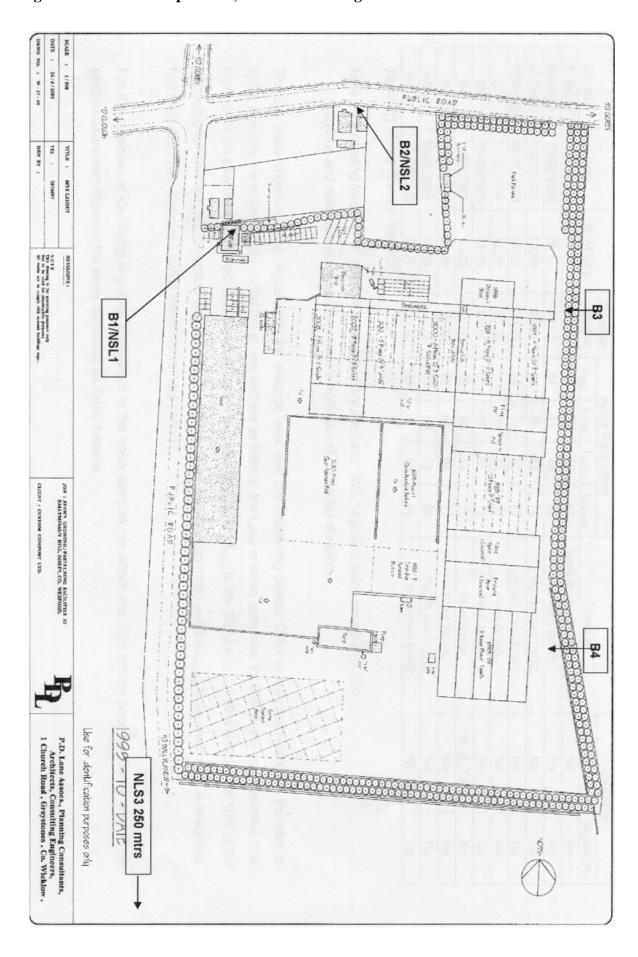


Figure 5: Custom Compost Ltd, Noise Monitoring Locations



APPENDIX 2

Puraflo Wastewater Treatment System – Service Inspection Report

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Puraflo (Single House) Wastewater Treatment System
Commissioning Report ____ Service Inspection Report ____

Customer Name	AMENIAL LIMIT			lah	Number		7 De	port	1	,
Customer Name	PAT	MI	Welly	7, 300	Number	4707			8/11/	10
Site Address: Cush	on Co		051.	Pho	ne:				,	
Ballymaum	11 >	1.	Garen	Num	ber of Modules	6				
Co		x for	1	Grav	vity Outlet	X	Pumpe	d		
(8	we.	x ro	0,				Outlet	10000		
SEPTIC TANK:	Precast Concrete)	/ Block Walls	Fibre	eglass	Other (Please Sp	ecify)			
T-Pieces Fitted	Yes Y	No /	Baffle Wa	II Yes	No No	Septic Tan Needs Des	k sludging	Yes	No	1
Outlet Filter Installed	Yes X	No	Outlet Filt Accessibl		X No	Outlet Filte Cleaning	r Needs	Yes	No	X
Access Manholes Secure	Yes	No _	Comment	s:	Filter	clered	1.	v autoria		
PUMP/SUMP (to module		of Pump		PB	5	Pump Inspe	cted & Y	es X	No [
Alarm Float Inspected & Operational	Yes [X No		17.55		s Manhole Covers \$	Y	es X	No	
-	152-25210	10		OF SHEET						MAKE AND
OUTLET PUMP/SUMP:		of Pump		N	14	Pump Inspe Oper	ational	es	No	
Alarm Float Inspected & Operational	Yes	No			Acces	s Manhole Covers S		es	No	
		as tire	C	ontrol Panel	Connected to Per	manent Electricity S	Supply I Y	es 🗸	No [
ELECTRICS:				ontroi i disci	oormeeted to 1 er			1		
Control Panel Enclosure	Indoo	X	Outdoor Mini Pillar			Alarm Light Oper	ational Y	es X	No	
Alarm Signal	Visible	e X	Audible			Trip Switches Open	ational Y	es 7	No	
RISING MAIN - Sump to	Modules:		Length of Ri Used (m):	sing Main	34	Other (Please				
1½" N.G. Hydradare		LX	2" N.G. Hydi	radare		Specify)				
RISING MAIN - Pump to (Where applicable):	Percolation	<u>Area</u>	Length of Ri Used (m):	sing Main	NIA					
1½" N.G. Hydradare			2" N.G. Hydr	radare		Other (Please Specify)				
MODULES	Laconte									
Modules Serial Number (For Commissioning Only	0									
		T					T		T	
Modules Level	Yes	X No		ondition Fibre	Mode	la nona	lad			
Base of Module Relative Finished Ground Level (n					Sample Cham		Yes	X	10	1
Are Modules Free Drainin		No	X		Comments:					
General Comments - W	here applicat	ole pleas	e include detail	11	0 1	1	tails of any	remedia	l work re	equired:
PEAT GIBE	nino	dul) Need	1 60 K	e Keple	oced, (ie fol 1	100	sen	0
quot or	(Go.	EiR	re to K	se r	eplocea	<u> </u>				
Servicing/Commissioni	ng Satisfacto	ry	Yes No			Date: 18	y/cr.			
Service/Commissioning	Carried out I	by:		0	1	10/1	0	,	- >	,
Print Name Ohn Rowan Signatures.		10	· ···	Customer Signature:	El	00 n	065	rea		

