



PFAS Positioning and Guidance Statement:

The United States generates hundreds of millions of tons of organic residual materials annually. These barely tapped resources have their origin in the soil. Composting is the most effective means to recycle and return these materials to the soil. The US Composting Council has served the composting industry for more than 30 years and the use and disposal of PFAS-containing products negatively impacts this vital industry. The benefits the industry brings must not be jeopardized by the adoption of any regulatory limits for soil PFAS unless supported by sound, peer-reviewed research

This positioning and guidance document describes the impacts that could occur if the compost industry is negatively impacted by unsound policies and contains the USCC's recommendations to mitigate those potential impacts.

The Composting Industry: A Vital Climate & Ecosystems Actor

Composting is an industry that allows US communities to avoid disposing of valuable organic resources in landfills and incinerators. Organic residuals in landfills emit methane, a potent greenhouse gas. The diversion of food waste and biosolids from U.S. landfills to composting avoids approximately 2.7 million metric tons of CO₂-equivalent emissions to the atmosphere annually. Thus composting in lieu of landfilling is one of the most impactful and cost-effective ways we can make a difference in combating climate change.

Additionally, resulting compost products contain nutrients, conserve water, reduce and avoid use of synthetic chemicals, build healthy soil, and sequester carbon. According to the United Nations Food and Agriculture Organization, one third of the world's topsoil is already degraded, and topsoil in the United States is eroding at more than nine times its natural rate of replacement.¹

Compost manufacturers bring environmental and economic benefits to municipalities, agriculture and industry while adhering to strict state level regulations regarding their inputs, controls over the composting process, and quality of the finished products. This important industry contributes to vibrant communities by protecting air, water, and land throughout the country. The composting industry employs tens of thousands of people, mainly through

thousands of small businesses and their suppliers who contribute to the economies of urban, suburban, and rural America.

Organizations like the Environmental Protection Agency (EPA), Natural Resources Defense Council (NRDC) and the United States Department of Agriculture (USDA) all recognize the importance of composting. whose mission

Within the industry, the US Composting Council is the only trade organization whose mission is to advance compost manufacturing, compost utilization, and organics recycling to benefit its members, society, and the environment. The USCC believes that compost manufacturing and compost utilization are central to creating healthy soils, clean air and water, a stable climate, and a sustainable society.

EPA

Cites compost as beneficial²:

- Enriches soil, helping retain moisture and suppress plant diseases and pests.
- Reduces/eliminates the need for chemical fertilizers.
- Encourages the production of beneficial bacteria and fungi that break down organic matter to create humus, a rich nutrient-filled material.
- Reduces methane emissions vs. landfilling organics and lowers your carbon footprint.

NRDC³

“Compost adds nutrients and organic matter back to soil, which benefits agriculture, reduces our reliance on synthetic fertilizers, diverts methane-producing organic materials from landfills, and improves soil’s water retention capacity so you don’t need to water as much...”

USDA⁴

Each 1 percent increase in soil organic matter helps soil hold 20,000 gallons more water per acre.³

PFAS and Risks to the Composting Industry

The synthetic chemical compounds known as Per- and Polyfluoroalkyl substances (“PFAS”) (perfluorooctanoic acid, or PFOA) and perfluorooctane sulfonate, or PFOS) have become ubiquitous in the environment. PFAS compounds have been used since the 1960s in everyday materials, such as cookware, cosmetics, packaging, and outdoor clothing, as well as other uses, such as firefighting foam and equipment. These compounds break down far more slowly than other chemicals and trace amounts now exist throughout the environment and, indeed, in the blood of virtually every person on earth⁵. Certain PFAS chemicals are considered more harmful than others and are no longer manufactured in the United States. Many others are still imported or manufactured and are used in products still sold.

Given the fact that PFAS is so widespread in the environment and can be found in virtually every home in the country, it is likely that trace amounts could be found in compost products. However, this in no way indicates that compost increases human exposure to PFAS. We know of no research that suggests that compost contributes to the worsening of the PFAS problem.

Legislation and regulations aimed at curbing PFAS, while well intentioned, could inadvertently yet significantly jeopardize the composting industry, resulting in:

- Job losses at thousands of public and private composting operations throughout the country.
- Increases in the amount of organic residuals being disposed of in landfills and incinerators.
- Halting and reversal of the contributions made by the composting industry to soil health, water quality and climate.

Composting is a growing industry and with that growth will come even greater benefits. The benefits the industry brings should not be jeopardized by the adoption of regulatory limits for soil PFAS unless backed up by peer-reviewed research and sound science.

USCC's PFAS Policy Recommendations

USCC supports reasonable regulation of PFAS and efforts to better understand the impact of these chemicals on the environment and industry, such as:

1. Bans on intentionally added PFAS in food service packaging (or other feedstocks) and reasonable regulation of PFAS chemicals at their source. Support innovative packaging (or other feedstocks) that eliminates PFAS inclusion in their production.
2. Strongly support that composting must be included in any legislative exclusion from CERCLA liability related to PFAS. ⁶
3. The EPA must “*Ensure Science-Based Decision-Making*” to advance scientific understanding of PFAS and follow the science to advance public health and environmental protections. This must be completed prior to setting national and state regulatory standards for safe levels of PFAS in compost. As per EPA's recent *PFAS Strategic Roadmap*, EPA must go further in developing health risk assessments of PFAS chemicals in compost feedstocks, compost finished product and soil. The USCC recommends that EPA engage in similar to studies done under Rule 40 CFR Part 503. (These standards were developed as a comprehensive risk-based rule to protect the public health and the environment from reasonably anticipated adverse effects of pollutants that may be present in biosolids.)
4. USDA and EPA to provide grant research funding to scientifically document the plant uptake properties of PFAS – if any – in compost. It is important that field trials be a component of any research since lab settings may not mimic real world conditions.
5. Research should also be funded to demonstrate, again through field trials, the runoff and migration of PFAS – if any - from compost-amended soils. The addition of compost to

soil improves its ability to retain moisture and minimize erosion thus reducing the potential to migrate to ground or surface water.

6. Though in its infancy there is positive indication that certain PFAS compounds can be broken down biologically. This deserves further research support.
7. Manufacturers of the GenX chemicals and others designed to substitute for PFOA and PFOS must fund research into the long-term impacts of these new chemicals and actively seek substances that provide similar properties that do not impact human health.

CITATIONS:

¹United Nations News, 7/2022, <https://news.un.org/en/story/2022/07/1123462>

²<https://www.epa.gov/recycle/composting-home#benefits>

³<https://www.nrdc.org/stories/composting-way-easier-you-think>

⁴Bryant, Lara, NRCS. "Organic Matter Can Improve Your Soil's Water Holding Capacity", <https://www.nrdc.org/experts/lara-bryant/organic-matter-can-improve-your-soils-water-holding-capacity>

⁵Environmental Working Group, <https://www.ewg.org/news-insights/news/2022/10/flawed-who-report-forever-chemicals-fails-human-health-ewg-scientists#:~:text=Today%20PFAS%20are%20found%20in,system%2C%20including%20reduced%20vaccine%20efficacy.>

⁶<https://www.epa.gov/enforcement/defenses-and-exemptions-superfund-liability>