### 43135

Europe, Asia, Africa

# **Improving** Composting **Operations** In Developed And **Developing Nations**

Two agencies — one in the UK and the other in the Netherlands — publish manuals to achieve sustainable waste management goals.

### Information Infrastructure Guide To Large-Scale Composting In The UK

JANE GILBERT, chief executive of The Composting Association in the United Kingdom, is justly proud of the UK's first large-scale composting manual. "Published in response to demand from all sectors of the waste management industry," writes Gilbert about the Association's looseleaf-formatted guidebook, "the manual encompasses all the composting systems and their associated issues currently available in the UK." The manual, titled Large Scale Composting: A Practical Manual for the UK, has been edited by David Riggle (formerly a *BioCycle* editor before moving to Scotland), Fiona Holland and Jane Gilbert.

Public officials whose comments ap-

pear in the foreword note that: In Wales, composting is set to play a key role in converting "waste" materials into beneficial resources; In Scotland, "there is no doubt that composting will have a major part in achieving ... implementation of our National Waste Strategy; In Northern Ireland, composting will be a "vital component of sustainable waste management industry"; and throughout England, the Waste Strategy has "statutory targets for local authorities to deliver large increases in recycling and composting."

Chapters in the manual present valuable data on feedstock sources and characteristics, collection schemes, regulatory context, site selection and preparation, operational issues and troubleshooting, health and safety, alternative systems, and compost applications and markets.

Case studies are interspersed through the pages of the manual. The reader will learn how Gleneagles a five red star hotel, conducted a waste audit of its organic stream, which led to a composting trial in 1997. A pilot composting operation recycled yard trimmings and stable manure as well as food residuals. Since the pilot concluded in 1998, Gleneagles is investigating the suitability of an in-vessel composter for the back of the hotel.

At the Worm Research Centre in Yorkshire, technical performance of outdoor vermicomposting systems is being studied. Forty experimental beds (400 square meters) with leachate collection systems are supplying data on worm populations and composting rates. One project is with locally produced potato waste as a feedstock.

The section on "Standards for Composts" includes references to the European Union (EU) ecolabel for soil improvers, certification standards prepared by the UK Soil Association as well as the Composting Association Standards for Composts. Key requirements include terms of production, no feedstocks are specifically excluded, and producers "are expected to follow the composting procedure they have agreed with The Composting Association. ... Additionally, composts must perform adequately in plant germination and growth tests."

For details on ordering a copy of Largescale Composting: A Practical Manual for the UK, contact The Composting Association, Avon House, Tithe Barn Road, Wellingborough, Northamptonshire, 1DH, UK; info@compost. org.uk; www.compost.org.uk.

### Five Tools For **Integrated Sustainable** Waste Management

**BASED** in Gouda, the Netherlands, the Urban Waste Expertise Programme (UWEP) has been working since 1995 to develop a set of tools to help officials manage waste streams sustainably. This summer, UWEP has summarized its findings in a publication titled *Integrat*ed Sustainable Waste Management (ISWM)

BIOCYCLE August 2001 - A Set of Five Tools for Decision-makers. (www.waste.nl)

The countries and organizations monitored during the course of the project were ACEPESA in Costa Rica; IPES in Peru; CAPS in the Philippines; CEK in Mali; Geopont-Intercom in Bulgaria; and WASTE in the Netherlands and Egypt. The pilot projects were set in low and middle income countries in Africa, Asia and Latin America.

The first tool takes a very specific look at the concept of ISWM, which stresses equity, effectiveness, efficiency and sustainability. All waste must be managed while maximizing the benefits of removal and minimizing the costs.

The second tool addresses the role of composting in ISWM practices. It serves as a primer for a waste manager who is relatively unfamiliar with the composting option. The focus is on low-cost, low technology composting approaches suitable for developing Southern countries and transitional Eastern European countries.

The third tool for waste managers examines the costs associated with ISWM. Primarily, if any one of the four key principles of ISWM are violated, the public sector pays the price for clean up. If a practice is deemed sustainable, it has to fit within economic boundaries. In order to manage costs and efficiency, the fourth tool is designed to help decision makers analyze the potential benefits of using Micro and Small Enterprises (MSEs) and Community Based Organizations (CBOs) to take care of some of the waste management workload. The final aspect is an in-depth look at community partnerships. This topic examines how the government can provide support to the community for services and how communities can play a larger role in ISWM.

The UWEP will continue to run pilot programs based on ISWM practices for the next two years in La Ceiba, Bamako, Bangalore and Batangas Bay.

It is preparing for an extension into other developing regions, where it will pair with both old and new partners. The UWEP also plans to facilitate ISWM practices in many more cities around the world.

For more details, contact Jaap Rijnsburger, director, WASTE, Nieuhaven 201, 2801 CW Gouda, the Netherlands. E-mail: office@waste.nl. --- A.S.

## PROFESSIONAL SERVICES

### CH2MHILL ...Helping the World Manage Waste

Comprehensive Waste Management Services and Pre-Engineered Products

- Organics and Biogas Services
- C:N Composting Systems™
- BIOCLEAN Biofiltration Systems

Manufacturing • Engineering • Permitting • Construction • Operations



## TOTAL **Sludge Management** ENVIRONMENTĂL SERVICES, INC.

1-800-292-2325

77B West Street • West Hatfield, MA 01088 413-247-9656 • FAX 413-247-9401



"Your Environmental Connection to Internet Solutions"

DVIRKA AND BARTILUCCI

Integrated Waste Management Services Composting, Recucling, Odor Control Process Design and Procurement Facility Audits/System Optimization

Woodbury, New York, South Pleinfield, New Jersey Tel: 516-364-9890 Fax: 516-364-9045

e-mail: db-eng@att.net

### TETRA TECH, INC. / E&A ENVIRONMENTAL CONSULTANTS, INC.

America's Premier Compost And Odor Control Specialists

Stoughton, MA (781) 344-6446

Bothell, WA (425) 485-3219

marketing@enviroconn.com

Cary, NC (919) 460-6266

Materials and Logo:

**WASTE MANAGEMENT CONSULTANTS SINCE 1975** 

- Planning
- Engineering Design
- Implementation
- Recycling/MRFs Composting
- Market Analyses Collection
- Biosolids Reuse
- Expert Witness International

1850 Gateway Blvd., Suite 1060 Concord, California 94520 USA Tel: 925-356-3700 Fax: 925-356-7956 Email: mail@calrecovery.com

#### **COMPOST TESTING**

Laboratory Support for Commercial Composting

Our COMPLETE COMPOST PROGRAM starts with formulating the compost mix and ends with potential uses of final product.

Feedstock: chemical & physical quality
Formulating Mixes: guarantee quality
Compost: quality, stability and cure
Agricultural uses and Application rates
Bioremediation and Degradation of toxins
Toxicity, Bioassay, Metals, Pesticides

CONTROL LAB, Inc. 42 Hangar Way, Watsonville, CA 95076

### G. B. Willson Associates

Consultant on Composting/Organic Waste Recycling

1702 Park Drive Loveland, CO 80538 Phone: (970) 663-7757 Fax: (970) 663-5441

Digester Cleaning, Dewatering, Dredging, Disposal **Complete Services** 



The full range of water and wastewater related services 800-465-2115 www.trimaxenv.com; 888-776-7306 www.azurixna.com