

- Odour Control System This plant operates on full flow but has the ability to
  work on half flow during night time hours. The demand on the system is not as
  high during winter time as material is not as hot and odourous as in the summer
  time months. I propose the system is switched to half power during the cold
  months of December and January.
- Operation of all Machinery A large part of the plant on site is turned off during break times. A consultation should be carried out with the manufacturers of all the machinery to ensure that this is the correct thing to do; often the largest part of electricity is during the power up process of machinery.
- Compressor A compressor can have a significant contribution to energy consumption, a compressor was used at the facility for odour control but this has ceased since July 2008
- Administration of Electricity Usage Going forward I propose that all electricity usage day (kWh), night (kWh) and cost should be entered in on receiving the invoice into a simple spreadsheet. This will allow us to track improvements and trends in the electricity consumption at the site.
- Hot water There is always a supply of hot water from taps at the facility which may be fuelled by an electric switch. These should be all checked to ensure efficiency and if indeed the hot water is necessary in areas.

#### 3.2 Water

Water consumption at the facility is extremely hard to define as it is not metered or connected to the local mains and water consumption is directly from the well on site. No water is used for processing as incoming material normally contains excess moisture from the natural degrading process. For emergency purposes there is an over ground tank that holds 90,000 litres if water and is supplied by Bore well number 3.

#### Some Water Uses at Kilmainhamwood Compost;

- Wash down of vehicles, processing machinery etc
- Fire Hoses/Hydrants
- Showers
- Canteen
- Toilets

#### Recommendations

- Recycle the washbay water
- Roof drainage could be diverted into a holding tank and used to top up the water reserves for the fire system.
- All dripping taps, hoses and hydrants to be repaired immediately and checked on a monthly basis
- Toilets to be adapted to only allowed a certain amount of water in per flush

Energy Report
Kilmainhamwood Compost,
Thorntons Recycling W0195-01 October 2008

Page 8 of 11



#### 3.3 Diesel

The main types of fuel used at Kilmainhamwood Compost includes plant diesel (Gas Oil). 76, 290 litres of diesel was consumed at the facility in 2007.

Table 3.3a below estimates the proposed quantity of diesel which will be consumed at the facility in 2008 totally 78290 litres. This is of a similar quantity of which was consumed in 2007.

	Table 3.3a	
	Source of	Consumption Year
Machine	Energy	
Shredder Doppstadt	Diesel	20,800 litres diesel
AK 430		
Cat 318 C Used to	Diesel	7.800 liitres of diesel
load Shredder		the.
Volvo Loading Shovel	Diesel all all	47,320 Litres of diesel
L90E X 2	Diesel of did and	P6500
Forklift	Dieselunguir	520 litres
Food Tractor	Diesel	2080 litres

#### Recommendations Diesel Consumption

- Carry out an investigation on compatibility of machinery on site to use of Bio Fuels (50% VRT refund available)
- Ensure fleet serviced regularly
- Drivers leave engines running whilst on site, turning off engines must be enforced at the facility

#### Long Term Capital Projects/ Renewable energy sources 4.0

#### **Dry Anaerobic Digestion**

We are currently investigating incorporating a dry anaerobic digester. Using this technology we can extract Methane gas from our feedstock and run a CHP plant which would supply enough electricity to run our composting facility and export excess electricity into the national grid.

Thorntons Recycling W0195-01 October 2008

The technology of "dry fermentation" can generate energy from municipal and agricultural organic matter and waste.

> **Energy Report** Kilmainhamwood Compost,

> > Page 9 of 11



Until now, biogas technology mainly concentrated on "wet fermentation" of agricultural and municipal organic waste, while the recently patented BEKON dry fermentation process allows methane production from organic matter with a high content of dry matter. This kind of energy production is ecologically friendly and financially interesting, while also creating and securing jobs.

A great potential for energy generation from organic matter is found in agricultural byproducts and waste, municipal organic waste and cuttings from coppicing and other countryside and forest maintenance work.

The dry fermentation process produces biogas with high energy content that can be converted into electricity, on the one hand, and into heat in block-type thermal power stations, on the other hand.

Instead of disposing organic matter from agriculture or municipal waste otherwise, dry fermentation offers a means of turning the waste into a valuable resource and extracting the highest possible benefit from it (in the form of biogass electricity, heat, compost and fertilizer). The high quality compost resulting from the process of dry fermentation can be used as a valuable fertilizer for agricultural and torticultural purposes.

# Combined Heat and Power (CHP) Deployment Programme

At present the Programme includes feasibility studies, to assist investigation into the application of CHP across all size ranges and technologies and investment grant support for small-scale fossil fired CHP with a capacity ≥ 50kWe and < 1MWe. The Programme will ultimately include biomass (anaerobic digestion (AD) and wood residue) CHP, and micro CHP, and these remaining technologies will be launched through specific calls.

