

How To Grow The Composting Industry

Nora Goldstein

BioCycle

www.biocycle.net



*An Invitation
to Men
Concerned with the Treatment
of Municipal or Industrial
Organic Wastes*

With this first issue, Compost Science launches an information service that we believe will become increasingly valuable to all sanitary engineers, mayors, city managers, directors of public works, superintendents of sewage treatment plants, and executives of companies producing organic waste materials.

Composting can offer practical solutions to many waste treatment problems right now. As more engineering advances are made and equipment developed, composting will deserve increasing consideration as a practical treatment.

That is why we feel Compost Science will be valuable to you. In this and future issues, you will read practical studies, research reports, special surveys, and specific experiences that will bring you valuable information heretofore presented only on a hit-or-miss basis.

The field is an important one to you, even if it is an admittedly specialized one. Composting is a specialty which many men in the waste treatment field should get to know better—for what it is and what it can be.

Compost Science—to be issued quarterly—will bring you that knowledge in an unbiased, qualified manner. You can make sure that you and your associates will receive future issues by accepting this invitation to subscribe to Compost Science. Subscription price is \$4.00 per year.

**COMPOST
SCIENCE**

EMMAUS, PENNSYLVANIA



A Call to Executives of the Composting (???) Industry, Whoever and Wherever You May Be

A meeting will be held in the near future to organize an industry-wide association made up of companies who have a commercial interest in the development of composting and waste recycling. We have used question marks in the above headline, because at the present time, it might be considered presumptuous to refer to a compost industry.

Yet the need for such an association is very much present, and it is time to do something about creating one. Without such an organization, it is very difficult to counteract old attitudes and ancient economic thinking that relegates composting to an untried method only touted by zealots.

If your company has any financial, idealistic or any other interest in encouraging the recycling of solid wastes, then

NOW IS THE TIME TO DECLARE YOURSELF.

If cities and industries are to recycle wastes, the men responsible for treating those wastes must get some help from you.

In the absence of any other agency or group, COMPOST SCIENCE has decided to serve as a liaison to encourage formation of an industry-wide organization. A directory will be compiled based on the replies received.

There is no obligation to do anything except fill out and mail the enclosed card. Our goal is to coordinate the efforts of different companies and individuals for more effective waste management.

Eventually, such an organization could hold seminars and symposia for consultants, city officials, researchers, etc. which would advance the knowledge of waste recycling. Many constructive programs will develop after interested individuals cooperate.

A preliminary survey of companies and consultants who have been active in the composting field has shown a willingness to form such an organization. If you would like to receive information about the progress of such a group, please fill out the attached card or write to the Editor, Compost Science, Emmaus, Pa. 18049.



about a 100, this size
isolating a major frac-
tional refuse.

ows a schematic repre-
his portion of a sep-
Objects are dropped
stream conveyor onto
r which passes under
e sensors make contin-

