MEMORANDUM

DATE: February 26, 2007

TO: USCC Market Development Committee, USCC Executive Committee, and Dr. Stuart

Buckner, Executive Director

FROM: Ron Alexander, USCC Market Development Committee & Industry Liaison to AAPFCO

RE: Update from the AAPFCO Mid-Year Meeting

Uniform Bills Committee

The Uniform Bills Committee met to discuss a variety of subjects, with two being relevant to the composting industry. The first was related to the 'Rules and Regulations for Bulk Compost'. Very little discussion took place on the subject and no changes to the draft Rules' were made. At the Meeting, the Control Officials voted to move the Rules to 'official' status. The AAPFCO Board later approved this measure. With this achieved, Control Officials will vote at the August, 2007 Membership meeting to make the Rules 'Official'. The 'tentative' version of the 'Rules and Regulations for Bulk Compost' are attached below.

The second item related to the composting industry was a status report on the re-write of the Uniform Soil Amendment Bill. This subject is discussed in the Soil Amendment Subcommittee report below.

Soil Amendment Subcommittee

(of the Uniform Bill's Committee)

Last year it was decided that a Subcommittee should be formed to consider re-writing the current Uniform Soil Amendment Bill. This is because the current model Bill is not considered strong enough or inclusive of many of the products now registered as soil amendments. Further, it does not contain draft rules and regulations (only the legislative language). One of the most relevant issues for compost in a rewritten Bill is that the definition of 'soil amendment' would be modified to include 'chemical, physical and biological' improvements to soil. The current Bill defines soil amendments as products that provide 'only' physical improvement to the soil, and therefore, only those related claims can be made.

During the meeting, a detailed review of the proposed language for the upgraded Bill was completed, and the list of approved 'compost claims' (now within the Uniform Fertilizer Bill Rules and Regulations [draft]) is included within its language. There were also discussions whether other organic soil amendments should also be able to make similar claims. Work on the upgraded Bill language will continue at future meetings.

Labeling and Terms Committee

As suggested by the Uniform Bills Committee, the USCC representative submitted a list of definitions for materials that are considered to be common composting feedstocks. It was decided that since the term 'feedstock' was defined in the 'Rules and Regulations for Bulk Compost' and since the Rule would require registered composts to define their contents, that definitions should be developed. The USCC representative was assisted by a representative of the Mulch & Soil Council and some Control Officials in the development of the draft definitions (attached below). A debate ensued over where the definitions should be placed, within the draft 'Rules' or the AAPFCO definitions list. It was decided that they were to be placed in the AAPFCO definitions list. Specific definitions were discussed in detail and the USCC was asked to present upgraded definitions at the next meeting.

Environmental Affairs Subcommittee

(of the Environmental Affairs Committee)

The By-Products and Recycled Materials Subcommittee met to discuss several issues, of which two were relevant to composters. The first issue was related to the potential risk of prions in biosolids. As requested during the 8/06 meeting, the Canadian Food Inspection Agency (CFIA) and the USCC were asked to provide perspectives on the issue relative to their specific country. The CFIA reported on their Enhanced Feed Ban and other related BSE control measures. The CFIA reported that they do not see biosolids as a high risk material for biosolids. We, as the USCC, after speaking with representatives from both the USEPA and USDA, reported similarly. The detailed USCC report is attached below.

The second issue was less positive. A chemical fertilizer manufacturer provided a press release to the Committee identifying the concerns pertaining to E.Coli contamination in foods. The press release also references research stating that composting may not kill E.Coli. We will obtain a copy of this press release so that the USCC may address it.

RULES AND REGULATIONS - BULK COMPOST

These Rules and Regulations for Bulk Compost are approved by the AAPFCO under the Uniform State Fertilizer Bill and in conjunction with the Rules and Regulations for Fertilizer. States proposing to adopt these Rules and Regulations for Bulk Compost under their own state fertilizer law are encouraged to adopt AAPFCO's Rules and Regulations for Fertilizer, which also apply to compost, unless otherwise noted within these regulations.