#### 5.0 Energy as part of the Environmental Management System

Kilmainhamwood Compost is certified to international standards for Quality ISO 9001, Health and Safety OHSAS 18001 and Environmental ISO 14001. As part of its Environmental Management Programme for its integrated management system (IMS)

Energy Report
Kilmainhamwood Compost,
Thorntons Recycling W0195-01 October 2008

Page 10 of 11



alternative energy resources research has been defined as a clear objective and target for the facilities manager to investigate by the end of 2008. Simple procedures incorporating some of the recommendations detailed in this report can be adopted for the management of energy consumption at Kilmainhamwood Compost through its IMS.

Thorntons Recycling will strive to achieve an Irish Energy Management Standard i.e. IS 393 Energy Management System, which will drive energy efficiency and reduce costs. This is a national standard to ensure that energy management becomes integrated into the organisational business structure.

#### 6.0 Summary

Energy Costs for Kilmainhamwood Compost are very high. Fuel spent in 2007 was €45,773 and electricity costs were approximately €99,796.

Energy consumption and costs are currently playing a large role in the financial operation of the Kilmainhamwood compost. No other sites owned by Thorntons Recycling were used as a benchmark as no other site incorporates the same processing and handles the same materials as Kilmainhamwood Compost so it was felt that another site would not be representative to draw comparisons. All recommendations listed above for reduction in consumption should be taken into account and a detailed summary should be produced for 2008 in order to identify trends.

E Desire

Energy Report
Kilmainhamwood Compost,
Thorntons Recycling W0195-01 October 2008

Page 11 of 11

# **APPENDIX 6**

Consent of copyright owner required for any other use.

PM03- F07	Manag	PM03- F01 Management Programme 2009	amme 2009					
COMPLETED	ED.	DELAYED C	DELAYED CARRY FORWARD TO 2010					
Ref Number	Date	Туре	Objective and Target	Location	Responsibility	Method	Time Frame	Status
			ENVIRONMENTAL	TAL				
EP 01	Jan-09	Environmental	Landscape Plan to be completed at Kilmainhamwood Compost re conditions of the licence	Kilmainham	TMCD	<ol> <li>Kilmainhamwood landscape plan to be completed as part of Development</li> </ol>	Dec-09	Not Started - Plans previously drawn up from initally planning
EP 02	Jan '09	Environmental	Site Expansion	Kilmainham	TMCD	<ol> <li>Meeting with EPA</li> <li>Metting with MCC re planning</li> <li>Lodge</li> </ol>	90-וער	Started - Work in Progress
EP 03	Jan '09	Environmental	Upgrade of odour syslem - Investigate possibility of scrubber etc	Kilmainham	TMCD differ tree.	Quotes for consultants and assess same     Appoint Consultant     Tender out the installation of technology     Dec-09     Assess options available     Installation	Dec-09	Started - Work in Progress
EP 04	Feb-09	Environmental	Production report for the dry recylcing line	Killeen road	DD	Assess Inputs Design spreadsheet for operations to add in to act in to . Output will be an accurate processing ost per tonne	Mar-09	Completed - JS./TMCG inputting data. DD monitoring ongoing
EP 05	Mar-09	Environmental	Yard scraper for the dry recycling recyclates storage area.	Killeen road,	DD	1 Design scraper for the forklift. Approve design with operations and mainteance dept 3 Build scarper. 4 Implement scraper, test runcheck & amend if necessary	Mar-09	Completed, working and no amendments required
EP 06	Mar-09	Environmental	ESB Energy monitoring system .	Killeen road	DD	1 Liase with Software company to install system and give demonstration 2 Review system, after week one and amend if necessary 4 Change the system to record the data ever 24 hours. 5 Set up a monthly template for logging the daily data for easy of comparision. 6. Insert the daily data into the Production reports for the three buildings	Mar-09	Completed. System working and currenly being tracked-ongoing

Apr-09	Review the legislation. 2. Review the procedure used in 2008 and amend to make it simple and more efficent	DD	ELV	Create a template for producing the quarterly tyre reports for the ELV	Environmental	April	EP 12
Dec-09	Sample current proposed RDF material and get it analysed. 2. Shred proposed RDF and get it analysed. 4. Source potential outlets for RDF and provide with samples of RDF material and Analytical results. 5. Project tonnages of material per annum and secure outlets	MF	Killeen Road	RDF - Business plan and potential outlets	Environmental		EP 11
Aug-09	1. Analyse the sources of glass from commercial and domestic markets. 2. Quantity potential polynologies for collection. 3. Source an end destiantion for collected material. 4. Source a location for bulking collected material. 5. Investigate the purchase of a specifically designed collection vehicle. 6. Create a P or L for all aspects	MF	Company	Glass collection service - develop business plan	Environmental		EP 10
90-un	1. Contact repak to confirm details for characterisation survey. 2. Obtain 3 quotes from consultants. 3. Carry out survey's. 4.  Simalise reports and distribute.	MF OHY OF	Killeen road	Repak Revenue - waste chacterisation	Environmental		EP 09
Jun-09	1, Review currnet plant equipment and capacity. 2, Outline areas for new euipmen to be loacted, 3, Identify other equipment that would segregate recyclates, 4, Determine costs benefits of new equipment vs stay with the same system.	DD/JS	Killeen road	Review recycling building operation and see whether to invest in new equipment	Environmental		EP 08
Apr-09	1 Walk the site and record light fixtures and their daily usage. 2 Prepare electrical maps to show which lights are connected to which switches. 3. Review the past ESB bills and comapre usage with the on Site energy monitoring system. 4. Create a report detailing current energy usage and propose changes to save energy. Review system in 3 months and again in after one year	DD	Killeen road	Energy Report for Killeen Road- regarding the ESB usage	Environmental	Apr-09	EP 07

