



January 30, 2026

Wisconsin Conservation Congress
Environmental Advisory Committee
Wisconsin Department of Natural Resources
101 S. Webster Street PO Box 7921
Madison, WI 53707-7921

(Delivered electronically to Committee Chair (O'Brien), Vice Chair (Bovi), and Secretary (Schutte))

**RE: Citizen resolutions 410425 (Milwaukee), 560325 (Saint Croix), and 690225 (Waupaca):
Digestate produced by on-farm co-digesters.**

To the Environmental Advisory Committee of the Wisconsin Conservation Congress,

The American Biogas Council (ABC) is a nonprofit association representing a diverse set of stakeholders who own and operate organic waste recycling systems, including digesters. Digesters owned and operated by municipal wastewater systems and farms help redirect food waste from landfills, preventing valuable agricultural nutrients from being lost forever, reducing emissions from decomposition, and producing energy. We write today to shed some light on digestate, and help foster fact-based discussions that the Committee and the WCC continue to have about food waste and its interaction with natural resources.

The ABC works closely with the Zero Food Waste Coalition¹, the US Environmental Protection Agency (EPA) and with policymakers across the country to help deploy policies that recycle food waste into higher value pathways, like animal feed, energy, soil amendments. Digesters are a foundational tool being leveraged to meet ambitious food waste diversion and recycling goals nationwide.

While Wisconsin does not yet have a waste diversion or organics recycling policy, it does rank 11th in the nation for the amount of organic waste it generates, including over 3,000,000 tons of food waste and nearly 13,000,000 tons of animal manure every year². Deploying waste recycling and reusing these materials provides significant value to Wisconsin's economy, its rural and urban communities, and its agricultural systems.

The three citizen resolutions advanced in 2025 (Protecting our Farmland, Water, Fish, Wildlife, and Public Health from Toxic Industrial Food waste By-products produced by on-farm co-digesters) misrepresent digestate, its characteristics, its value, and its interaction with agricultural and natural systems. The resolutions fail to differentiate pre-consumer and post-consumer food waste and distinct differences in those feedstocks, and also ignore significant advancements in technologies used to de-package certain food wastes, achieving exemplary results that outperform composting of those same wastes. We're providing some high level information here, in hopes it will ignite your curiosity, and we welcome the opportunity to explore the science, data, and results with the WCC that demonstrate digestate's value and performance.

The basics of digestion and digestate

Anaerobic digestion is a simple, biological process of breaking down organic wastes in a closed, airtight system. Microorganisms break down or "digest" organic material without the presence of oxygen. The residual material is a mixture of water and fiber, similar to compost, known as digestate. This digestion process mimics biology,

¹ <https://zerofoodwastecoalition.org/about/>

² <https://americanbiogascouncil.org/resources/state-profiles/wisconsin/>

meaning food waste, like spent grain from brewers, is digested just the same if it goes through a livestock animal, or through an engineered digester. The microbes breaking down the food material produce the same result, material that has been broken down into its fractions: water, fiber, and nutrients.

Food waste characteristics

The vast majority of food waste handled in digesters is known a “pre-consumer” food waste, often originating from human food systems. Think breweries’ spent grain, fiber, peels, and other residues from produce processors, and byproducts of cheese manufacturing. In most cases these food processing residues never interact with things like packaging, that can introduce physical or chemical contamination. In instances where post-consumer food waste, from places like university cafeterias, is introduced into a digester, it has undergone source separation and depackaging to ensure it does not harm digester performance.

Benefits of digesters for recycling food waste

Digesters are uniquely suited to safely handle and recycle food waste, primarily because they can handle higher volumes of food waste than traditional commercial composting, and recycle food waste in closed systems, eliminating nutrient runoff associated with compost pile exposed to the elements. Because digesters are living systems, they are sensitive to environmental conditions and inputs, meaning systems cannot simply accept anything, feedstocks (ie food wastes) must be compatible and easily broken down by microorganisms. This means physical contaminants, like packaging residues, can quickly harm the biology and impede digester performance. For this, and many other reasons, digester operators scrutinize what feedstocks they received, to ensure that homeostasis in the digester can be maintained.

Nutrients in digestate

Digested organic material is a valuable, organic fertilizer with equal, if not better performance in nutrient control and management when applied to crops. Many academic studies have documented that digestate’s nutrients are more bio-available, meaning crops take them up more quickly and easily than synthetic fertilizers³, thereby reducing impacts to natural water systems associated with fertilizer application and runoff. Digestate, having originated from biological processes, also contains bioactive substances like amino acids and vitamins that promote plant growth.⁴ The process of digestion does not change the nutrient composition of the incoming organic residues, it simply breaks them down, making them more available for agriculture.

The fibrous material naturally found in food waste, grains, and crop residues are also preserved, and when added to cropland as a soil amendment, have proven to increase the organic content of soils, which in turn improves the soil’s ability to hold on to water, nutrients, and carbon.

Regulatory oversight

Any feedstock introduced to a farm-based digester must be reflected in both the farm’s NPDES permits under the Clean Water Act, and under its Comprehensive Manure Management plan. These regulatory programs assess the feedstocks, and how they may or may not change what is covered by the land application criteria in those permits, and requirements are adjusted accordingly. Similarly, any groundwater permits required by a state agency would also require the information on feedstock, and often final digestate be reflected and analyzed. Digestate from mixed food-manure systems are given proper scrutiny by existing regulatory authorities for both water quality protection under existing laws and by agricultural agencies who understand dynamic crop systems and agronomic rates.

³ <https://www.biogas-info.co.uk/about/digestate/>

⁴ Kurt Möller, Torsten Müller (2012) Effects of anaerobic digestion on digestate nutrient availability and crop growth: A review. <https://doi.org/10.1002/elsc.201100085>

Certification opportunities for digestate

ABC worked with EPA and other stakeholders over the course of three years to develop a standardized testing protocol and certification program for digestate. The certification program was launched in 2016⁵ and is analogous to the US Composting Council's seal for testing assurance. This certification is a "nutrition label" which ensures property owners and regulators know what's being land applied, also similar to commercial fertilizers. In the broadest terms, the required analysis includes pathogen destruction criteria, agricultural nutrient profiles, heavy metals, & physical contamination (important due to de-packaging required of many food wastes).

The certification criteria meet or exceed the requirement under EPA's Part 503, which for those unfamiliar, apply to biosolids from wastewater treatment facilities, a sector that is heavily regulated. More specifically, if digestate meets the standards for unrestricted use under this certification, it will have met or exceeded the standard set for "Class A" or "exception quality."

We understand that the WCC Committee are not experts in this space and have concerns about something that is often misunderstood. We are happy to help the Committee and concerned citizens better understand this topic, and can offer experts from academia and government with expertise to provide further information.

We respectfully request that the Committee not advance these resolutions, as we believe they have wide reaching impacts to farms that own and operate these systems and rely on the nutrients for agricultural performance and cost management. Removing a key policy tool for food waste recycling also puts further strain on landfill resources, and waste handling systems that are a necessity for our communities nationwide.

Sincerely,

A handwritten signature in black ink that reads "Heather Dzedzic". The signature is written in a cursive style with a large, stylized initial 'H'.

Heather Dzedzic
Vice President of Policy
American Biogas Council

⁵ www.digestate.org