Under the Uniform State Fertilizer Bill by the	of the State of	pursuant to due publication
and notice of opportunity for a public hearing, the	has adopted the following re	egulations.

1. Definitions of Words and Terms

When used in these Rules and Regulations:

- a. "Annual Production" means the quantity of compost produced by a composting facility.
- b. "Batch" means a specified volume or quantity of compost. A batch may represent:
 - (1.) The volumetric capacity of a windrow or stockpile; or
 - (2.) A testing frequency of no less than:
 - (A) Once per quarter for a facility with an annual production of 1 6,250 tons of compost; or
 - (B) Once per two (2) months for a facility with an annual production of 6,251 17,500 tons of compost; or
 - (C) Once per month for a facility with an annual production of 17,501 tons of compost and above.
- c. "Bulk" means in non-packaged form.
- d. "Compost" means a biologically stable material derived from the composting process.
- e. "Composting" means 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.
- f. "Feedstock" means source material used for the production of compost.
- g. "Lot" means an identifiable quantity of compost that can be sampled officially up to and including a freight car load or 50 tons maximum, or that amount contained in a single vehicle, or that amount delivered under a single invoice.
- h. "Quantity Statement" means net weight or net volume.

2. Net Weight

The label of a bulk compost must include a statement of the net weight; however, if the quantity statement is provided on a volume basis:

- a. A weight conversion shall be provided elsewhere on the product label (e.g., 2 cubic yards = 1 ton); or
- b. A weigh scale ticket shall accompany delivery and be supplied to the purchaser at time of delivery.

3. Product Claims

Compost shall be exempt from (cite State's Soil Amendment Law), "the State Soil Amendment Law" provided that the compost is registered as a fertilizer and also provided that the label and labeling may bear a statement that the product is intended solely to be used for one or more of the following purposes:

- a. Improves soil structure and porosity creating a better plant root environment;
- b. Increases moisture infiltration and permeability, and reduces bulk density of heavy soils improving moisture infiltration rates and reducing erosion and runoff;
- c. Improves the moisture holding capacity of light soils reducing water loss and nutrient leaching, and improving moisture retention;
- d. Improves the cation exchange capacity (CEC) of soils;
- e. Supplies organic matter;
- f. Aids the proliferation of soil microorganisms;
- g. Supplies beneficial microorganisms to soils and growing media;
- h. Encourages vigorous root growth;
- i. Allows plants to more effectively utilize nutrients, while reducing nutrient loss by leaching;
- j. Enables soils to retain nutrients longer;
- k. Contains humus assisting in soil aggregation and making nutrients more available for plant uptake;
- l. Buffers soil pH.

4. Expression of Guarantees

- a. Guarantees shall be stated on a wet basis ("as is"). However, for compost stored in environmental conditions that may result in a variable moisture content in the compost, guarantees may be determined and guaranteed at a specific moisture level, provided that the moisture value shall be stated on the label. Provided that the _____ determines the moisture level to be in excess of the stated value, the nutrient guarantees shall be adjusted accordingly.
- b. Each batch of bulk compost may be tested for nutrient content, and such test results may constitute a guarantee:
 - (1.) Except that Total Phosphate (P₂O₅) may be guaranteed in addition to Available Phosphate (P₂O₅) and Total Potash (K₂O) may be guaranteed in addition to Soluble Potash (K₂O);
 - (2.) And such test results shall accompany each batch of bulk compost.
- c. Guarantees for Total Nitrogen (N), Available Phosphate (P₂O₅), Total Phosphate (P₂O₅), Soluble Potash (K₂O) and Total Potash (K₂O) may be guaranteed in fractional units of less than one percent, regardless of whether the compost is sold as a specialty or agricultural fertilizer.

5. Feedstock Statement

The label must contain a list of feedstocks from which the compost was derived.

6. Sources of Nutrients

When shown on the label, the sources of nutrients shall be listed below the completed guaranteed analysis statement. The statement shall include any additional sources of nutrients that have been added to the compost.