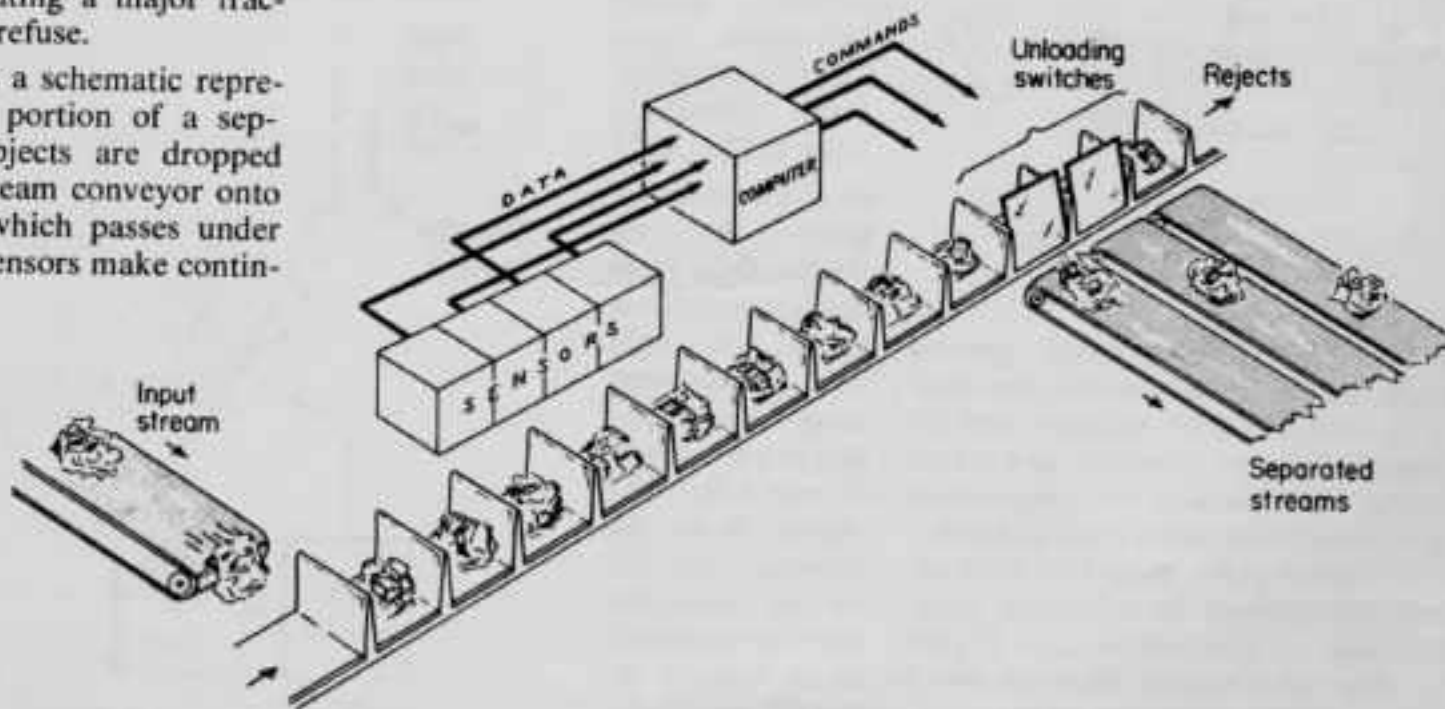


Figure 1. Schematic Representation of a Sensor-Controlled Separation Plant.



The Glasers compost about 500 cubic yards of material annually; the weight of the finished compost runs 1200 to 1500 pounds per cubic yard depending upon moisture content. The stirring machine above is powered by a Ford V-8 engine and is constructed from old automobile parts and scrap materials.

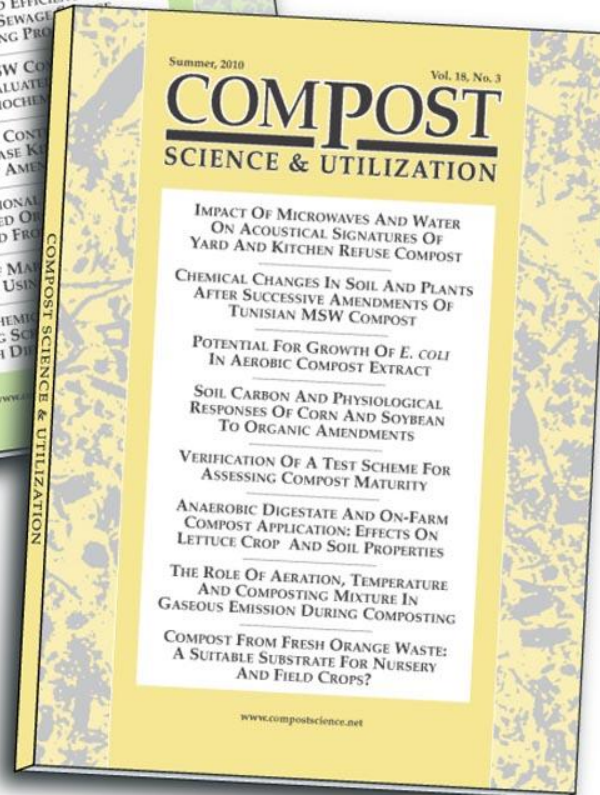
Current U.S. Composting Industry

- **Food Waste — 225**
- **Yard Trimmings — 3,500 (2004 data)**
- **Biosolids — 265**
- **Farm Composting — 600 (guess)**
- **Universities, institutions — 500 (estimate)**
- **Schools — 500 (guess)**
- **Vermicomposting — 100 (guess)**
- **People who love compost — millions!!!**



Factors That Foster Growth

- Research
- Compost Performance
- Standards
- Tools of the Trade
- Facility Performance
- Markets
- Cog in Sustainability Wheel



