On Behalf of the P.S.M.A. I would like to thank you for allowing us the opportunity to present the issues we feel need to be addressed concerning the DEP's initiative to make numerous changes to Pennsylvania's general permits 7,8, & 9. The general permits specifically regulate the land application of Class A EQ Biosolids in general permit 7. the land application of Class B biosolids is general permit 8 the land application of septage is Pennsylvania general permit 9.

The P.S.M.A is very concerned about the proposed changes to these permits. Our membership serves the entire onsite septic system management industry in the Commonwealth which represents 43% of the homes in the Commonwealth. Additionally, our membership manages the Biosolids produced at approximately 50% of the wastewater treatment plants in the Commonwealth. It is important to know the Biosolids management represents 50% of the operations and maintenance costs of a wastewater treatment plant. The protentional financial impact that the proposed changes to the general permits will be far reaching, touching the lives of every taxpayer in the Commonwealth. It is asked that the following comments are considered when your committee makes a determination concerning any changes to the PAGP7-8-9.

Requirement for Covered Farm Field Storage of Biosolids

The Pre-draft revisions to the general permits for exceptional and non-exceptional quality biosolids (PAG-07 and 08) proposes that field storage of biosolids must be covered. This is not feasible and would restrict biosolids recycling most of the year. Biosolids field storage is already subject to very protective regulations to avoid adverse environmental impacts.

The Publication: "*Guide to Field Storage of Biosolids*" developed by USEPA, USDA and referenced in the PADEP "*Biosolids Sampling Manual*" does not recommend the use of tarps on biosolids storage areas. It is not safe for the workers and tarps are often damaged or blown away by the wind. Land appliers who have tried this agree and point out that rainwater puddles at various points on the tarp and it becomes so heavy that the tarp cannot be lifted. In addition, the tarp can only be used once then it must be landfilled.

Granted that there were some biosolids field storage areas that washed out of the storage areas. However, this was during highly unusual weather events. In 2018 rains amounted to 50 inches during the storage period. In 2021 Hurricane Ida dropped 9 inches of rain in a single event. In the future, this could be mitigated by use of Vegetated Treatment Areas downslope of the stockpiles. The Natural Resources Conservation Service designs storm water management features for a 25-year storm as a Best Management Practice. On occasion however, where will be storm water that overflows the system, and this is considered acceptable.

The pre-draft versions of the General Permits for Land Application of Biosolids, PAG-08 and PAG-07, proposes sampling and analyzing biosolids for PFAO and PFOS at the same

frequency
as metals and PCBs, 4 times per year. DEP is proposing these changes because of increasing public opposition to biosolids recycling because of an unproven belief that biosolids are contaminating the environment. In reality, the contamination is being done by industries that manufacture, utilize, and release PFAS to the sewers. The PA PFAS Action Team recommended DEP look at biosolids but they also stated that "Pennsylvanians produce an estimated 2.2 million tons of wastewater solids (biosolids), or sewage sludge and residential septage, each year. This material has proven to be a valuable resource when heavily treated, controlled, and safely applied as a fertilizer to help rejuvenate farmland, forests, and mine lands. In order to ensure safe use of biosolids, Pennsylvania sets strict standards for the quality of biosolids before they can be applied to land. This approach was developed after extensive studies by the EPA found that land application is environmentally safe and beneficial to the soil. However, despite the regulatory controls and valuable nutrients and organic material that biosolids provides, state regulators suspect biosolids **may** contain PFAS and research indicates that it may be a source of contamination on farms where this material has been applied." They suspect. They do not know. For that reason, they suggested, rightly so, that someone should look into it.

As it turns out, the US EPA announced on October 18 that it has launched a comprehensive program, a road map, to investigate PFAS contamination. Their goal is that between now and 2024, the EPA will increase investments in research, take action to restrict PFAS chemicals from being released into the environment, and accelerate the cleanup of PFAS contamination[1] The EPA expects to complete a risk assessment of PFOA and PFOS in biosolids by the winter of 2024 to determine if regulations are needed.[2]

These studies will be done at the expense of the Federal government. The proposed PA DEP changes to PAG 07, 08 and 09 will force PA state biosolids programs to monitor their biosolids now, at their own expense. It is estimated that this monitoring requirement will cost over $22 million dollars over the next 10 years. The cost to analyze PFOS and PFOA is $700 per sample using the modified 537 method. When you add in the staff time or contractor charges to properly collect and transport the sample the total cost for each testing event is at least $1700. There are 328 Land Application general permits issued under PAG 07 and 08. If they monitor an average of 4 times per year, that would be 1312 monitoring events per year. The estimated cost is $2,230,400 per year. That's $22,304,000 over the 10-year term of the permit. That cost will have to be passed on to sewer users, which is basically every household that flushes!

