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

Al Rattie
So, just what is compost?
FERTILIZER
If it isn’t STA compost......

.....What is it???????
USCC STA
Participants are:

Compost Manufacturers!
The United States Composting Council
Certification Program for
Seal of Testing Assurance
Program Rules

November 29, 2000
rev. September 15, 2001
rev. March 1, 2007
rev. August 15, 2010

ACKNOWLEDGEMENT OF AND AGREEMENT TO PROGRAM RULES

(PARTICIPANT), through its duly authorized representative(s) as set forth below,
hereto acknowledges and agrees to be bound by the terms and conditions of the
Program Rules and expressly agrees to perform the duties set forth in the
Agreement, with due diligence.

[PARTICIPANT]

Name:

Date:

Date:
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!!**
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
COMPOST TECHNICAL DATA SHEET

<table>
<thead>
<tr>
<th>Compost Parameters</th>
<th>Reported as (basis of measure)</th>
<th>Test Results</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plant Nutrients:</td>
<td>%, weight basis</td>
<td>%, wet weight basis</td>
<td>%, dry weight basis</td>
</tr>
<tr>
<td>Nitrogen</td>
<td>Total N (TN or TKN+NO3-N)</td>
<td>72</td>
<td>1.12</td>
</tr>
<tr>
<td>Phosphorus</td>
<td>P2O5</td>
<td>13</td>
<td>37</td>
</tr>
<tr>
<td>Potassium</td>
<td>K2O</td>
<td>32</td>
<td>58</td>
</tr>
<tr>
<td>Calcium</td>
<td>Ca</td>
<td>2.34</td>
<td>1.64</td>
</tr>
<tr>
<td>Magnesium</td>
<td>Mg</td>
<td>57</td>
<td>89</td>
</tr>
<tr>
<td>Moisture Content</td>
<td>%, wet weight basis</td>
<td>42</td>
<td></td>
</tr>
<tr>
<td>Organic Matter Content</td>
<td>%, dry weight basis</td>
<td>31.31</td>
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</tr>
<tr>
<td>pH</td>
<td>unlitus</td>
<td>7.4</td>
<td></td>
</tr>
<tr>
<td>Soluble Salts</td>
<td>dS/m (mmhos/cm)</td>
<td>3.49</td>
<td></td>
</tr>
<tr>
<td>Particle Size</td>
<td>screen size passing through</td>
<td>1/8</td>
<td></td>
</tr>
<tr>
<td>Stability Indicator (permeability)</td>
<td>mg CO2-Ca T5/day</td>
<td>14</td>
<td></td>
</tr>
<tr>
<td>CO2 Evolution</td>
<td>mg CO2-Ca OM/day</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Maturity Indicator (Tonometry)</td>
<td>average % of control, AND 92</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Percent Emergence, And Relative Seedling Vigor</td>
<td>average % of control, AND 16</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Select Pathogens</td>
<td>(90°F, 60% RH for 4 weeks)</td>
<td>Pass</td>
<td></td>
</tr>
<tr>
<td>Trace Metals</td>
<td>(90°F, 60% RH for 4 weeks)</td>
<td>Pass</td>
<td></td>
</tr>
</tbody>
</table>

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 ensure 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

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.tmec.org.

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
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!
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
STA Consumer Compost Use Program
US Composting Council

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215.258.5259

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