			Covering of new diesel bund	Killeen Road	ent	Cover with appropriate material diesel     band on CID line, which holds the	Dec-08	WIP Quotes being obtained, DD to
EP 13	Jan-08	Environmental			. Moriodo	generator		alternative methods of achieving same goal
EP14	Mar'09	Environmental	Review ELV permit	ELV	QQ	1 Carry out a review. 2. Submit to council	May'09	Review submitteed 60 days before current permit expires- awaiting final print of new permit
EP15	Feb'09	Environmental	Install height restriction barrier in civic amenity site	Dunboyne	TR	Carry out a feasibility study on the of a height restriction barrier to combat the entrance of commercail customers to use	Mar-09	Completed
EP16	Mar'09	Environmental	Environmental Procedures for waste acceptance for the shredding facility	Shredding	MF	Arrange meeling with shredding facility manager to draw up flow and design procedures in relation to operations.	Apr'09	Work in progress
					in other use.			
					oose offer	didoses offer the feet feet feet feet feet feet feet		
						For its pection		
						Conser		
					i			

Env 10 Jan-08 Review the processes in Killeen Road Dunboyne Env 10 Jan-08 the dry recycling shed in Environmenal	Env 9 Feb-08 Env Licence compliance in All sites Environment relation to Bund Testing Manager	New Site Shredding - New Site Environmental  Env 8 Feb-08 Env	New Site Millenium - New Site Environmental  Env 7 Jan-08 Env	Env 6 Jan-08 Env Covering of new diesel Killeen Road Environment Manager	Prevention and All sites  Minimisation of waste in the offices is. Interorve recycling in the offices.  Mrep Environment	To increase community All sites Environment liasion with residents and local community groups  Env 4 Jan-08 Env local community groups  Manager	Establish monitoring and All sites Environment targeting for energy and water consumption site	Improve environmental Killeen Road, Environment appearance of all Dunboyne, Manager for site iconsed facilities - Kilmainhamwood Flanting, shrubs, painting etc	Jan-08 Env register with mo analysis	Ref Date Type Objective and Location Responsibility	COMPLETED DELAYED CARRY FORWARD TO 2009	PM03-F0
Audit and observe the current practices in the Killen road dry     recycling shed. 2. Identify new equipment if need be: 3 Complete     record as to the accommendations.	Ensure all on sites bunds have been tested as per conditions     waste licence	In house permit application     Itasion with project on development	1 Obtain planning 2 Obtain Licence	holds		nment visit	Delemine what resources are to be monitored  2 Develop means and documented procedure for capturing inigomation in conjuction with the finance department  3 right all relevant employees on the new procedure and format  4 All datjs to be collated by the end of December every year  5 All leeps dites to sign up for ESB data on line	1 Environmental Manager for each site is responsible for improving the environmental appearance of the facility 2 Quotes from gardeners for planting and maintenance contracts for one year. Check Licence conditions re landscaping 3 Daily Checks on Litter to be carried out	Determine what on each site is due to be calibrated     Set up a register on IMS drive     Communicate to all managers how to use and complete register	Method Time Fra		PM03-F01 Management Programme 2008
May-08 Report completed and forwarded to the releveant personnel on the 23 April 2008. item closed	Dec-08 Quotes obtained for testing	Jun-08 Fermit application lodgeed with DCC in Feb 2008 Obtained on the 13.05.08 . Projects moving equipment, new baler installed July sile now fully operational	Dec-08 Planning lodged in November 2007 Licence application lodged Dec 2007. Planning rejected new application to an bord pleanals lodged September 2008 and FIR to EPA completed also awaiting outcome from bopth	Dec-08 WIP Quotes being obtained	Jun-08 (Completed - Green frays purchased for all desks in the office, central dry recyclables bins and signage compited	Dec-08 WIP, website launched April 2008, section now in complaince. PR/sponsorship ongoing see individual site managers for list.	Dec-08 KR, MF energy report completed for GB, MA looking at cost savings in Quarter 4. Dunboyne WVG completed audit in July 2006, DD working on electricity monitoring and comparsion with 2007, lights on timers etc.  Kilmain TMCD identified resources to be monitored	Sep-09 Ongoing works, planting completed on all sites.	Jun-08 Completed and includes thomions fankering servcie also May 2008. MF	rame Status		

