

Mid-Atlantic Biosolids Association

TO: The Pennsylvania House Environmental Resources and Energy Committee

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Thank you for the opportunity to provide information to your committee pertinent to the proposed revisions to the General Permits affecting biosolids utilization. The Mid-Atlantic Biosolids Association (MABA) is a trade group representing all aspects of the production and use of the byproducts of wastewater treatment, an environmental management function in which we all have a stake. The MABA region has 60 million residents, and at 50 pounds of biosolids per capita-annually, that is approximately 1.5 million dry tons each year produced in the seven states, New York through Virginia (one-fifth produced in Pennsylvania). What is more, Pennsylvania is at the center of the mid Atlantic, and substantial transportation of biosolids occurs across the region, and thus regulations in Pennsylvania have a regional impact. I will address several issues that the pre-draft General Permit changes raise with the the region's generators and users of biosolids, particularly these topics: PFAS monitoring, phosphorus regulation, exclusion of food-waste amended solids, and temporary storage.

But first, I want to emphasize that a substantial risk in too quickly moving on the proposed permits is the lost opportunity to have all communities in the Commonwealth participate, with biosolids as one tool, in lending a shoulder to the urgent issues of climate change and ecological deterioration through nature-based solutions that deploy the nutrients and carbon captured during wastewater treatment. Instead of a permit system that creates expensive hurdles to recycling, we need a permit system that will enable application of biosolids to projects that make the circular economy and sustainability real at this urgent juncture. MABA urges a careful, comprehensive reconsideration of not only the specific proposals in the pre-draft General Permit, but a thoughtful study of the larger policy issues, as may be accomplished by House Resolution 149, offered by Representative Rigby.

Potential for a GHG Mitigation Component to Biosolids Management. The Mid-Atlantic Biosolids Association recommends to PaDEP that it amend its General Permits in a way that facilitate rather than increasingly restrict biosolids use. Updates for reissuing the General Permit are an opportunity to increase in Pennsylvania the use of both Exceptional and Non-Exceptional Biosolids for projects that are "nature-based solutions" for climate change adaptation. In particular, biosolids could be ingredients in projects for restoring disturbed lands and ecological diversity, projects of a kind expected to be key in carbon offset or carbon taxing approaches to "decarbonizing" the economy. While these national tools are not yet in place, PaDEP ought to anticipate a quick move to significant new programs in which the state's wastewater agencies could participate.

Pennsylvania has a history of leading-edge participation in the global energy systems, and a regulatory system that enhances, instead of restricts, access to biosolids as a soil-building tool for carbon sequestration, biomass cultivation, and bioenergy production will allow Pennsylvania to be a leader in the new energy economy.

PFAS Monitoring in the General Permits: The Mid-Atlantic Biosolids Association recommends that PADEP remove all reference to PFAS in the General Permits. In its place, MABA recommends that state government instead engage in a track down of PFAS hotspots in the state, following this up with an evaluation of risks of PFAS discharge to publicly owned sewers. Chemical compounds in the broad class that is now called PFAS have become a topic of scientific, regulatory, public and media concern over the past several years, even though they have been in wide use for well over 50 years and their use has been waning significantly. Everywhere in the world, community wastewater systems have been a conduit through which residual loads of PFAS have flowed from household use of PFAS containing fabrics, containers, and cookware, and in several cases industrial users of PFAS chemicals have discharged their wastewaters to publicly owned sewers. Several states, notably Maine, Michigan and California, have engaged in a track down of those several municipal wastewater plants that have received inordinate loads of PFAS. That track down would be very useful in every state of the MABA region, including Pennsylvania and in all states of the MABA region. The broad finding in the three states where track down has occurred is that all wastewaters contain low levels of PFAS-type compounds, and these levels pose no human or environmental risks, even when those compounds are sequestered in biosolids and used on land. In cases where public wastewater systems have been unwitting recipients of industrial contamination, mitigative actions are absolutely called for. While public concern has been raised to a high level, global scientists have not yet made final the laboratory methods for analysis of PFAS in wastewater and biosolids, nor have they concluded the concentrations that pose health risks in wastewater and biosolids. The pre-draft GP requirements for PFAS monitoring are premature from both an analytical and risk standpoint, pose major costs on local government and ought to be removed. Nevertheless, Pennsylvanians deserve to have PFAS hot spots identified and mitigated, but this goal is not advanced in the context of GP amendments. Important to state regulators is the EPA issuance of draft laboratory protocols (methods 1633) for measuring PFAS in wastewater and biosolids. These protocols are about a year from being made final, and accreditation of laboratories around the state and beyond will be two years or more beyond that. What is more, EPA has not yet completed its assessment of potential risks to humans and the environment from PFAS borne in biosolids, so imposition of monitoring costs for PFAS in biosolids is not justifiable on a cost effectiveness or a scientific basis.