Effect Of Compost Application On Tulip Poplar Growth



Courtesy of Eliot Epstein



Effect Of Compost On Turf Grass Growth



Courtesy of Eliot Epstein



White House – Beltsville Biosolids Compost Application



BEFORE



AFTER

Courtesy of Eliot Epstein





PLASTICS RECOVERY • IN VESSEL TECHNOLOGIES • WOOD WASTE MARKETS

BIOCYCLE

JOURNAL OF COMPOSTING & RECYCLING

JANUARY 1995

Bioaerosols AND Composting

State Of The Knowledge Report



www.biocycle.net

10TH ANNUAL BIOCYCLE CONFERENCE ON RENEWABLE ENERGY FROM ORGANICS RECYCLING

October 18, 19, 20, 2010 • Des Moines, Iowa • Des Moines Marriott Downtown • www.BioCycleEnergy.com

BIOCYCLE

JULY 2010

ADVANCING COMPOSTING, ORGANICS RECYCLING & RENEWABLE ENERGY

Bioremediating Petroleum With Compost

Megacomposting
Success In California

Anaerobic Digestion Of
Commercial Food Waste

Composting On Campus

Slow Speed Shredders

34TH ANNUAL CALIFORNIA RESOURCE RECOVERY ASSOCIATION CONFERENCE ISSUE
AUGUST 8-11, 2010 • SACRAMENTO, CALIFORNIA

BIOCYCLE
GLOBAL 2011



Building the **Soil** for Cleaner Water, Healthier Streams, Successful Landscapes, and Healthy Communities

Soils for Salmon
Home

Why build healthy soil?

:: How To: Soil Best Practices

> WA State's Soil BMPs --

How-To Guide

> Low Impact

Development

> Local soil regs in WA

> Erosion control with

compost

> Improving the soil in

existing landscapes

> For homeowners

Case Studies

Other Resources

a project of the



How To: Soil Best Management Practices, Tools, & Specifications

Soil best management practices (BMPs) include preserving native soil, and restoring soils disturbed during development with organic amendments like compost. This reduces stormwater runoff and pollution, reduces landscape maintenance needs for water, fertilizer, and pesticides, and makes healthier, more attractive landscapes.

On this page:

- [Washington State's Soil BMPs for New Construction: How-to Guide and Specifications](#)
- [Low Impact Development](#)
- [Local Soil Regulations Around Washington](#)
- [Erosion Control with Compost Berms, Blankets, and Socks](#)
- [Improving the Soil in Existing Landscapes](#)
- [Information for Homeowners](#)

Washington State's Soil BMPs for New Construction: How-to Guide, Specs, and "Low Impact Development"

Soil BMPs are simple – see the Summary at right.

Or view a slideshow: [Building Soil: Foundation for Success](#) (PDF 37 slides, 4.8 MB)

Washington State now requires Soil BMPs in new construction. Washington State Department of Ecology's [Stormwater Management Manual for Western Washington](#) (WDOE website), used by local jurisdictions for stormwater design, requires soil protection or

Soil Best Practices:

New Construction

- Retain and protect native topsoil & vegetation where practical
- Restore disturbed soils by tilling 2-3" of compost into upper 8" of soil
- Loosen compacted subsoil, if needed, by ripping to 12" depth
- Mulch landscape beds after planting

www.soilsforsalmon.org
www.buildingsoil.org



THE SUSTAINABLE SITES INITIATIVE™

[HOME](#)[ABOUT US](#)[AREA OF FOCUS](#)[CASE STUDIES](#)[CURRENT WORK](#)[CONTACT](#)

The Sustainable Sites Initiative™ (SITES™) is an **interdisciplinary effort** by the American Society of Landscape Architects, the Lady Bird Johnson Wildflower Center at The University of Texas at Austin and the United States Botanic Garden to create **voluntary national guidelines and performance benchmarks** for sustainable land design, construction and maintenance practices.

[Learn more about the first projects to use the national rating system for sustainable landscapes.](#)



Sustainable Facts >>>

Play in places with trees and vegetation can support children's development of skills and cognitive abilities and lessen the symptoms of Attention Deficit and Hyperactivity Disorder (ADHD).
- Taylor et al., 1998; Taylor et al., 2001

SUSTAINABLE SITES CASE STUDY: >>>

Sidwell Friends School (Middle School renovation and addition)

The renovation and addition project at Sidwell Friends School (SFS) campus transforms the Middle School's fifty-year-old facility into an exterior and interior teaching landscape. Designed to foster an ethic of social and environm...

