

2015 Food Recovery Summit – Nov. 16 -18, 2015
Organic Residuals to Resources through Testing and Information



**US Composting
Council**

***Seal of Testing
Assurance®***



**US Composting
Council®**



Organics Residuals are Unique in the Recycling World!

- They're messy
- They don't smell good
- 'Contamination' issues – a can is a can!
- They are challenging to collect and recycle
- Poorly recycled/composted organics impact product performance, user perception and can influence long term opinions



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“Compost made from organic ‘waste’, that is not beneficially used, is simply more expensive waste!”

Al Rattie



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2015 Food Recovery Summit – Nov. 16 -18, 2015
Organic Residuals to Resources through Testing and Information

So, just what is compost?



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FERTILIZER

If it isn't STA compost.....



.....What is it???????



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USCC STA
Participants are:

Compost
Manufacturers!

STA Rules Agreement – 48 pages

The United States Composting Council
**Certification Program for
Seal of Testing Assurance
Program Rules**

November 29, 2000
rev. September 29, 2001
rev. March 2, 2007
rev. August 10, 2010

* * * * *

**ACKNOWLEDGEMENT OF AND
AGREEMENT TO PROGRAM RULES**

[PARTICIPANT], through its duly authorized representative signing below,
hereby acknowledges and agrees to be bound by the terms and conditions of these
Program Rules with respect to its Compost Product that has been certified in accordance
with these Program Rules.

[PARTICIPANT _____]

Signed: _____

Name: _____

Title: _____

Date: _____

Seal of Testing Assurance (STA) Program

WHAT IS IT?

- ◆ Compost testing and information disclosure program - employing standardized practices with **NO link between Administration, Testing Agency and Compost Producer**
- ◆ It is NOT a standards program (Except for the CCUP component)
- ◆ Created in 2000 through a consensus process that included most of the leading compost scientists in the US (published jointly by USDA & USCC)

PURPOSE

- ◆ To assist compost users purchase the product they require for their particular project
- ◆ To assure that compost users know the characteristics of the compost products they purchase
- ◆ To improve overall customer confidence in compost selection and utilization
- ◆ Essentially, treat compost in the same way as any other consumer product. **People need to know what they are buying!!**

Seal of Testing Assurance (STA) Program

ALL STA Participants MUST:

- ◆ **Operate a permitted facility!**
- ◆ Test their compost at a certified STA lab (managed by CO State University) anywhere from quarterly to monthly, depending on production
- ◆ Create and distribute specific compost use directions (these must contain either volumetric or compost application depth directions)
- ◆ Provide an accurate statement of feedstock materials (what goes into making the compost)
- ◆ Provide an STA CTDS report to all who request it.
- ◆ **ALL STA compost must meet EPA standards for Class A, EQ quality – *The compost MUST be SAFE to use!***

Seal of Testing Assurance (STA) Program

Key Elements:

- ◆ Regularly sample and test their compost products based on production tonnage, or as otherwise prescribed by the STA program administrators **for each product that they enroll**
- ◆ Participants will complete test analyses for the compost properties listed (**compost produced from yard trimmings, manure, or food scraps may test for pathogens and trace metals at half the required frequency**)
- ◆ **ALSO**, any and all testing required by applicable State and/or Federal regulation (e.g., pathogens, heavy metals, pesticides, inerts, etc.) to assure public health/safety and environmental protection must be completed **at the frequency so regulated.**
- ◆ All lab analyses will be conducted at 'certified laboratories' that are capable of performing the test methods specified in the STA Program Rules – **Participate in lab proficiency program!**

Seal of Testing Assurance (STA) Program

Key Elements:

- ◆ The Participants, or their compost testing lab, will provide the appropriate lab analyses results using the 'Compost Technical Data Sheet - CTDS' to the USCC at the prescribed frequency. **This data will not be distributed to compost customers by the USCC.**
- ◆ **The Compost Technical Data Sheet shall include:**
 - detailed directions for product use (**actual compost application rates and/or depths**)
 - a list of product ingredients (**use directions and product ingredients shall be provided by the STA participant**)
 - analytical test results (from a certified STA test lab)

USCC STA Compost Testing Schedule

Annual Compost Production Quantity/Required Testing Frequency*

1 – 6,200 tons/1 per quarter
6,201 – 17,500 tons/1 per 2 months
17,501 tons and above/1 per month

***Metals and pathogens every other test for
non-biosolid's compost**



US COMPOSTING COUNCIL

Seal of Testing Assurance

Barnes – Regional Composting
3511 West Cleveland Ave.
Huron, OH 44839
Telephone: 800-421-8722
Fax: 419-433-3555