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	CUSTON	-					
Account paid in full:	1× Year V	Warranty.			Warrar	nty:	
Callout Number: 9	368 Date: 25-	11-10	Time:_		Re	c'd From:	aut
Passed to : MPaa	Kez Date: 25-	-11-10	Time: _		Lo	gged by:_	ED
Name of person requesting callout:	Pat miske	lla		Pho	ne: 053	3 94	21777
Name of Household	er/owner:			Pho	mar.	2310	
Job Number:	707 Date In:	stalled: O4	-03-9	7	Insta	Her:	m
Address of househo	past, Ballymi	naun	Hell,	Copey	6	wexk	sed
LINESCOTORICIO OT GARIES	MAN .						
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Paid in full		ce ru	ane ic	Date &			
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Customer Responder Date remedial Work undertaken: Nature of remedial v	ed to by: work			Date &	Time:		
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Biresten: It Scanian (Charman), P Besnam, P Fes. C & Grigatis

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APPENDIX 3 Environmental Management System

Environmental Manual			Document:	EP 0.0
Document Approved By :	Custom Compost			
	WALS	H	Revision:	0
	Custom Compost MUSHROO	омѕ	Page: Issued:	2205/08
Technical Director			issueu:	2205/08

Title: Environmental Procedures : Table of Contents

Document	Subject	Issue Date	Revision	Pages
EP 0.0	Table of Contents	22/05/08	00	1
EP 1.0	Company Structure and Responsibility	22/05/08	00	2
EP 2.0	Environmental Policy Statement	22/05/08	00	2
EP 3.0	Communications Programme	22/05/08	00	4
EP 4.0	Training, Awareness & competence	22/05/08	00	3
EP 5.0	Environmental Objectives & Targets	22/05/08	00	2
EP 6.0	Non-conformance, Corrective/Preventive Action	22/05/08	00	2
EP 7.0	Surface Water Management	22/05/08	00	3
EP 8.0	Monitoring	22/05/08	00	5
EP 9.0	Raw Material Acceptance Procedure	22/05/08	00	4
EP 10.0	Waste Management Procedure	22/05/08	00	2
EP 11.0	Nuisances Control	22/05/08	00	3
EP 12.0	Emergency Response Procedure	22/05/08	00	3
EP 13.0	Complaints Procedure	22/05/08	00	2
EP 14.0	Incident Investigation and Reporting Procedure	22/05/08	00	2
EP 15.0	Bunding Procedure	22/05/08	00	1
EP 16.0	Site Management -Roads Cleaning Procedure	22/05/08	00	1
EP 17.0	Environmental Management System	22/05/08	00	2
	Documentation			
EP 18.0	Annual Environmental Report	22/05/08	00	2
EP 19.0	Environmental Audits	22/05/08	00	2
EP 20.0	Management Review	22/05/08	00	1
EP 21.0	Reporting	22/05/08	00	2

