

September 20, 2024

John Newberry
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500 James Robertson Parkway, 9th Floor
Nashville, Tennessee 37243-1102

Submitted via email at: John.Newberry@tn.gov

RE: Tennessee Department of Environment and Conservation Biosolids General

Dear Mr. Newberry,

Thank you for providing Synagro Technologies, Inc. (Synagro) with the opportunity to comment on the Tennessee Department of Environment and Conservation (TDEC) reissuance of the Biosolids General permit for the land application of biosolids.

Synagro is the largest recycler of organic by-products in the United States. Synagro annually manages more than 16 million tons of wastewater biosolids and other organic by-products for over 1,000 municipalities in 35 states, including Tennessee. Our team is dedicated to working with our clients to find the right solution to their organic residuals management challenges. Synagro, and its subsidiaries, are at the forefront of the environmental movement to safely process and market organic residual materials for beneficial uses.

Biosolids are a nutrient-rich end-product of the wastewater solids treatment process that have been treated to ensure adequate use in agricultural land application. Biosolids provide multiple benefits to overall soil quality and health, including improved moisture absorption ability, recycling of micro and macro nutrients, carbon sequestering, reduced nutrient leaching, and lower use of industrially produced fertilizers.

Biosolids used for land application are carefully tested to meet comprehensive Federal EPA and TDEC standards. These regulatory requirements have successfully protected public health, land, and water resources. The requirements include nutrients and metals testing, treatment standards, management practices and reporting obligations. In fact, numerous scientific studies have been conducted for many years on biosolids land application showing that through rigorous treatment, management practices, and regulatory compliance there are many benefits provided to the soil, plants, and environment. As with any other environmental regulation, biosolids regulations should be continuously reviewed and revised as new science and findings are developed

The EPA estimates the U.S. generates about 3.76 million dry tons of biosolids annually, regulated through permitting under Section 503 of the Clean Water Act. Once treated to remove pathogens, over 56% are used in agriculture, land reclamation, and landscaping. They serve as an affordable, effective soil amendment that prevents erosion, resists drought, sequesters carbon, replaces synthetic fertilizers, and strengthens supply chain security for farmers.

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Unfortunately, biosolids have been misrepresented and misunderstood due to concerns about PFAS (per- and polyfluoroalkyl substances). There is a concern that any concentration of PFAS could have harmful impacts on public health, but there is currently no scientific evidence that everyday concentrations that may be found in non-industrially impacted biosolids or wastewater carry these impacts. The mere presence of PFAS in the environment, although it is ubiquitous and found at significantly higher concentrations in everyday commercial household products than in biosolids, has nevertheless led to questions regarding biosolids land application.

EPA is in the process of evaluating whether a rulemaking under Clean Water Act Section 405(d) is warranted should PFAS concentrations in biosolids be found to pose a risk to human health or the environment. The risk assessment portion of the regulatory development is currently underway and is expected to be published by the end of 2024. This is a necessary first step to determine whether regulation of these PFAS in biosolids is warranted under the Clean Water Act.

After the risk assessment is complete, the EPA will engage in risk management to decide how to manage PFAS in biosolids, if necessary. EPA will use the results of the risk assessment in addition to consideration of other factors including economics and technological feasibility in the rule making process. Synagro strongly encourages the TDEC to take advantage of EPA's final science-based rule adoption before developing any regulation of PFAS in biosolids. If TDEC decides to adopt biosolids regulations prior to EPA's rule development TDEC should refer to adopted regulations in Michigan and New York that effectively address PFAS in land applied biosolids.

Research indicates that PFAS in soil and water from biosolids poses a low health risk unless contaminated by high PFAS levels from specific industrial sources. Industrially impacted biosolids represent only an extremely small amount of the biosolids generated. These biosolids should not be land applied. TDEC should advocate for product substitution legislation and adopt industrial wastewater pretreatment/source control regulations.

Municipal wastewater municipalities are critical entities for safeguarding public health and the environment. These utilities are not the generators of PFAS but are blameless "passive receivers". Regulations based on the mere presence of PFAS and not on actual risk have forced municipal wastewater utilities to seek more burdensome, expensive, and limited biosolids management alternatives (e.g., landfill disposal) that do not necessarily provide enhanced environmental benefits. This underscores the importance of developing and preserving a range of viable and environmentally beneficial biosolids management options.

Thank you again for the opportunity to comment. If you have questions or need any additional information, please feel free to contact me at (714) 299-2943 or by email at lbaroldi@synagro.com.

Sincerely,

Layne Baroldi

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