[Learn more](#)

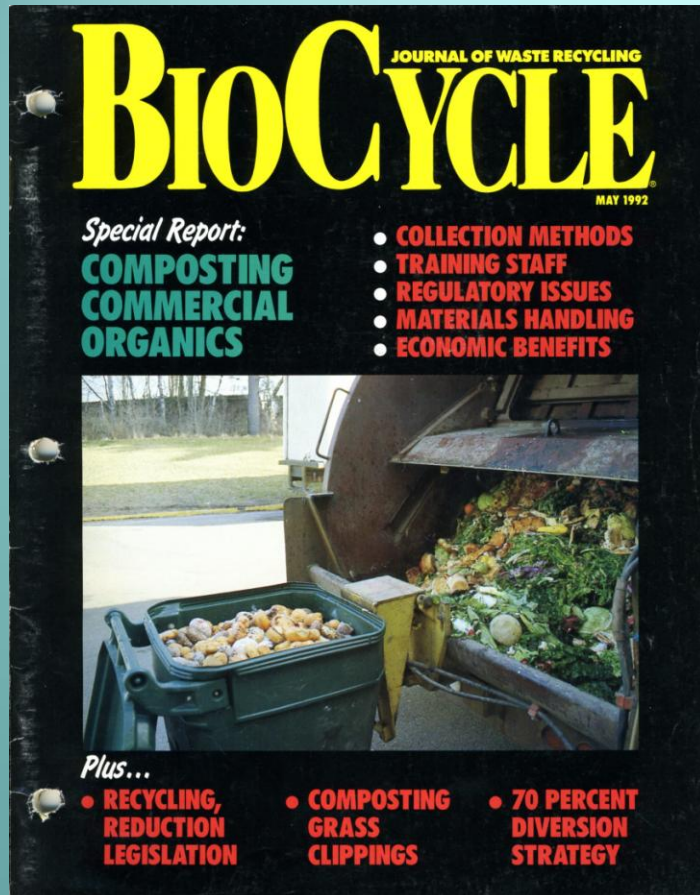
[See more case studies](#)



Copyright 2010, Sustainable Sites Initiative. All Rights Reserved.

www.sustainablesites.org





Solid Waste and Recycling Programs

Integrated Organic Diversion Program



Integrated Organic Diversion Program

Program Objective:

- ✓ Divert all food scraps from landfill disposal
- ✓ Start on west coast, implement a large-scale rollout of food scrap recovery to all 50 States and Puerto Rico; by utilizing various methods of source reduction, beneficial reuse and recycling;
- ✓ Move larger percentages of organic materials to follow the EPA /Wal-Mart Organic Hierarchy – ensure ability to redirect as new technologies become available; and
- ✓ Have all 50 States completed by August 1, 2010.



We've Switched To Compostable Service Ware



It's Not Garbage Anymore!



Promoting the Advancement of Anaerobic Digestion Technology



Renewable biogas could displace as much as 10-15% of fossil natural gas use by 2025.

Find out more ▶

Home | About Us | Legislative Affairs | Media | Become a Member | About Biogas | News/Events | Members Only

Feature

ABC Develops Goals for 2011

The American Biogas Council has developed a number of specific goals for 2011. In the process of reaching these targets, ABC will maximize the amount of waste digested to make biogas, grow demand for anaerobic digestion (AD), achieve incentive/policy parity with other renewables, promote AD as an environmental and economic strategy, and increase the amount of AD-based energy.

The 2011 goals encompass Legislative, Education & Outreach, Financial, and Membership efforts of the Council.

Find out more ▶



ABC Members



Become a Member ▶

Free Biogas News Signup ▶

www.americanbiogascouncil.org



www.biocycle.net

10TH ANNUAL BIOCYCLE CONFERENCE ON RENEWABLE ENERGY FROM ORGANICS RECYCLING

OCTOBER 18, 19, 20, 2010 • DES MOINES, IOWA • DES MOINES MARRIOTT DOWNTOWN

MAY 2010

BIOCYCLE

ADVANCING COMPOSTING, ORGANICS RECYCLING & RENEWABLE ENERGY



Putting The Landfill Energy Myth
To Rest

BIOCYCLE
GLOBAL 2011

FLORIDA TRASHES YARD TRIMMINGS BAN

FLORIDA Governor Charlie Crist was lauded as a hero by that state's organics recycling industry this past June when he vetoed legislation that would have allowed for disposal of yard trimmings in Class I landfills equipped to recover methane. Five months later — and immediately following an unsuccessful U.S. Senate bid for which Crist had switched from Republican to independent status — that veto was overturned by a newly-led state legislature, along with seven other bills the lame-duck governor had vetoed.

The move took place swiftly in a three-hour special session after the state House and Senate swore in 54 new members and named Sen. Mike Haridopolos, R-Merritt Island, and Rep. Dean Cannon, R-Winter Park, Senate and House majority leaders, respectively. The yard trimmings ban had been on the books in its current form for more than 20 years.