Env 20	Env 19	Env 18	Env 17	Env 16	Env 15	Env 14	Env 13	Env 12	Env 11
May-08	Mar-08	Jan-08	Jan-08	Jan-08	Jan-08	Jan-08 Env	Jan-08 E	Jan-08 Env	Jan-08 Env
Ēπν	Env	Env	Env	Env	Env	Ēnv	Env	'nv	īnv
Develop environmental guidance on FOG handling	Willow Tree plantation and permitted facility for spreading of de sludged water	Research the possibility of providing an inhouse way of shrdding tyres and sourcing outlets	Research the possibility of providing our customers with a skip recycling bag	Look at the possibility of recycling polystyrene	Create a waste management plan for PDM	Plant willow farm	Investigate alternative energy sources	Produce a screened compost product more efficently	Dunboyne Civic Amenity Upgrade
пз	Tankering Division / Barrockstown	ELV	Dunboyne	Dunboyne	PDM	Kimainham	Kilmainham	Kimainham	Dunboyne
Mrep Environment,TTS Manager and Ops Foreman	Mrep Environment	Environmental manager	Environmental Manager	Environemtnal Manager	Environmental Manager	Facility Compost Manager	Facility Compost Manager	Facility Compost Manager	Environment Manager
1 Create a guidance document which can be used for internal and internal communications and internal communications 2. TTS Manager to research regulations etc 3. Documents to be saved on X Drive in environmental guidance 4. Distribute to each new grease trap contract	Contact MCC re permit and status of spreading effluent and planting willow trees.     Doblan drawings.     Contact planning department re spreading and establishing permit site.     Apoplication to be lodged for both with MCC.	Research the processes for recycling tyres, 2. lidentify rcycling equipment, 3. identify and source outlets, 4. Contact outlets for prices, 5. Complete a profit or loss, 6. Do up a report as a proposal	Research the product, 2. Design a skip bag, 3. Contact Companies for quotes. 4. Do up a Profit or loss, 5. organise the production of the bags and their distribution	1. Research polystyrene recycling, 2 Squrce balers and compactors and prices. 3 Source outpet for the processed polystyrene, 4, Identify the sources of depletision and the quantities. 5 Complete the Profit or Lossingd the enior management.	1. Review the current wasts streams. 2. Collate the information into a report of the current studyion. 3. Research ways of reducing waste in the woodsplace 4. Put in place a plan to reduce waste onsite	1. Contact EPA re licence and status of planting willow trees. 2. Objach drawings 3. Chigar department of agriculture department re grant 4. Consult with specialist consultants 5. Planting to commence in May 2008	Identify resources and data collation on same     Invite consunsulants to assist on project     Research on processes to determine the most suitable technology for site     A. Assess available energy from end product compost	1 Investigate different types and costings of screener 2 Seek Independent advice 3 Environmental aspects 4 Install	1 Source Destinations 2 Source equipment, signage, staffing etc 3 Attract New customers 3 Attract New Customers 4 Meath CC re VMEEE collection point 5. Install a barrier system for entering and exsting CA site 5. Review current oil storage on site for waste oil and cooking oils 5. Review current oil storage on site for waste oil and cooking oils
Dec-08	90-unc	Jul-08	Apr-08	Apr-08	Aug-08	May-08	Dec-08	Apr-08	Jun-09
WP summary sheet completed	Site unavilable at Barrockstown furthe investigation on site availability. Decsion taken to plant at Calfied. Project completed willow tree will be at maturity in 3 years	Research completed decision not to continue project due to H & S issues and not economically viable. Closed	At the Profit and loss stage in Jan 08, 2 Researched and report forwarded on to the managing director. Decision taken by MD not to invest and found not to be economically viable. Closed	i. Researched the recycling of polystyrene, 2 Compactors sourced, 3. Outlets and prices sourced, 4 report forwarded to managing director. Decision taken by MD that project was not economically viable- closed	Aug-08 Completed and submitted to KCC in August 2008	If PA informed awaiting grant approval decided not viable for kilmainharmwood changed plan to Calfied and 49 acres of willow free plantation planted at the farm in Calfield where originally there was an application for an integregated waste management facility.	Dec-08 Investigation commenced	Apr-08 Completed	Jun-08 Meeting with MCC re VMEEE collection, collection days organised for January 2008 confinuation of WEEEE collection on site mem continuous collection. Barrier system installed and operated. All upgraded and updated. Financial report completed and CA site doing well

## **APPENDIX 7**

Consent of copyright owner required for any other use.



Kilmainhamwood Compost, Kilmainhamwood, Co Meath

Leachate Tank Integrity Test

Integrity T

December and other use.

December 2006

Consent of congritate owner restriction of congritate owner restriction.