Phosphorus Regulation in the General Permits. The Mid Atlantic Biosolids Association recommends that PaDEP postpone making changes to the General Permits that insert new procedures for phosphorus control. The wastewater industry is keenly aware of the critical objective in the watershed to the Chesapeake Bay of phosphorus reduction to surface waters, as their ratepayers already bear the cost of many hundreds of million dollars for equipment to remove phosphorus from effluent discharges. These substantial investments have had two significant results, full compliance with the bay-wide assignment of reduced loads to sewage sources in the watershed and necessarily increased loads of phosphorus in the byproducts, specifically the biosolids. As the biosolids from the municipal discharges are directed to their most effective use, farmlands, current biosolids rules place on farmers specific standards for stream setbacks, land slopes, soil drainage classes, nutrient management and soil and erosion controls. These existing rules impose far more directed and enforceable rules on biosolids-sourced fertilizer than rules applied to farm activities employing chemical fertilizers, nutrient sources that continue to dominate phosphorus loads to the Chesapeake. The Pennsylvania State University continues to refine its tools useful for farmers throughout the state that enable farmers to minimize losses of nutrients to surface waters, but these tools are not in final form, as additional validation of their predictability and practicability are pursued. The pre-draft General Permit requirements, aside from compelling biosolids generators to deliver biosolids to new and more remote farming operations in the state, at significant cost, would impose additional layers of regulatory steps and paperwork filing and review. These measures would not result in meaningful changes to the way soil is managed, so hence have no meaningful or measurable reductions in phosphorus release to streams.

Acceptance of High Strength Organic Waste into Municipal Digesters. The Mid-Atlantic Biosolids Association recommends PaDEP entirely remove from its pre-draft General Permit proposal its redefinition of biosolids to exclude biosolids from General Permit coverage from wastewater operations that accept high strength organic wastes (HSOW) into digesters. This proposal is unmatched by regulatory interpretations in any other state in the US, and in fact runs counter to a global "Race to Zero" initiative which encourages municipal wastewater plants around the world to optimize production of biogas for energy production, driving down to zero the need of a plant to purchase electricity from the grid. The very best way of accomplishing this energy goal and the consequent reduction of greenhouse gas emissions is to deliver HSOW to supplement sludge solids in municipal anaerobic digesters. This is the customary practice, and it has been shown in hundreds of published case studies to be a sound and beneficial practice for wastewater agencies. Neither the mass of biosolids nor its quality is significantly impacted by HSOW input to digesters, based on increasingly successful cases in the US

and also in Pennsylvania. In light of urgent need to respond to global focus on reducing GHG emissions, this proposal is wholly counterproductive.

Storage Requirements for Biosolids Production. The Mid-Atlantic Biosolids Association recommends that the PaDEP write its proposed storage rules in a way that does not impose unreasonable increases to capital expenditures and that does not change operational timelines in a way that disrupts the obvious necessity for daily biosolids disposition. Climate change has taken hold in the mid-Atlantic, with periods of record-breaking rainfall quantities and intensities. These climate changes have adversely effected famers and agricultural activities, and program such as biosolids management that work with them. The wastewater and agricultural industries are on a long path of adapting to these fundamental changes. But both farmers and the public agencies and their contractors will need time and money to install the capital equipment and make the operational changes needed to get the job done right. An unreasonable set of General Permit stipulations work against developing sound long-term solutions and might force public agencies to expensive disposal options.