"We never thought there would be this massive turnover of vetoes," says Janet Dougherty of Sage Eco Solutions, a public relations firm that works closely with organics recyclers in Florida. "This bill [HB 569] got caught up in our governor's Senate race. Basically, the Republican legislature was throwing it in Charlie Crist's face after they won and he lost the U.S. Senate bid after switching to independent. They passed all the legislation he vetoed except two [of 10 bills]."

Many in the organics recycling industry say HB 569 had legs in the first place due to the concerted lobbying efforts of trash hauler and landfill operator Waste Management, a company that has recently been investing significantly in green technologies including organics recycling. "A waste company cannot claim to be 'green' when it is working aggressively to repeal one of the country's most important recycling laws, the requirement to compost instead of landfill yard trimmings that is responsible for about a third of our diversion," Center for a Competitive Waste Industry Executive Director

**Lame-duck
governor's veto
of longstanding
legislation
overwhelmingly
overturned by
state House
and Senate.**

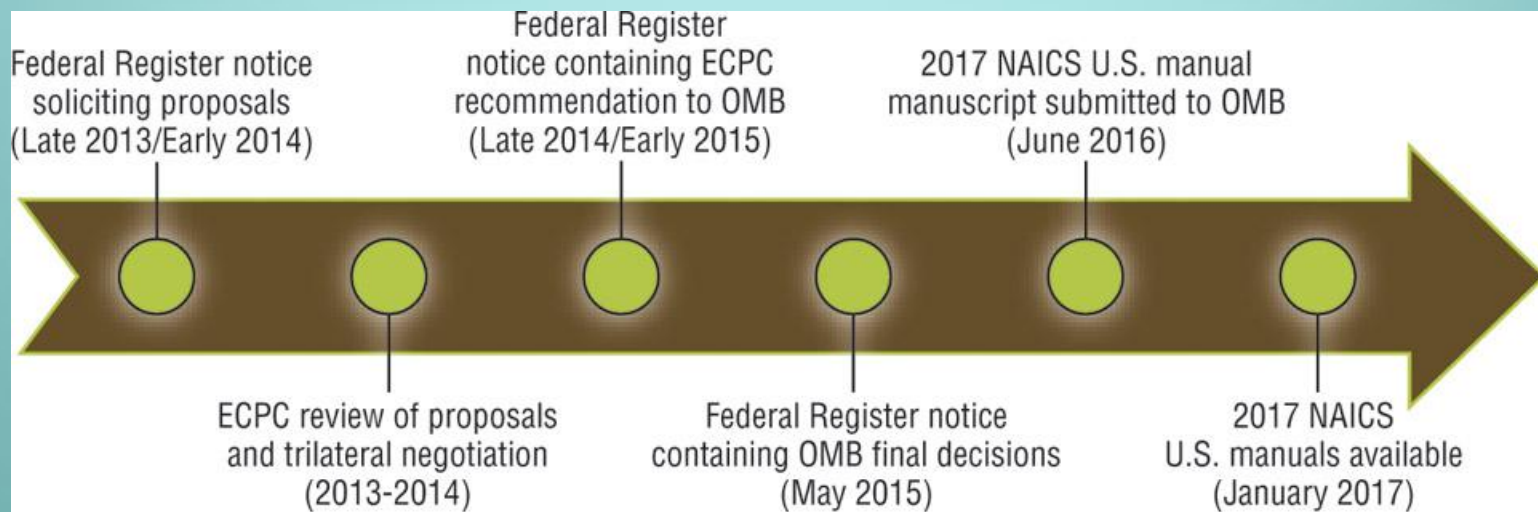
Dan Sullivan

Peter Anderson stated in a press release.

The statement also called attention to Waste Management's support of similar repeal legislation in Georgia, Michigan and other states and challenged what were couched as "wholly false claims the company is making to defend its hostile recovery efforts." Anderson stated that the argument that the repeal of the yard trimming bans helps the environment by recovering energy to generate electricity is flawed because these materials break down much too quickly for the methane to be adequately captured.

A spokesman for Waste Management took issue with Anderson's claims. "The National Solid Waste Management Association [NSWMA] Florida Chapter and several solid waste and recycling companies, including Waste Management, supported that legislation," says Waste Management Director of Communications Wes Muir. "The effort was to enable community choice for yard waste options." The characterization of "repeal" and "overturn" of the Florida ban is factually incorrect, he says. "Communities in Florida are now enabled to choose the best methods for their citizens and infrastructure. Implementation is totally voluntary and at the discretion of the local facility operator. The exception allowed in this legislation applies only to landfill locations with an active gas-collection system that beneficially use the methane captured ... and is not a repeal of the ban. Also the legislation involves only 12 out of 45 Class I landfills in Florida." Given that non-MSW facilities — such as C&D landfills — in Florida can accept yard waste and most of these facilities have no gas collection systems, Muir says, "enabling yard waste to be utilized to generate green energy where gas collection does occur is an appropriate option."