Issue		Prepared by	Checked by	Verified by
V1 [	DEC 06			
V2	-	David My Denot	lacksquare	( ) ( ) 10
V3	-	Land My Thenor		Genal Martin
V4	-	David McDermott		Donal Marron
V5	-	Senior Environmental Scientist		Regional Director

White Young Green Ireland Limited, Apex Business Centre, Blackthom Road, Sandyford Industrial Estate, Dublin 18 Telephone: +353 12931200 Facsimile: +353 12931250 E-Mail. enviro.dublin@wyg.com

Mr Tom McDonnell,
Kilmainhamwood Compost,
Kilmainhamwood,
Kells Co Meath

December 13<sup>th</sup> 2006

Re: Integrity Test on the Leachate Process Tank

Padraig Thornton Waste Disposal Limited, (PTWDL) requested White Young Green Environmental (Ireland) Ltd (WYG) to undertake integrity testing on its Leachate Process Tank at its composting facility at Kilmainhamwood, Kells, Co Meath.

The test involved filling the tank with a known volume of water and monitoring any losses over a monitoring period. Where applicable the following British Standard was used in testing the tank; "BS 8007 - The British Standard Code of Practice to the Design of concrete structures for retaining aqueous liquids".

It is recommended by BS 8007 that integrity testing take place over a standard seven day

It is recommended by BS 8007 that integrity testing take place over a standard seven day period with a soakage period of the same order. However due to plant operational constraints, the test could only occur over weekend three day period. The tank was filled for a 24 hour period prior to testing allowing any soakage effects from the concrete to be minimised. Under the British Standard it is also recommended that a visual inspection of the structure be undertaken for any defects prior to testing. For safety reasons, given the confined space risks involved, it was decided that the tank should only be visually inspected if the integrity test failed

As the tank is located underground and all inputs and outputs were sealed for the duration of the test, climatic conditions i.e. rainfall, evaporation are unlikely to have had any significant effect on the water levels recorded and as such were not monitored.

The Leachate Processing Tank as shown on Figure 1 has an internal diameter of 2.710m (2.996m externally) and a depth of 3.035m indicating a total capacity of 15.9m<sup>3</sup> or 3500

Kilmainhamwood - PTWDL CE05243 page 1 of 2 gallons. For the test the tank was filled to an arbitrary level close to the top of the tank and 0.637m below the manhole cover. Therefore approximately 2.398m or 13.8m3 of water were pumped into the tank (or just over 87% of the tank capacity). It is reported by PTWDL that in normal operating conditions the tank is filled to a level of no greater than 75% of the capacity of the tank.

Figure 1 shows the construction of the Leachate Processing tank. Test water was pumped into the bund on the 23<sup>rd</sup> of November 2006 under PTWDL supervision. A period of stabilisation of 24 hours was allowed prior to the test commencing at 16.30 on the 24<sup>th</sup> of November 2006.

The tank was monitored over a three day test period by a combination of WYG and PTWDL staff on a daily basis measuring from the top of the manhole to the water level at the same location. Table 1 below presents the levels recorded in the tank over this period.

Table 1 Integrity Test Results

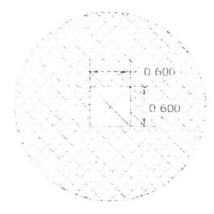
and real results	0,00	
Date	Time to see of for	Monitored level
24/11/06	16.30, coly	0.637
24/11/06	6.45	0.637
24/11/06	or in 1917:00	0.637
25/11/06	10.50	0.637
26/11/06	11:50	0.637
27/11/06 27/11/06	12:00	0.637

As can be seen on the table a steady water level of 0.637m below the top of the tank was recorded over the three day period. It is concluded that the tank has passed the integrity test.

The Leachate Process Tank is deemed to have passed the integrity test. All tanks require testing every 3 years.

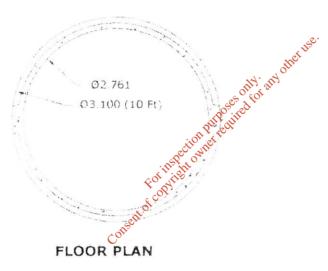
Kilmainhamwood - PTWDL CE05243 page 2 of 2 EBC now Edition to Carolin, Tel 659-91-59302. Eas 069-91-59202 le fival goles arannimina castianis s'en Septit, and Philent Parks Parks Charoliers Reservoiry Intervillation, and Decora Product.

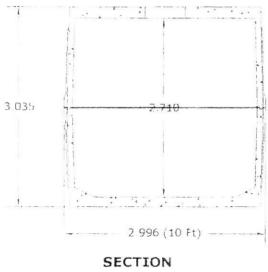
#### 3500 GALLON (15.90 cubic metre) TANK



Tank weights Base section 4,500kg Top section 4,500kg

#### **ROOF PLAN**





Roof design to particular loading requirements

Collars, fittings etc. to customers requirements

0171

1m

2m

300

4n:

The restar had truck of lark

## **APPENDIX 8**

Consent of copyright owner required for any other use.

#### Environmental **Procedures Manual**

Title: Environmental Communications Programme



Reference Date issued Revision

EP01 15-02-08 05

Relevant	Killeen Road	Kilmainhamwood	Dunboyne	PDM	ELV	HQ	Tankering
to:-	V	<b>√</b>	1				

#### PURPOSE AND SCOPE

The purpose of this communications programme will ensure that effective and responsive communication measures are in place at Thorntons Recycling to allow any local community groups, key interest groups, local residents, customers and members of the public to obtain information concerning the environmental performance of the facility, as required under the conditions of each sites waste Licence.

