

Good Morning

Thank you for this opportunity to testify before the Committee.

My name is Christine Volkay-Hilditch. I am employed by the City of Lancaster as the Deputy Director of Public Works for Utilities. I am a professional engineer registered in the Commonwealth, a diplomate of the Environmental Engineering Academy, and a licensed water and wastewater operator.

I am here today to respectfully request that PADEP continue to allow hauled wastes into digesters, continue to allow storage of biosolids at farms, determine if there is sufficient local landfill capacity if land application of biosolids is in anyway constrained, and most importantly conduct a cost benefit analysis of the proposed permit changes for the land application of wastewater treatment plant biosolids.

Lancaster operates a 32 Million Gallons per day advanced wastewater treatment plant. It serves the City as well as 11 surrounding municipalities through intermunicipal agreements, including the townships of Manheim, East & West Lampeter, Manor, East Hempfield, Upper Leacock, Pequea, Lancaster, West Earl, and Strasburg Borough. In 2020 the plant generated over 23,000 tons of biosolids from the treatment process. Of that amount, approximately 66 percent was land applied.

The City has a long-term capital plan to maintain and update its assets over the next 30 years. New anaerobic digesters and driers were identified as part of that process to reduce the volume of biosolids that the wastewater plant generates. More recently, the city started work to reduce the amount of energy it uses to treat water and wastewater. Like other municipalities and authorities, the City uses a considerable amount of energy to treat water.

In May of 2021 the City requested proposals for an Energy Service Company to evaluate energy savings measures at its water and wastewater plants. An ESCO is a company or an entity that delivers energy services or other energy efficiency improvements. The ESCO proposals that the City received identified various program to reduce energy consumption including solar power, LED light replacements, pumping efficiency measures, and anaerobic digestion to sell methane gas under the renewable fuels program.

Anaerobic digestion reduces the amount of biosolids generated in the treatment process. Methane gas is generated in the anaerobic digestion process. Methane can be used as a fuel source to generate electricity or for heating. It can also be sold as a green fuel under the renewable fuels program. To implement the Renewable Fuels program, EPA tracks production and use of qualifying renewable fuel using Renewable Identification Numbers or RINs. These RINs are generated by renewable fuel producers or importers and are bought and sold "attached" to the renewable fuel until the fuel is purchased by another party.

If methane production is maximized, cost recovery increases with the sale of more gas. One of the ways this can be done is by increasing the food to the digesters in the form of organic material. The proposed changes in the general permit will prohibit the future acceptance of hauled waste, except at the headworks, or the start of the liquid side of the treatment process. However, most hauled waste

is best accepted into the digester. Lancaster wants to be able to accept hauled wastes directly into the digester.

The City currently has a three-year contract to beneficially reuse or dispose of biosolids. Both landfill and land application are used by the contract hauler. The 2019 cost of disposal was \$59.45 per ton and the current disposal cost is \$65.00 per ton. Costs increase each year under the contract as fuel and labor costs increase. With the proposed changes to the general permit, land application will be jeopardized with the new constraints. The costs that a municipality pays its hauler includes transportation and disposal or tipping fees at the landfill. The farmer that accepts biosolids is not paid by the hauler. The farmer gets fertilizer for free because biosolids is an organic fertilizer that contains nitrogen and phosphorus. If there is less land application because of storage constraints at the farm, the farmer will still need fertilizer. The farmer will pay for commercial fertilizer and food crops or animal feed costs can increase. Likewise, the fee that the municipality will pay to the hauler will also increase as the biosolids that was land applied must now go to a landfill, and a tipping fee paid. These additional costs will be passed onto the rate payers, and I don't know how much they may be.

What truly concerns me most is that a landfill is under no obligation to take in more biosolids. Lancaster sends out 5 tractor trailer loads of biosolids 5 days a week. PADEP regulates how much biosolids a landfill can accept. However, a landfill can also self-impose how much biosolids it takes. If all, or even a part, of the land applied biosolids must be taken to a landfill, we don't know how much capacity is left or even if the landfills will even entertain taking in more biosolids. Biosolids pose special management issues for landfills, so landfills watch how much they take. In the 2018-2019 water year, PA had over 60 inches of rain. In a normal year it is approximately 39 to 40 inches, depending on where you are in PA. In that time, land application was seriously constrained because it was a cold and wet winter. Some landfills did not want to take the extra biosolids when it was too wet to land apply and biosolids were trucked farther where space was available. We all "hoped" it would get drier. But "hope" is not an operational plan. Municipalities need to know what the new permit conditions will cost so that they can determine how the wastewater treatment rates will be affected. Storage at a plant site can be an issue as some plants are land locked and storage is also expensive to build. How much will the costs increase?

Municipalities also need to know where the biosolids can go if it can no longer be land applied. Hauling out of state will not be cost effective as transportation costs will increase and more greenhouse gases will be generated. The City is trying to reduce its energy costs and greenhouse gas emissions with the adoption of a climate plan, yet the future of its biosolids management program is unknown and costs will increase.

In conclusion, the City respectfully requests that PADEP:

Conduct a cost benefit analysis of the proposed changes to the general permit;

Continue to allow hauled wastes into digesters;

Continue to allow farm storage of biosolids; and

Determine if there is sufficient local landfill capacity if land application is in anyway constrained.

Thank you again

Christine Volkay-Hilditch, P.E., BCEE