Waste Management recently acquired majority equity interest in Ohio-based compost and mulch producer Garick, LLC, and has invested in other "green energy" compa-



Find A Composter.com

GROWING THE COMPOSTING INDUSTRY.

Find A Site

Register A Facility

A Free Directory Of Composting Facilities Throughout North America

Welcome to FindAComposter.com; a free directory of composting facilities throughout North America, created and managed by *BioCycle* magazine and sponsored by the Biodegradable Products Institute.

Use this searchable database to:

Locate a Composting Facility - Search by Zip/Postal Code or Compost Site Name and you'll instantly see a list of all the facilities in your area that accept organic wastes for composting.

Add Your Facility - Not listed on FindAComposter.com? Take a few minutes to enter your information, and become part of the only searchable database of composting facilities in North America. Each listing is verified by *BioCycle* magazine editors for accuracy.

COMPOSTERS

BioCycle has been a champion of your industry for more than 50 years. Help us grow your business and increase public awareness of why composting make sense, now more than ever. List your facility today!

[Create Your Free Listing Today](#)

ORGANIC WASTE GENERATORS

Find local composters to recycle your food waste, wet/soiled paper, compostable products, yard trimmings, manures, biosolids and more. Search by location or feedstock. You may save money on disposal costs.

[Find Local Composting Facilities](#)

CONSUMERS

Use the directory to buy compost, as well as teach community leaders about local composting facilities in your area. Help boost community recycling rates, reduce greenhouse gas emissions, and build healthy soils.

[Locate Composters in Your Area](#)

Register A Compost Facility

Find A Site


Hide Map




We found 9 Composting Facility in zipcode 18049 (50 miles)

Found 9 records

A B C D E F G H I J K L M N O P Q R S T U V W X Y Z


 e-mail to friend | add to quick list | print | map

1 Lehigh County Organics Recycling Facility (7.45 miles)




5375 Old Packhouse Road
5375 Old Packhouse Road
Orefield, Pennsylvania 18069

Phone: [Click to View Phone #](#)
Fax: [Click to View Fax #](#)
Website: www.lehighcounty.org
Email: [Click to View Email Address](#)

 e-mail to friend | add to quick list | print | map

2 Hidden Creek Stock Farm (14.85 miles)



3237 Salford Station Road
Perkiomenville, Pennsylvania 18074

Phone: [Click to View Phone #](#)
Website: <http://www.hcsfarm.com>
Email: [Click to View Email Address](#)

 e-mail to friend | add to quick list | print | map

3 BarnSide Farm Composting Facility (20.59 miles)



991 Halderman Road
Schwenksville, Pennsylvania 19473

Phone: [Click to View Phone #](#)
Email: [Click to View Email Address](#)

 e-mail to friend | add to quick list | print | map





e-mail to friend add to quick list print map

Grow Compost of Vermont LLC

Overview

2046 US Route 2
 Moretown, Vermont 05676
 Phone: [Click to View Phone #](#)
 Fax: [Click to View Fax #](#)
 Website: <http://www.growcompost.com>
 Email: [Click to View Email Address](#)

Additional Information

[Click here to see more info!](#)

Accepted Feedstocks

Agricultural

- Horse Manure
- Dairy Manure

Food Waste, Compostable Products, Paper/Corrugated

- Meats, Bones, Fish
- Fruits, Vegetables, Trimmings

Yard Trimmings

- Brush & Branches
- Construction & Demolition Debris
- Grass
- Leaves
- Logs & Stumps
- Clean Wood (chips, sawdust, lumber)

Other

Compost Facility Details

Compost Certification

Seal of Testing Assurance (US Composting Council)

Receiving Waste From

- Residential - yard trimmings
- Residential - food waste
- Commercial
- Institutional (e.g., schools/colleges, hospitals, prisons)
- Industrial (e.g., food processors)
- Agriculture

Composting Methods

Windrow

Collection Methods

- Commercial/Institutional Cart
- Drop Off /Self-Haul
- Dumpster and/or Compactor

Compost for sale?

- Bulk
- Retail
- Wholesale

Description

Source separated organics site accepting range of feedstocks

Compost Facility Map



Compost Facility Photo



[Click here for Slideshow.](#) You can also click on any of the photos to start slideshow.