Procedure only relates to licensed facilities by the Environmental Protection Agency (EPA).

#### RESPONSIBILITY

The Environmental Manager for each site is responsible for ensuring that all requests from members of the public or customers on environmental information relating to the facility are dealt with in a quick and professional manner.

EP01-F01 request for Environmental Information
Environmental Guidance

#### COMMUNICATION TEAM AND OBJECTIVES

The Public Relations Department will be the main channel of information between Thorntons Recycling Centre and local residents, businesses and interest groups/organizations.

The Environmental Department will perform the following objectives;

- Manage consultation with local residents, businesses and local interest/representative groups
- Investigate complaints in relation to the Thorntons Recycling (and provide report to PR team to deal
- Encourage liaison between Thorntons Recycling and local residents
- Ensure the general public is aware of how to contact the facility
- Make available Environmental Performance data relating to waste transfer and recycling information available to members of the public and customers at all reasonable times

#### Environmental Procedures Manual

Title: Environmental Communications Programme



Reference Date issued Revision EP01 15-02-08 05

Relevant	Killeen Road	Kilmainhamwood	Dunboyne	PDM	ELV	HQ	Tankering
to:-	V	√ √	√ √				

#### PROGRAMME IMPLEMENTATION

The communication programme will consist of the following elements:

#### (a) Site Notice Board

A site notice board has been erected at the entrance of all Thorntons Recycling Licensed sites. This clearly displays:

- 1. Name and telephone number of the facility
- 2. The normal hours of opening
- 3. Name of licence holder
- 4. An emergency out of hours contact telephone number
- 5. The licence reference number
- 6. Location of environmental information relating to the facility.

#### (b) Queries or Requests for Environmental Information

Environmental information including annual environmental reports, quarterly reports, environmental policy and waste licence, in relation to Thorntons Recycling can be viewed at;

- The Main Reception of Thorntons Recording facility offices at Killeen Road, Dunboyne and Kilmainhamwood, between the hours of 09:00 and 17:00 only. All visitors must sign a visitor's book at reception at site offices.
- Office of Environmental Enforcement, EPA, McCuminskey House, Richview, Clonskeagh, Dublin 14 on request between the hours of 09:00 and 17:00 only.

All requests/queries concerning the performance of the facility and general environmental queries will be logged in the communication recording forms/requests for environmental information at the environmental office of each site. EP01-F01 request for Environmental Information

#### (c) Main Contacts

Local resident groups and businesses can contact the PR Manager or Environmental Manager or Deputy Manager of the facility. If issues arise local residents may contact the PR manager to ensure that issues are dealt with effectively and efficiently by Thorntons Recycling.

#### (d) Site Visits

Thorntons Recycling maintain an "open door" policy to neighbors' and customers that may wish visit the facility at reasonable times. Site visits and tours can be arranged by writing to the Environmental Department of the site which you wish to visit. The written request must detail the date and time of the proposed visit, number of visitors and the purpose of such a visit.

#### (e) Complaints Register

1. All complaints concerning the performance of the facility will be logged in the <u>environmental</u> complaints recording form completed for record tracking purposes.

Controlled document on day of print.

Printed on xx on xxxxxx

#### Environmental **Procedures Manual**

Title: Environmental Communications Programme



Reference Date issued Revision

EP01 15-02-08 05

Relevant	Killeen Road	Kilmainhamwood	Dunboyne	PDM	ELV	HQ	Tankering
to:-		<b>√</b>					

- 2. The Environmental Department will have regard to the corrective action procedure and liaise with the complainant to ensure that impacts have been alleviated.
- The environmental department will respond to all written complaints within ten days.

#### (f) Meetings with Interested parties/organisations

Interested parties/organizations can submit a written request for a member of Thorntons Recycling management to attend meetings. The written request must detail the date and time of the proposed meeting and the purpose of the meeting. Thorntons Recycling management will do their best to honour such requests.

#### (g) Newsletters

Thorntons Recycling Centre will continue to submit newsletters to local residents and interested parties.

(h) Thorntons Recycling Website
Information in relation to the company including the companies EHS policy is available to download from Thorntons Recycling Website at http://www.thorntons/recycling.ie/

#### (i) Internal Communications

Information in relation to common environmental queries can be obtained for internal use at the following link. Environmental Guidance. Should you require more detailed information please contact the COMMUNICATION POLICY Consent of Confund

"Thorntons Recycling is committed to maintaining open and clear channels of communication with local residents and other interested parties with regards to the environmental performance of all of Thorntons Recycling facilities. It is intended that the communication programme will help address any concerns and certainly help avoid any misunderstandings about the operation of Thorntons Recycling".

All original completed records of request for information or any complaints received in relation to Thorntons Recycling will be filed in the communications file or the complaints file in the Environmental department, of each Thorntons Recycling site and will be available for inspection by the EPA at all reasonable times.



