

REGULATORY UPDATE

# Compost Fares Well In Fertilizer And Soil Amendment Rules

*New definition for compost, and model language to exempt compost, biosolids and manure products, where warranted, under the Urban Landscape Fertilizer regulations, are among latest AAPFCO developments.*

Ron Alexander

**C**OMPOST is a moderately priced, extremely accessible, and somewhat uniform source of bulk organic matter. Further, it is unique because it contains important plant nutrients, is microbially active, and supplies a source of carbon that feeds microbes in the compost and key soil microbes. This is why compost has become such a staple in the landscape and turf industries, and continues to gain momentum in agriculture, erosion control and storm water management. Markets for compost products continue to expand, but an ever-growing number of products are competing in the marketplace (e.g., anaerobic digestate and wood-based products, humic acids, microbial supplements).

Further, what can be said legally about “compost” on a product label and/or promotional materials is controlled on a state level in the U.S. The “Control Officials” in each state Department



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ment of Agriculture (DOA) are members of the American Association of Plant Food Control Officials (AAPFCO), who register and regulate the distribution of fertilizer, soil amendments and liming agents (and sometimes pesticides and animal feed). The U.S. composting industry (commercial-scale), being 4,500 to 5,000 facilities strong and over 35 years old, needs to stay engaged with AAPFCO and its state members, thereby appropriately impacting state soil amendment and fertilizer regulations.

AAPFCO, which also represents control officials in U.S. territories and Canada, creates model laws and regulations to assist interstate commerce with these agricultural and horticultural staples. Its primary goals pertain to consumer protection, requiring “truth in labeling” and uniform regulation from state to state. It should be

noted, however, that their model laws, regulations and Statements of Uniform Interpretation and Policy (SUIP) are created to provide guidance to states. They are *not forced* upon them.

Over the years, a small number of composting industry representatives, strategically funded by the US Composting Council (USCC), have greatly impacted compost labeling and registration, and protected the industry from unscientific attacks from competing industries, as well as some misinformed but well intentioned individuals. It must be noted that honest concern about the safety of compost products, typically related to its feedstock sources (which may contain some pathogens and low levels of heavy metals and other chemical contaminants), as well as their efficacy, have come up from time to time. These concerns have been addressed with scientific data.

### PAST SUCCESSES

Some important past successes of the USCC's involvement with AAPFCO include:

*Introduced TMECC Manual.* The USCC introduced the Test Methods for the Examination of Composting and Compost (TMECC) test manual, which AAPFCO accepted as a viable set of testing methods.

*Assisted in rewrite of the Uniform Soil Amendment Bill.* The rewrite better defines soil amendments, and the rules and regulations pertaining to their distribution and sale. (Most composts are marketed as soil amendments/conditioners.)

*Assisted in creating definitions.* Input on definitions for various carbon-based soil amending products was provided, including digestates, compost extracts (teas), vermicompost, etc. — and most recently, redefining “compost” (see below).

*Created “Rules and Regulations for Bulk Compost.”* Not yet adopted by any state, these rules and regulations create a framework for making nutrient claims for bulk compost products stored outdoors. The most impactful aspect of the “draft” rules and regulations are a standardized list of labeling claims for compost (see Claims sidebar). The list helps state Control Officials automatically accept well-documented and acknowledged benefits of soil amendments (compost), without requiring further research by individual product manufacturers.

*Assisted in development of “Heavy Metals in Fertilizer SUIP” (SUIP #25).* The USCC industry liaison got involved through AAPFCO's Environmental Affairs Committee because of its interest in developing a set of heavy metal standards for fertilizers, which would

have impacted any compost products registered as a fertilizer, as well as all manure-based composts. This initiative began because of a scare in Washington State regarding heavy metal-tainted fertilizer killing some farm animals. This initiative culminated in development of SUIP #25, containing numerical heavy metal standards for fertilizers, which

were based on two independent risk assessments. Because of USCC's involvement, the finalized SUIP lists compost as an exempted product, which does not have to meet the fertilizer heavy metal standards, but instead must meet those developed by the U.S. EPA in its 40 CFR 503 Regulations. This involvement enabled science to “rule the day.”