Complete the form below to contact Grow Compost of Vermont LLC

* Your E-mail:

Subject:

* Additional message:



Accepted Facility Feedstocks

Agricultural

Select specific feedstocks and estimate annual tonnage processed

Feedstock	Tons or Cubic Yards/yr	
<input checked="" type="checkbox"/> Dairy Manure	0	tons OR 10000 cubic yds
<input checked="" type="checkbox"/> Horse Manure	0	tons OR 0250 cubic yds
<input type="checkbox"/> Poultry Litter		tons OR cubic yds
<input type="checkbox"/> Other Animal Manure		tons OR cubic yds
<input type="checkbox"/> Crop residuals		tons OR cubic yds
<input type="checkbox"/> Mortalities		tons OR cubic yds

Food Waste, Compostable Products, Paper/Corrugated

Select specific feedstocks and estimate annual tonnage processed

Feedstock	Tons or Cubic Yards/yr	
<input type="checkbox"/> Fruits, Vegetables, Trimmings		tons OR cubic yds
<input type="checkbox"/> Meats, Bones, Fish		tons OR cubic yds
<input type="checkbox"/> Corrugated (Waxed)		tons OR cubic yds
<input type="checkbox"/> Corrugated (Unwaxed)		tons OR cubic yds
<input type="checkbox"/> Compostable Foodservice Ware (plates, cups, cutlery, takeout containers)		tons OR cubic yds
<input type="checkbox"/> Soiled napkins, towels, carry out boxes		tons OR cubic yds
<input type="checkbox"/> Packaging (not corrugated)		tons OR cubic yds
<input type="checkbox"/> Plastic (BPI Certified)		tons OR cubic yds
<input type="checkbox"/> Plastic (Non Biodegradable)		tons OR cubic yds
<input type="checkbox"/> Other		tons OR cubic yds

Wastewater Treatment



Facility Size & Type

Site size (in acres):

Regulatory status(es)
(check all that apply)

- Solid waste facility permit
- Source separated preconsumer food waste only
- Source separated preconsumer & postconsumer food waste, i.e., all food waste streams
- Biosolids composting permit
- Permit by rule
- Agriculture exemption
- On-Site composting exemption
- Other

Sources from which you
receive materials
(check all that apply)

- Residential - yard trimmings
- Residential - food waste
- Commercial
- Institutional (e.g., schools/colleges, hospitals, prisons)
- Industrial (e.g., food processors)
- Agriculture
- Other

Ownership type:

Number of employees:

Does your composting facility
have paved or gravel,
year-round access?

Yes No

How To Grow The Composting Industry?

What would Jerry say?



Theorems On Industry Growth

- As long as have easy disposal option for organics, will be hard to make it on tip fee.
- As grow demand for product — where can really add value — can grow the industry. Want to be touching material to make money, not touching material to lose money.
- Touch more if contaminated. Need to structure tip fee for clean organics
- Have a federal policy — natural resource framework

Theorems, continued

- **What if compost actually worked better and was cheaper than the alternative?**
- **What business are you in? Composting is a fundamentally different business than disposal. With organics, it is hard to be in both.**
- **Resource conservation business. Goal is to minimize disposal, maximize resource use.**
- **Fundamentally,**





ABOUT THE COVER
The City of Saint-Hyacinthe, Quebec wastewater treatment plant installed mesophilic anaerobic digesters to manage the biosolids on-site. Construction began in September 2009, and the digesters went into service in January 2010. Cover photo courtesy of Bio-Methanex, Inc.

Editor and Publisher Emeritus
Jerome Goldstein

Editor

Nora Goldstein

Publisher

Rill Ann Goldstein

Associate Publisher

Ina Pincus

Managing Editor

Dan Sullivan

Contributing Editors

Craig Coker, Rich Flammer,
Diane Greer, Robert Spencer,
Molly Farrell Tucker, Rhodes Yepsen

Advertising Director

Teri Sorg-McManamon

Art Director

Doug Pinkerton

Production Assistant

Celeste Madtes

Editorial Board

Sally Brown, Ph.D.

University of Washington

Carla Castagnero

AgRecycle Inc.

Luis F. Diaz, Ph.D.

CalRecovery Inc.

Larry Krom

Focus On Energy

Fred Michel, Jr., Ph.D.

The Ohio State University

Wilson Rickerson

Meister Consultants Group, Inc.