EP 22.0 **Environmental Manual**

Document Approved By :	Custom Com	post		
		WALSH	Revision:	0
	Custom Compost	MUSHROOMS	Page:	63 of 70 22/05/08
Technical Director	-		issueu.	22/05/06

Title: List of Records

Record	Description	Date	Revision
EPF 3.1	Request for Environmental Information Form	22/05/08	00
EPF 4.1	Environmental Training Record	22/05/08	00
EPF 4.2	Reading acknowledgement Form	22/05/08	00
EPF 4.3	Environmental Training Sheet	22/05/08	00
EPF 5.1	Register of Environmental Objectives and Targets	22/05/08	00
EPF 6.1	Corrective & Preventive Action form	22/05/08	00
EPF 7.1	Sump Management Record	22/05/08	00
EPF 7.2	Phase I Sump cleaning record	22/05/08	00
EPF 8.1	Water Usage (Non-Process) Record	22/05/08	00
EPF 8.2	Daily surface water monitoring record	22/05/08	00
EPF 9.1	Raw Materials (poultry litter) Record Sheet	22/05/08	00
EPF 9.2	Waste Received (hm)	22/05/08	00
EPF 9.3	Waste Received (pl)	22/05/08	00
EPF 10.1	Waste Management Record (Disposal)	22/05/08	00
EPF 11.1	Phase I Tunnel Record	22/05/08	00
EPF 11.2	Phase I Pad and Bunker Record	22/05/08	00
EPF 11.3	Phase II Record.	22/05/08	00
EPF 13.1	Environmental Complaints Form	22/05/08	00
EPF 14.1	Incident Investigation Form	22/05/08	00
EPF 14.2	Notification Form	22/05/08	00
EPF 16.1	Phase I Cleaning Record	22/05/08	00
EPF 16.2	Phase I Tunnels and small sump cleaning record	22/05/08	00
EPF 19.1	Internal Audit Trail	22/05/08	00

APPENDIX 4

Communications

Tel: 053-9421777 Fax: 053-9421059 E-mail: info@walshmushrooms.ie www.walshmushrooms.com

Date: 20th August 2010.

Publice Info.

To all our Neighbours:

Dear Neighbour,

The report was received in January of this year which was much later than we had anticipated but, to be fair, a lot of data had to be assimilated and modelled which takes time. The assessment has confirmed that a significant improvement has been achieved but suggests that further improvements can also be achieved; therefore we agreed that we would get back to you as soon as we had the opportunity to assess its findings, recommendations etc in detail and formulate some type of proposal.

We requested a meeting with the EPA in February to discuss the report and options for possible further improvement etc.

We met with the EPA on Monday 19th July 2010 and after discussion with them, we have agreed to submit a proposal to further deal with any potential odour emissions from our facility. It will take a few months to prepare this proposal for submission, at which time we would plan to communicate with you all to outline our plans, discuss issues etc.

In the mean time, we are commissioning an "Odour Absorption System" that operates on the basis of an atomising spray that helps neutralise odour molecules by attaching to them when the spray comes into contact with them and bringing them to ground and thus reducing possible impact beyond the facility boundary. We hope this will be another improvement in helping to deal with this issue.

In the meantime; if there is anything further we can do to help clarify or explain further for you, please do not hesitate to contact us.

Yours truly,

Pat Miskella.
Technical Director.



APPENDIX 5

Summary of Emissions and Waste Management



| PRTR# : W0123 | Facility Name : Custom Compost | Filename : W0123_2010(1).xls | Return Year : 2010 |

Guidance to completing the PRTR workbook

AER Returns Workbook

Version 1.1.1

REFERENCE YEAR 2010

1. FACILITY IDENTIFICATION

1. TAGIETT IDENTIFICATION	
Parent Company Name	Custom Compost
Facility Name	Custom Compost
PRTR Identification Number	W0123
Licence Number	W0123-01

Waste or IPPC Classes of Activity

Waste of IFFC Classes of Activity	
No.	class_name
	Recycling or reclamation of organic substances which are not used as solvents (including composting and other biological transformation processes).