## **Thorntons**

recycling

# Recycler

Thorntons

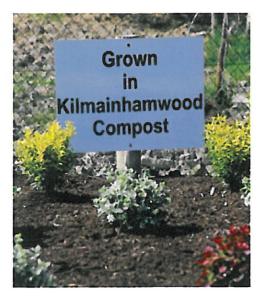
## **Repak Recovery** Operator of the **Year 2008**

Thorntons Recycling was named Recovery Operator of the Year 2008 by Repak in October. This award acknowledges the company's outstanding performance and demonstrated excellence in packaging minimisation and waste management.

Gary Brady, Managing Director said, "We are delighted to receive this award from Repak which recognises our exceptional standards in recovery and recycling. It is a wonderful acknowledgement for staff at each of our facilities who are constantly developing new solutions in recovery and recycling and are committed to best practise in every operation", added Brady.



Pictured with their REPAK Recovery Operator of the Year 2008 award are I-r Paul Thornton, Director, Mercedes Feely, Environmental Manager and Gary Brady, Managing Director, Thorntons Recycling.



## Ireland's Best **Composting Facility**

Kilmainhamwood Compost, Thorntons Recycling's state of the art composting facility in Co Meath, was named Ireland's Best Composting Facility at the Cré Compost Industry Awards 2008. These awards recognise excellence, impact and innovation in the composting industry.

Tom McDonnell, Facility Manager says, "We are delighted to receive this recognition from Cré. These awards are important for promoting the benefits of commercial composting in Ireland." Thorntons Recycling has just invested more than €350k on new screening equipment for Kilmainhamwood

Compost. The efficiency of the screening and composting process means the facility is now diverting 20,000 tonnes of material from landfill and producing 5,000 tonnes of commercial grade compost per annum.



**Best Compost Facility 2008** 

End of Life Vehicles Wood Processing

## **New Investments**

Thorntons Recycling's operations span the entire spectrum of recycling and waste recovery. The company is continuously reinvesting in plant and machinery to increase the amount and quality of material recovered and recycled. Success in this regard benefits the business, customers and the environment. This year the company's recycling rate was more than 82%.

## **Security Shredding Service**

Thorntons Recycling has invested €3 million in a new Security Shredding Service, which offers Irish businesses the benefits of a regular, scheduled and confidential shredding service.

Companies can now dispose of documents and records securely, availing of on-site shredding at their own premises or off-site shredding at the company's secure lock down facility in Park West. The security shredding facility is fully secure and monitored 24 hours with CCTV. All materials are handled in compliance with the Data Protection Act and the Waste Management Act and a full audit trail and certificate of destruction is issued for all completed shredding assignments.



### **Construction & Demolition**

Thorntons Recycling is constantly striving to develop innovative new waste processing services.

The company have invested €750,000 in new state of the art equipment for its Construction & Demolition service, enabling increased efficiency in the recycling of concrete, soil, woods and metals.



## New Water Recycler

Thorntons Recycling Tanker Services, which offer a range of specialist services in liquid waste disposal, has invested more than €500,000 in a new water recycler and dewatering unit.

The water recycler is one of the largest in Europe and can recycle up to 64 olitres per min of drain water, thus eliminating the need to use fresh water to jet drains.

# Brown Bin Collection

In a continued expansion of operations, Thorntons Recycling is delighted to introduce a new Brown Bin Collection as part of its commitment to improving the domestic service in Kildare and Meath after a very successful trial period.

The Brown Bin service will collect organic waste to be composted in Kilmainhamwood Compost.

Composting is of great benefit to the environment as it is Natures way of recycling. This service adheres to the Government strategy to reduce the amount of waste going to landfill.



Skip Hire Secure Shredding Recovery and Recycling Tanker Services Compost Commercial Wood Processing End of Life Vehicles

### **Green Meath Art Competition**

Jessica Mullen, from Dunboyne Senior Primary School scooped the top prize in the 2008 Thorntons Recycling "Green Meath Art Competition" announced at a fantastic POP Awards Ceremony hosted by Meath County Council with generous support from Thorntons Recycling

The Green Meath Art Competition provides an opportunity to raise awareness of recycling and environmental issues among young people and pupils were asked to design a poster which represented the competition theme 'Meath and its Environment'.

The Competition, now in its second year, attracted over 900 entries from school children throughout County Meath and Jessica's winning entry is now displayed on the side of a Thorntons Recycling truck which travels throughout County Meath collecting materials for recycling.



Pictured at the prize-giving are (L-R) Meath County Council Cathaoirleach Nick Killian, County Manager Tom Dowling, Thornton Recycling Managing Director Gary Brady and Jessica Mullen, overall prize winner.

## Thorntons Recycling Sponsors Familiscope

Children and young people from the Ballyfermot community can now avail of a fantastic Art Therapy resource, which has been equipped with specialist equipment including seating, tables, and therapeutic play resources by Thorntons Recycling.