Carol Werner

Environment and Energy

Study Institute

BioCycle is published monthly by The JG Press, Inc., ISSN 0278-9205. Editorial Advertising Subscription offices: 419 State Avenue, Emmaus, PA 18049. Telephone (610) 967-4135. Copyright © 2011 by The JG Press, Inc. (www.biocycle.net). All rights reserved. Reproduction in whole or in part without permission is prohibited. Known as Compost Science until 1978, and as Compost Science and Utilization until 1981. Subscription Rates in U.S.: One year (12 issues) \$14 and two years (24 issues) \$27. In Canada: one year \$60 and two years \$100. All other countries: one year \$105 and two years \$181. Single copy \$10. Periodicals postage paid at Emmaus, PA and additional mailing offices. (USPS 427-430) Postmaster: Send address changes to BioCycle, 419 State Avenue, Emmaus, PA 18049. Canada Post Publication Mail Agreement No. 406126/8. Return undeliverable Canadian addresses to: BioCycling International, P.O. Box 25642, London, ON, N6C 6B2. Printed in the U.S.A., on recycled paper.



The JG Press, Inc.
Published since 1960.

SUSTAINING COMMUNITIES

IN 1979, one year after we founded The JG Press, Inc., we published *Energy-Efficient Community Planning*, a book authored by James Ridgeway. In the 1970s, we experienced the Arab Oil Boycott that led to fuel shortages and the catastrophe at Three Mile Island caused by a partial core meltdown at a nuclear power plant in Pennsylvania. Like today, the country struggled to establish a national energy policy that would transition us from the age of fossil fuels to the era of renewable energy.

In the book's introduction, "Building A New Energy Base," Ridgeway wrote a paragraph that could easily have been written today versus 32 years ago: "All too often, changing the nation's energy policy is perceived as merely increasing domestic oil production, mandating the compact car, halting nuclear power and so on. Yet an effective policy need not be only a national one. Rather, various parts of the nation can adopt the innovations that suit their needs. In Hartford, Connecticut, officials have worked to reorganize agriculture by revitalizing nearby farms, reintroducing growing practices that went out with the western migrations of the last century ... In all of this, they seek to provide jobs for the city's unemployed people ..."

"While energy policy begins with a reassessment of agriculture in Hartford, it is centered on water policy along the eastern slope of the Rockies ... Water feeds the suburbs, which are dependent on the automobile. As these energy-inefficient communities grow, they require more and more fuel, both in gas for cars and energy for housing ..."

Energy-Efficient Community Planning may likely be one of the first books ever published focusing on sustainable community development. The JG Press published Jim Ridgeway's book because the concepts and communities profiled embodied the core principles of our company and our publishing mission — management of natural resources to sustain a community's well-being, from clean air and clean water to healthy soil and healthy people, from renewable energy and recycling to composting and conservation.

In March 1979, The JG Press also began publishing *In Business*, the magazine for "Creating Sustainable Enterprises and Communities." *In Business* ceased publication at the end of 2007, yet its mission continues to guide and energize us. So it is in the spirit of the core principles that have guided us for 33 years that *BioCycle* is launching a new article series on Sustainable Communities. Managing Editor Dan Sullivan is working on the first community profile of the city of Philadelphia, where sustainability initiatives include "surface-level greening" to manage storm water to establishing 1,000 Corner Stores to provide access to fresh produce and other healthy foods to all residents in all neighborhoods.

The communities we profile may take the form of a municipality (rural, suburban, urban), a neighborhood within a community, a college campus or school district, a healthcare network or an innovative business subscribing to the triple bottom line of "people, planet and profit." Our definition of sustainability includes terms like "durable," "permanent" and "business as usual" (when best practices become commonplace). A concrete goal of this article series — working with the communities and people we are profiling and learning from — is to develop benchmarks or metrics to quantify sustainable natural resource management. Establishing a measurable baseline, and setting achievable goals using that baseline, will be a huge step forward to truly sustaining communities.

Nora Goldstein





**SAVE
THE
DATE!**

BIOCYCLE GLOBAL 2011

**INTERNATIONAL CONFERENCE ON
COMPOSTING, RENEWABLE ENERGY
AND ORGANICS RECYCLING**

**APRIL 11, 12, 13, 14, 2011
San Diego, California
Town & Country Resort**

Workshops • Tradeshow • Presentations • Site Tours

This premier event will connect you with
waste management solutions for today's real world issues.

Energy. Sustainability. Climate Change.

Soil And Water Protection. Jobs.

Issues that must be addressed if we are going to
successfully manage our waste streams for now and the future.

CALL FOR PAPERS:

www.BioCycleGlobal.com

www.biocycleglobal.com