Sample Date: 8/14/02

COMPOST TECHNICAL DATA SHEET

| Compost Parameters | Reported as (units of measure) | Test Results | Test Results |
|---|--|----------------------|----------------------|
| <i>Plant Nutrients:</i> | % , weight basis | % , wet weight basis | % , dry weight basis |
| Nitrogen | Total N (TN or TKN+NO ₃ -N) | .72 | 1.12 |
| Phosphorus | P ₂ O ₅ | .13 | .21 |
| Potassium | K ₂ O | .32 | .50 |
| Calcium | Ca | 2.34 | 3.64 |
| Magnesium | Mg | .57 | .89 |
| Moisture Content | % , wet weight basis | 42 | |
| Organic Matter Content | % , dry weight basis | 31.31 | |
| pH | unitless | 7.4 | |
| Soluble Salts <i>(electrical conductivity)</i> | dS/m (mmhos/cm) | 3.49 | |
| Particle Size | screen size passing through | ½" | |
| Stability Indicator <i>(respirometry)</i> CO ₂ Evolution | mg CO ₂ -C/g TS/day, AND | .14 | |
| | mg CO ₂ -C/g OM/day | .5 | |
| Maturity Indicator <i>(bioassay)</i> Percent Emergence, AND Relative Seedling Vigor | average % of control, AND | 92 | |
| | average % of control | 86 | |
| Select Pathogens | PASS/FAIL: per US EPA Class A standard, 40 CFR § 503.32(a) | Pass | |
| Trace Metals | PASS/FAIL: per US EPA Class A standard, 40 CFR § 503.13, Tables 1 and 3. | Pass | |

Participants in the US Composting Council's Seal of Testing Assurance Program have shown the commitment to test their compost products on a prescribed basis and provide this data, along with compost end use instructions, as a means to better serve the needs of their compost customers.

Directions for Product Use:

New Lawns: Apply a 1-2" layer to soil and incorporate to a depth of 5-7", apply seed, then rake and water.

Flower Beds: Apply a 1-2" layer to soil and incorporate to a 6-8" depth. Condition soil this way every year to 2 years. Plant flowers and water.

Trees & Shrubs: Dig a hole 2/3 the depth of the root ball and at least twice as wide. Mix 1 part compost with 2 parts soil obtained from the planting hole. Place the tree or shrub in the planting hole and apply amended soil around the root ball. Firm soil occasionally and water.

Topsoil Manufacturing/Upgrading: Mix 1 part compost with 2 parts existing or purchased soil and blend uniformly.

Growing Mixes: Planter box or raised bed mixes can be produced by mixing 1 part compost to 1 part pine bark and 1 part soil, sand or expanded shale. Potting mixes should contain 1 part compost, 1 part peat moss or pine bark, and 1 part perlite, vermiculite, styrofoam, or other aggregate.

Mulching: Spread a 2-3" layer around trees, shrubs, and flowers. Always avoid placing mulches against plant trunks and stems.

Garden Beds (food crops): Apply a 1-2" layer to soil and till to a 6-8" depth. Reapply each year, or as per soil test recommendations.

NOTE: The USCC does not assess whether or not, or to what extent, these directions are sound, sufficient or otherwise appropriate. It is the participant's responsibility alone to ensure that they are.

Compost Ingredients:

Yard trimming, food by-products

This compost product has been sampled and tested as required by the Seal of Testing Assurance Program of the United States Composting Council (USCC), using certain methods from the "Test Methods for the Examination of Compost and Composting" manual. Test results are available upon request by calling Barnes Nursery at 800-421-8722. The USCC makes no warranties regarding this product or its contents, quality, or suitability for any particular use.

For additional information pertaining to compost use, the specific compost parameters tested for within the Seal of Testing Assurance Program, or the program in general, log on to the US Composting Council's TMECC web-site at <http://www.tmecc.org>.



US Composting Council®

Remember the 2nd page ----->

Seal of Testing Assurance

2014 STA Program 'Stats'

Companies in the STA Program = 213

Compost Products = 270

Compost in the STA Program =

Approx. 3.9 MM tons

Approx. 7.8 MM CYs

States with STA participants = 36

Labs in STA Program = 12



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Seal of Testing Assurance

270 STA Products in 36 States

- **CA*/55** **TX*/51** **OR*** & **WA*/19** each **CO*/9**
 - **NC*/10**; **MN*& NY*/9**; MO, PA & VA/8; **FL*/7**
 - IL & **WI*/6** each; **IA*/5**; **SC*/4**
 - **AK***, GA, KY, MA, MD, NV & WY/3
 - DE, HI & NJ/2 each
 - 1 each in AZ, CT, IN, ID, KS, MI, MT, OH, UT, VT
- *States with DOT (and/or state EPA) specifying STA compost

ALL states should have a compost testing requirement!



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Seal of Testing Assurance Compost *ONLY!*

CURRENT State Agencies Requiring STA Compost ONLY

AKDOT · CalTrans · CODOT · FLDEP · NCDOT
NYDOT · ORDOT · SCDOT · TXDOT · WIDNR
WIDOT · WSDOT

IADOT (EC uses only)

NEW in 2014: MNDOT



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STA Consumer Compost Use Program



US Composting Council®



January 25-28 | Jacksonville, FL

COMPOST 2016

USCC Conference & Tradeshow



US Composting Council

Al Rattie

Director, Market Development

al.rattie@compostingcouncil.org

215.258.5259

**Join us in Jacksonville, FL for our 24rd Annual
Conference & Trade Show
January 25-28, 2016**



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