



Cré Annual Seminar – May 5th 2005 -Portlaoise

Cré invites you to attend the 5th Annual Composting Seminar & Exhibition. The theme of this year's Seminar is "Composting Opportunities – Home, Business, Industry".

The Venue is the Heritage Hotel, Portlaoise, Co. Laois (www.theheritagehotel.com) and the date for the seminar is Thursday, 5th May 2004.

The Seminar is aimed at Local authorities, Horticulturists, Waste contractors, Consultants, Producers, users, distributors, Food Industry, Academic institutions and State sponsored bodies,

The Seminar is about opportunities in the biological treatment of organic wastes and will address the home and commercial environments, with emphasis on the practical application of existing and new methods.

Now a regular feature is the Exhibition area, demonstrating the capabilities of both public and private endeavours, and Irish and international companies. The day is designed to enlighten and inform. The Seminar and Exhibition coincides with International Composting Awareness Week 2005.

The attendance fee is €121 per member, €181.50 per non-member, including VAT and Lunch.

To attend the Seminar, please send cheque made payable to 'Cré - The Composting Association of Ireland'; or Purchase Order Number and post to: Cré, PO Box 310 Naas, Co. Kildare. Fax: 01 4100 996 Enquires to: info@compostireland.ie.

The final date for application is 2nd May 2005.

Dr. Padraic Larkin, Deputy Director General, EPA will give the Seminar Opening Address "Environmental Challenges & the Role of Composting & Anaerobic Digestion in Sustainable Development". The series of 11 talks as outlined on the column opposite will follow.

There will be ample opportunity to meet the many exhibitors and the day will finish at 4.30.

For transport details see www.irishrail.ie

Please note speaker changes.

Collection issues

MSW Characterisation, EPA Study:
Olivier Gaillot RPS-MCOS and James Hogan CTC.
Separate Collection of Household Biowaste: *Andrew Baker, London Borough of Harrow.*
Cost Effective Biowaste Collection:
Dominick Hogg, Eunomia Research & Consulting

Home & On-site Composting Options

Vermicomposting at home:
Speaker TBC
Home Composting Promotion:
Moira Byrne, Wicklow County Council
On-Site Composting, Small Scale Opportunities:
Paddy McCauley, Grow Green Solutions Ltd



New Technologies

Large Scale Vermicomposting, a case study:
Phillipa Stanley, ORM Waste Management
MBT, Challenges & Opportunities:
Dr Peter Bardos, R3 Environmental Technology
Small Scale AD, A Case Study:
BEOFS Ireland

New Applications

Composting of Farm Waste - 2 case studies:
Nick Helme, Bioganix, UK
Industrial Sludge Composting:
McGill Environmental



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Magherafelt Council Invests In Composting

Magherafelt District Council has awarded the contract to supply its in-vessel composting units (IVC) to VCU Europa, a subsidiary of VCU Technology. This will be the sixteenth VCU Europa site in the UK & Ireland.

UK-based VCU Europa will supply its animal by-product accredited vertical in-vessel composting system to process over 2,500 tonnes of organic material each year. Operated by the Council, the facility will take in meat inclusive catering waste and green waste from the Council's source separated brown bin scheme.

"This will be the first site where our technology is used as a double barrier system to meet the UK

catering waste regulations," says Carl Beck, European Business Manger, VCU Europa. "

John McLaughlin, Chief Executive of the Council says: "By purchasing VCU technology, we have chosen an established brand that is already accredited to meet the Animal By-production Regulations. This gives us confidence that regulatory compliance will be met and will allow us to move quickly to the forefront in achieving our recycling goals."

To meet its recovery target of 25% of household waste by the end of 2005, Magherafelt intends to expand its 'Brown Bin' service to cover 7,500 households by that time. www.vcutechology.com.

Anaerobic Digestion – EPA discussion paper

The Environmental Protection Agency (EPA) published a discussion paper in January 2005 on the benefits of Anaerobic Digestion (AD) for waste management, agriculture, energy and the environment.

An underdeveloped Irish industry has the potential to be a win-win solution for farming, for our Kyoto targets, and for the environment according to the EPA discussion paper.

"Centralising anaerobic digestion offers solutions to many agricultural, energy and environmental challenges facing Ireland currently", said Dr John Curtis, EPA Economist.