Compost Feedstock Terms AAPFCO Labeling & Definitions Committee Ron Alexander, US Composting Council

The following terms are submitted to the Labeling & Definitions Committee for consideration as AAPFCO Official Terms. These terms represent feedstocks that will be listed on compost labels as required under the new AAPFCO Compost Rules.

- A. T-?? Bark refers to all tissues of trees, shrubs, etc., that are external to the vascular cambium.
- **B.** T-?? Food Waste or Byproducts is the residual food from residences, institutions or commercial facilities and may include animal or vegetable material resulting from food production.
- C. <u>T-?? Industrial Waste or Byproducts</u> is decomposable organic material derived from manufacturing processes other than processes that generate food or agricultural waste.
- **D.** <u>T-?? Landscape Materials or Yard Trimmings, Yard Waste</u> means vegetative waste derived from landscape operations and includes but is not limited to grass clippings, leaves and tree trimmings.
- E. <u>T-?? Mixed or Municipal Solid Waste</u> includes various discards from residential, commercial, and institutional sources that are commonly disposed of at incinerators or landfills.
- F. <u>T-?? Agricultural Waste or Byproducts</u> is organic material produced from the raising of plants and animals on farms and ranches.
- **G.** T-?? Wood Waste or Byproducts is tree trimmings over 6 inches in diameter, sawdust, woodchips, untreated lumber and residues from the forestry products industry.

US COMPOSTING COUNCIL REPORT TO THE AAPFCO ENVIRONMENTAL AFFAIRS COMM.

Regarding Prion Risk in Biosolids

Based on the US Composting Council's (USCC) relationship with the USDA, it was asked during the 8/06 Environmental Affairs Committee meeting to gather data and report on prion risk as it pertains to biosolids. This concern was brought up during the 8/06 meeting, and both Canadian and US perspectives were sought. Both view points were reported on at the 2/07 meeting.

In order to provide the following report, both Dr. Pat Millner, USDA and Dr. Jim Smith, USEPA were interviewed on the subject, and related documents were obtained. Both are experts in diseases for their respective organizations, with both individuals having long-term experience working with biosolids.

Prions are a type of protein in animal tissues. Abnormal prions are infectious and can replicate (like viruses and bacteria). It is believed that prions cause Mad Cow Disease (BSE) in cattle, Scrapies in sheep and Chronic Wasting Disease in deer and elk, as well as several human diseases. Based on discussions with both the USEPA and the USDA, the following are their view points on prions and their risk within biosolids.

They:

- 1. Consider incineration and alkaline hydrolysis (under pressure) as the only 2 methods to guarantee 100% destruction of prions in 'high risk' materials,
- 2. Do not consider biosolids to be a high risk material for either prion content or transmittal (based on the Gale study and low relative incidences of BSE/CWD in biosolids)
- 3. Are more concerned with Chronic Wasting Disease in deer than BSE, as there have been many more confirmed incidences.
- 4. Have found prions to be difficult to test for in biosolids and other feedstocks, but test methods are improving,
- 5. Feel that more research is necessary on the prion issue, and stated that this is being planned for in the future.
- 6. Believe that the UK study completed by Gale is the best risk assessment completed on managing BSE in organic substrates (the study evaluates BSE risk and developed methods to manage BSE found in meat contained food waste at composting and digestion facilities),
- 7. Stated that the Gale study suggests a low risk related to the transmittal of BSE from these organic substrates to food crops,
- 8. Stated that no proof exists that CWD from deer can be transmitted to cows, or that BSE from cows can be transmitted to humans (species barrier).

Additional research on the subject found that cases of BSE are actually reducing on a worldwide basis. Further, a 1/30/07 press release from Yale Medical School stated that viruses may actually be causing BSE and related brain disorders in humans, challenging the common belief that they are caused by prions.

Submitted by: Ron Alexander, R. Alexander Associates, Inc. USCC Liaison to AAPFCO