Address 1	Ballyminaun Hill
Address 2	Gorey
Address 3	Co Wexford
Address 4	
Country	Ireland
Coordinates of Location	-6.31062 52.6417
River Basin District	IESE
NACE Code	3832
Main Economic Activity	Recovery of sorted materials
AER Returns Contact Name	
AER Returns Contact Email Address	pat@walshmushrooms.ie
AER Returns Contact Position	Pat Miskella
AER Returns Contact Telephone Number	053 9421777
AER Returns Contact Mobile Phone Number	087 2310303
AER Returns Contact Fax Number	053 9421059
Production Volume	68275.0
Production Volume Units	Tonnes
Number of Installations	1
Number of Operating Hours in Year	2830
Number of Employees	45
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)

Is it applicable?	No
Have you been granted an exemption?	No
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

Sheet: Releases to Air

SECTION A: SECTOR SPECIFIC PRTR POLLUTANTS

	POLLUTANT		METHOD			QUANTITY			
			Met						
No. Annex II	Name	M/C/E Method Code	od Code Designation or Description	Emission Point 1	T (Total) KG/Year	A (Accidental) KG/Year F (Fugitive) KG/Year	F (Fugitive) KG/Year		
				0.0	0.0	0.0	0.0		
	* Select a row by double-clicking on the Pollulant Name (Column B) then click the delete button								
CTION B: REMAINING PRTR POLLUTANTS									
TO A STATE OF THE PARTY OF THE	RELEASES TO AIR		THE PERSON NAMED IN COLUMN	Please enter all quantities in this section in KGs	in this section in KGs	はない はないのできるとなってい	A THE PASSAGE STATE	OF SACREMENT OF STREET	
	POLLUIANI	-	METHOD				QUANTITY		
No. Annex II	Name	MC/E Method Code	Method Used Od Code Designation or Description	Boiler Scriotion Emission Point 1	Phase I Compost only Emission Point 2 T (Total) KG/Vear		A (Accidental)	F (Fugitive)	
	Certon monoxide (CC)	С ОТН				339.0	0:0		0.0
	Carbon dioxide (CO2)	С ОТН	Based on boiler manufacturer specifications max emissions & hours operated.	offications 2223197.0	00	2223197.0	0.0		0.0
	Nitrogen oxides (NOvNO2)	С ОТН	Based on boller manufacturer specifications max emissions & hours operated.	ifications hours 2205.0	0.0	2205.0	0.0		0.0
	Sulphur axides (SOX:SO2)	C OTH	Based on boiler manufacturer specifications max emissions & hours operated.	ifications hours 2884.0	0'0	2884,0	00		0.0
	Ammonis (NH3)	- OTH	Estimated for Phase 1 only, from report @Review of Odour Control on Mushroom Technologies in Mushroom Compost Todouries 1 KGNomes of compost).	lew of the volument of the vol	. 252000.0	252000,0	•		0.0

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

Emission Point 1 T (Total) KGYear 0.0 M/C/E Method Code Pollutant No.

Additional Data Requested from Landfill operators

For the purposes of the National Investigate on Gaster, Institti operation are requested to provide summary data on institti gue (Bethewei) instead or utilised on their beliefliss to reconspary the Signer's for the institution and the Editivity to the Signer's for the institution and only sport father. Not make the other paper in the servicement under 1914 of 1917 for the state of 1914 or the service of 1914 o Custom Compost

Total estimated methane generation (ss per site model) Methane flared Methane utilised in exgine's Net methane emission (as reported in Section A above) Landfill:
Please enter summary data on the
quantities of methane flared and / or
utilised

Method Code M/C/E T (Total) kg/Year

Facility Total Capacity m3 per hour

Page 1 of 1

15/03/2011 16:57

same : W0123_2010(1):xls | Return Year 2010 |