Some benefits from centralised AD are:

- Contributions to Kyoto Protocol targets
- Less dependence on fossil fuel

- Groundwater is protected as digestes are less polluting and have improved fertiliser value
- Significant contribution to Ireland's target under the EU Renewable Energy Directive
- Investment payback for agriwaste management
- Compliance with the Nitrates Directive

The costs and benefits of developing centralised anaerobic digestion in Ireland are outlined in the discussion paper. The paper can be found at: www.epa.ie/NewsCentre/DiscussionPapers.

The EPA hopes that the paper will act as a catalyst for a discussion by interested parties on the issue. If a consensus can be reached then the implementation of some incentives could make anaerobic digestion of organic wastes in Ireland a viable business option.

"MBT: A Decision Makers Guide" – The Juniper Report

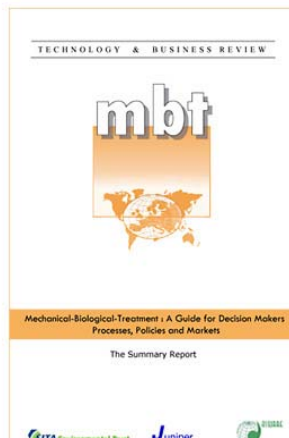
In the UK in March 2004, SITA Environmental Trust and ASSURRE commissioned Juniper Consultancy to carry out a one-year study on Mechanical-Biological Treatment (MBT).

The report, published in March 2005, represents the single most comprehensive review of the true capabilities of the various types of MBT systems and its relevance for integrated waste management across Europe.

The objectives of the report are to:

- Provide a comprehensive review of the status of MBT;
- Assess the capabilities and limitations of the many variants of this concept;
- Analyse the suitability of such systems for managing residual fraction of MSW;
- Report on the implications for UK Local Authorities' waste strategies.

The timing of the publication of the report is particularly appropriate - there is widespread interest in MBT in Ireland. Numerous processes utilising widely varying concepts are being promoted - yet until this report there has been no standard



publication that critically appraises these systems in the context of the needs of municipal authorities. This report is available to download from the website, www.juniper.co.uk.

Technical Review of MSW Composting

In the UK, a web site and technical review, which brings together the technical information available about the composting of mechanically segregated fractions of municipal solid waste (MSW) in a form that is easily accessible as part of the MBT technique have been launched.

The project, carried out by Dr Paul Bardos and his team at r3 Environmental Technology Limited and AEA Technology PLC was made possible with funding from SITA Environmental Trust, through the UK's Landfill Tax Credit Scheme.

The web site provides access to a bibliography of 1,600 references. It enables practitioners and researchers to add additional entries to the bibliography, enabling the site to remain up to date. The website address is www.compostinfo.info.

The technical review, available as web pages and in PDF format on the web site, collates together the large body of existing, and apparently forgotten

information about composting mechanically separated fractions of MSW. It appears that this information is not being exploited by MBT developers, who may therefore be at risk of repeating research that has already been done, or perhaps even repeating mistakes from the past, or not carrying out adequate sampling and analysis.



The review uses more than 650 bibliography references and provides a general grounding in the subject and signposts readers to sources of further information.

Dr Bardos will present a paper on "Challenges and Technologies in MBT" at the Cré Seminar on May 5th.

Cré Themed Meeting – Odour and Bioaerosols

A themed meeting was held on the 3rd of February 2005. The title of the meeting was 'Odour and Bioaerosols'. The speakers were Dr Tom McLoughlin-EPA, Dr. Munoo Prasad-Bord and Móna, Seán Creedon-Bord na Móna and Dr. Brian Sheridan-Odour Monitoring Ireland. Information was provided by the speakers on odour, how it can be sampled, measured and monitored, and mitigation measures were also addressed. The composting licence application process and concerns regarding bioaerosols and odour were discussed. Information was also provided on bioaerosol sampling, equipment used, operational control for bioaerosol abatement and dispersion modelling.

Dr. M Hogan, Medical Expert, Bord Pleanála OH was quoted 'While the risks to vulnerable individuals such as immunocompromised is greater from *Aspergillus Funigatus*, there is no evidence that the risk attributable to living near a composting site is greater than exist already anyway.' A set back distance of 200 m from the point of activity to a sensitive receptor, baseline research, a control plan and risk areas as opposed to a set back distance was discussed.