### MORE RECENT INITIATIVES

More recent initiatives include providing ongoing input to SUIP #34, the “Fertilizer Restrictions for Urban Landscapes” (as well as related fertilizer policy language). Various states are creating fertilizer restrictions on phosphorus and nitrogen fertilizer usage as a means to protect surface and ground water. Although the USCC supports protection of water, several of the states' initiatives unfairly affect compost, which often contains less mobile forms of nutrients, and generally “miss the mark” of creating regulation through the usage of good science. In general, the USCC's input led to model language for states to exempt compost, biosolids and manure products, where warranted from related state regulation (link to SUIP #34 draft at BioCycle.net in online version of this article).

Another initiative was to redefine the term “compost.” There has been interest in improving the existing definition for “compost” in order to reduce confusion in the marketplace. The new and old definitions are summarized in the Compost Definitions sidebar. Key reasons to modify the definition include:

- The old “composting” definition was scientifically “inaccurate” (and AAPFCO no longer wants to describe processes, just products).

- The old “compost” definition was not descriptive enough, so could allow many *noncompost* products to be confused with “real” compost.

- The composting industry wanted to promote that compost: a) was produced through a “manufacturing” process; b) was different from anaerobic digestion products; c) was heat treated and thus destroys most human pathogens and weed seeds (there has been a lot of concern about human pathogens in food); and d) contains stabilized carbon (which is more beneficial to soil than unstabilized carbon).

- The last line in the new definition basically allows composters to register their product as a soil amendment or fertilizer (“fertilizer” in labeling and registration just means that the product can legally make nutrient claims), depending on their labeling claims and overall desire.

Although this (negotiated) new definition may not be perfect — which is often the case with AAPFCO's defini-

## Standardized List Of Compost Claims

AAPFCO provides this list of Standardized Compost Claims in its Official Publication.

1. Improves soil structure and porosity, creating a better plant root environment.
2. Increases moisture infiltration and permeability, and reduces bulk density of heavy soils. This improves moisture infiltration rates and reduces erosion and runoff.
3. Improves moisture holding capacity of light soils, reducing water loss and nutrient leaching, and improving moisture retention.
4. Improves cation exchange capacity (CEC) of soils.
5. Supplies organic matter.
6. Aids proliferation of soil microorganisms.
7. Supplies beneficial microorganisms to soils and growing media (only for products providing minimum microbe content guarantees).
8. Encourages vigorous root growth.
9. Allows plants to more effectively utilize nutrients, while reducing nutrient loss by leaching.
10. Enables soils to retain nutrients longer.
11. Contains humus, assisting in soil aggregation and making nutrients more available for plant uptake.
12. Buffers soil pH.
13. Source of macro and micro nutrients (for products registered as fertilizers, not soil amendments)

Not all states allow all of these claims. Check with the states in which the compost is marketed. Also check for any qualifiers that states may include.

# AAPFCO Definition Comparison

The new AAPFCO definition for compost was created because the Association no longer is using processing definitions (see old composting definition below).

Old Definition	New Definition
<b>Composting</b>	
The biological decomposition of organic matter. It is accomplished by mixing and piling in such a way to promote aerobic and/or anaerobic decay. The process inhibits pathogens, viable weed seeds, and odors. (Official 1997)	AAPFCO no longer uses process definitions.
<b>Compost</b>	
A biologically stable material derived from the composting process. (Official 1991)	Is the product manufactured through the controlled aerobic, biological decomposition of biodegradable materials. The product has undergone mesophilic and thermophilic temperatures, which significantly reduce the viability of pathogens and weed seeds, and stabilize the carbon such that it is beneficial to plant growth. Compost is typically used as a soil amendment, but may also contribute plant nutrients.

tions that are a cross between scientific and marketing definitions, which are much better than the old definition, and helps to differentiate compost products in the marketplace.

It is clear that for the composting industry to be considered a "real" commercial industry, one supplying efficacious products to the retail, lawn/garden and agricultural sectors, it must be engaged in developing the regulation that impacts sale of its products. The USCC's long-term investment in staying involved in AAPFCO benefits the composting industry as a whole. The USCC's involvement with organizations like AAPFCO, allows our industry to kick off new initiatives, as well as address concerns when things go wrong. If we are not in the room, then we will surely be locked out of it. ■

*Ron Alexander is president of R. Alexander Associates, Inc. in Apex, North Carolina (919-367-8350, alexassoc@earthlink.net, www.alexassoc.net). R. Alexander Associates, Inc. specializes in market research and development for recycled organics products. He currently serves as an Industry Liaison to AAPFCO representing the US Composting Council.*