The Art Therapy service, situated in St Louise's School and run of by Familiscope, the Ballyfermot based community support centre, uses art and creative materials to help children deal with emotional conflicts, reduce anxiety, build self-awareness, solve problems and increase self-esteem. Art therapy allows children to express their thoughts and feelings in a comfortable environment. It is recognised as a very effective therapy to help children deal with emotional trauma.

Maria Andrews, Environmental Manager, Thorntons Recycling said, "Familiscope provides programmes in the Ballyfermot area that have a really positive impact on the lives of young people. When we learned about their requirement for specialist equipment, we were delighted to be able to help with this innovative and essential service".



Pictured at the new Art Therapy room in St Louise's School are I-r; Maria Andrews, Thorntons Recycling; Sr. Justine O'Brien, Principal, St Louise's School; Deirdre Ronan, Art Therapist, Familiscope and Frank Gilligan, Board Member, Familiscope



Gary Brady, Managing Director of Thorntons Recycling presenting students from Ballyfermot College of Further Education with a new CANON EOS 50D digital SLR camera. Also pictured is John Molloy, Darkroom Teacher and Technician at BCFE.

## Ballyfermot Students Get Snappy!

Cinematography students from Ballyfermot College of Further Education have been given a unique opportunity to produce a new Environmental Health and Safety DVD for Thorntons Recycling, which will be used by the company to educate employees, suppliers and visitors of the importance of the company's environmental health and safety policies and practises.

At Thorntons Recycling rigorous environmental health and safety policies underpin all activities. John Molloy, Darkroom Teacher and Technician first approached the company seeking assistance with the disposal of darkroom materials. During the course of the discussion, it emerged that the college required expensive new camera equipment, and so it was agreed that students could create the new DVD in exchange for a top of the range digital SLR camera.

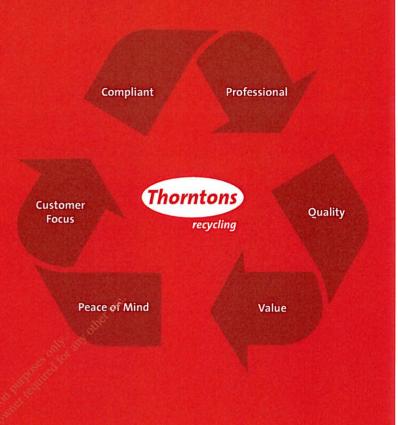
Tommy Rogers, Health and Safety Manager with Thorntons Recycling said, "We are very excited about the development of this new Health and Safety DVD, which we can use to provide extensive training to all personnel and visitors in an interesting and informative format".

Skip Hire Secure Shredding Recovery and Recycling Tanker Services Compost Commercial Wood Processing End of Life Vehicles

Thorntons Recycling is a strong supporter of local community groups and regularly assists them in their endeavours. This year the company pledged approximately €50,000 in support and some of the initiatives include:

- Providing funding to Familiscope to purchase specialist equipment for an Art Therapy resource
- Sponsoring the POP Awards, in association with Meath County Council
- Promoting Meath and Its Environment through the Annual Green Meath Competition
- Providing students from Ballyfermot College with a unique opportunity to create a Health and Safety DVD
- Purchasing a top of the range digital SLR camera for students in Ballyfermot College
- Completing the next phase of development in the All Weather Pitch for Kilmainhamwood GAA Club
- Hosting a Christmas Party of more than 200 Senior Citizens in Ballyfermot
- Supporting Saint Periguines GAA Club, Dunboyne Vintage Rally, Dunboyne Motor Club and Ashbourne Open Day

The company also provided free skips to a range of organisations throughout the year.













#### **Group Headquarters**

Thorntons Recycling Limited Unit S3B Henry Road, Parkwest Business Park, Dublin 12.

Tel +353 1 623 5133 Fax + 353 1 623 5131 Email: info@thorntons-recycling.ie Website: www.thorntons-recycling.ie Thorntons Recycling Centre Killeen Road Dublin 10.

Thorntons Security Shredding Park West Business Park Dublin 12

ELV Centre Kylemore Park West Dublin 10. Kilmainhamwood Composting Ballynalurgan Kilmainhamwood Co. Meath

Thorntons Recycling Centre Dunboyne Industrial Estate Dunboyne Co. Meath

Thorntons Wood Recycling PDM Ltd Old Mill Town Kill, Co. Kildare

Email: info@thorntons-recycling.ie Web: www.thorntons-recycling.ie

Thorntons recycling

Skip Hire Secure Shredding Recovery and Recycling Tanker Services Compost Commercial Wood Processing End of Life Vehicles

## Cré Composting Association of Ireland

Compost Industry Awards 2008

**Best Composting Facility** 

Kilmainhamwood Compost

This award for Kilmainhamwood Compost is in recognition that it is a well managed facility which acts as a role model for the industry to follow.

CCP COMPOSTING ASSOCIATION of IRELAND TEO

PERTY FOSTER
EXECUTIVE Administrator
22.05.08