All presentations are available on the Cré website, – www.compostireland.ie - as is the document 'Bioaerosol and Composting', produced by Cré.

Vermicompost Growth Trial Wins Research Prize

Former Cré secretary Percy Foster who is conducting an MSc research project on vermicomposting at Institute of Technology, Sligo has won this year's Chartered Institute of water and Environmental Management (CIWEM) 22nd annual Earth Tech Ireland Environmental Award. The award was for greenhouse trials with grass, barley, radishes and marigolds grown in vermicomposted dairy wastewater sludge and untreated dairy sludge diluted to various concentrations using Sphagnum peat moss. The research involved vermicomposting dairy sludge,

followed by trials to monitor growth and yield of the plants. Percy's research is sponsored by FIRM through the Department of Agriculture and Food and the Environmental Protection Agency under the National Development Plan and Glanbia Ingredients.

Research
IT, SLIGO

Please take note of the following dates of forthcoming Cré events, all venues to be decided;

21 July	Cré AGM
29 Sept	Themed Meeting and Site Visit Managing the Environmental Impacts of Composting Plants
17 Nov	Themed Meeting and Site Visit Developing Markets for Composted Materials

SRS In-Vessel Composting and Biodrying System

SRS is based in Ireland and committed to providing solutions and alternatives to the landfill and mass-burn incineration of waste. SRS are specialists in the provision of mechanical separation and biological treatment technology.

SRS offers the client a one-stop-shop for environmentally sound, cost effective, innovative and reliable solutions to waste management.

Depending on a customer's waste processing needs, SRS can provide a complete system for waste separation or individual units to complement existing processes or an In-vessel Composting and Biodrying System.

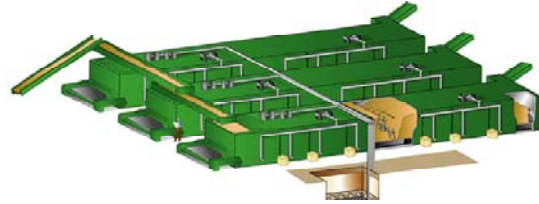
The composting system uses two-zone, flow-through tunnels, which process biodegradable waste streams in 14 days. Waste streams can include source segregated food waste, green waste, sewage sludge, agri-waste and the biodegradable component of MSW (which can be extracted using SRS Waste Separation System).



SRS has completed an installation the Panda Waste facility in Co. Meath. Panda Waste purchased two in-vessel composting and biodrying tunnels with a combined processing capacity of nearly 20,000 tonnes of biodegradable waste per annum. Panda Waste plan to turn source segregated organic waste and the biodegradable fraction of municipal solid waste (MSW) into a compost-like output with a variety of applications and outlet markets. Commissioning will take place in the next couple of weeks and both SRS and Panda Waste will host an open day later in the summer. Panda Waste also purchased from SRS, a line for mechanical separation of biodegradable fraction of municipal solid waste (MSW).

The system can be designed to function solely as a 'composter' or solely as a 'biodryer' or, as with Panda Waste in Navan, it can be designed to interchange between both. This allows the customer to switch between biodrying and composting to produce a product best suited to market conditions.

The main difference between the two is the level of biodegradation achieved and the moisture content of the output material. Output from both can be used for 'compost' and 'landfill' applications but biodried output is more highly calorific.



Key Features of the SRS Composting and Biodrying System Include:

- Two zones and temperature control, meeting Animal By-Product legislation requirements.
- Odour control in-tunnel and bio-filter treatment.
- All leachate is recycled within the tunnel to control moisture levels.
- Automatic material and tray/floor advancement and automatic control of airflow, temperatures, moisture and oxygen.
- Patented mixing process within the tunnels, to keep material porous and un-compacted.
- Horizontal Design minimising the height of the material and facilitating aeration.
- Minimum of moving parts and the use of corrosion resistant stainless steel, ensuring low energy and maintenance costs.
- Low operating costs and minimal staffing needs.
- Modular tunnel design
- Offers differing capacities to cope with any tonnage requirements.
- Ensures that capacity expansion is easy and cost-effective.
- Means that different waste streams can be processed separately if required.



Down to earth solutions

To learn more about SRS and SRS systems, please contact Alan Fallon, General Manager, ROI on +353 (0)46 9432282 or +353(0) 86 3223221.