This doesn't make sense when you consider:

1. As of now, there are no standards or guidelines for how laboratories measure PFAS. The EPA has yet to issue guidelines on how testing is to be done. At this point, different labs can use different methods and will potentially report vastly different results.
2. As of now, there are no labs accredited in PA to perform PFAS testing.
3. PADEP has not issued guidance on equipment and procedures for WWTP's to use when sampling PFAS.
4. Since use and production of new PFAS has been severely limited, there are very little new PFAS being introduced into the environment. The levels that you see today will not

vary much over the coming years. Repeated sampling will show the same results, time and time again with little variation.

Trucked in Waste:

Another proposed change mentioned in the DEP Pre-draft would affect WRRFs ability to land apply biosolids if they accept trucked in waste. The following is an excerpt from the DEP Executive Summary;

The permit proposes to clarify that the land application of exceptional quality biosolids mixed with solid wastes not generated by the preparer of the biosolids is prohibited by the permit unless those hauled-in wastes are first processed through the sewage treatment plant prior to the exceptional quality biosolids treatment process. This ensures that the material will be properly classified as sewage sludge.

This means that WRRFs with trucked in waste programs, where the waste is not put in at the head of the plant, would not qualify for coverage under the PAG-07 or PAG-08. They could still land apply but would need either an individual permit or general permit under Section 271, Subchapter I. Both of these alternative permitting scenarios are very time consuming and/or more restrictive than our current system. This would place a tremendous burden on an already woefully understaffed PADEP. Before the existing General Permitting system for biosolids was in place it could take 5 years or more to get an individual permit. More recently, an individual permit for an Exceptional Quality product produced in Schuylkill County took 12 years. The conditions of that individual permit are much more stringent than the existing General Permits for Exceptional Quality and non exceptional quality biosolids.

Now those plants will place plans on hold or if the permit is finalized as proposed, stop accepting trucked in waste. So where will that waste go? It could be further processed and dewatered and disposed in a landfill, if landfill space is available. However, we are finding that landfills have over committed to accepting sludges. The landfills are limited in how much it can take on a daily basis. They can take no more than 20% of the weight of the MSW (trash) landfilled daily. Taking more could generate odors or result in a landslide.

If haulers and pumpers cannot take wastes to a WRRF that land applies, they could try to take it to a WRRF that incinerates, but these are limited in number and capacity. There are often long waits when the trucks arrive at the incinerators and that increases costs.

This permit condition increases the chances that wastes will be dumped illegally.

There is no evident benefit to this permit condition.

This permit condition will double or triple costs for septage pumpers, food processors, restaurants, and small, rural WRRFs. It will also rob the larger WRRFs of the opportunity to generate revenues, produce their own heat and electricity and make the most of their waste processing capacity.

It will cost more to everybody who buys food, eats at restaurants and/or flushes. It will be one more necessity that will increase in cost for citizens of the commonwealth.

The P-Index:

Thee Pre draft permits require that for every farm field that receives biosolids the Phosphorous "P" Index must be prepared and submitted. Requiring a Phosphorus Index for every farm and field that receives biosolids would have a profound effect biosolids programs.

The P Index was developed by studying soil treated with manure. The research used showed that when soil treated with manure reached 200 ppm P, there was an increase in soluble P in the nearby surface water. Penn State's Dr. Jennifer Weld has stated consistently that more research is needed on phosphorus loss on fields treated with manure and/or biosolids. There was one study of P loss from fields treated with biosolids, but that was nearly 20 years ago and the researchers are now retired. The standard for manure should not be applied to biosolids without further study.

Why P-Index should not be applied to Non EQ Biosolids:

- Requiring a P-Index will be a hardship on the farmers. Many farmers who have given up their animal operations rely on biosolids as a source of nutrients. Changes to the General Permits will make it harder for farmers to obtain biosolids and increase the farmer's **costs** to raise crops.
- If implemented, farms that have been using biosolids for several years could no longer receive biosolids due to phosphorus built up in the soil. This would require WRRFs and/or their contractors to find new farms and these will probably be farther away. It is very time consuming to determine the P Index for every field where biosolids is used. This will increase biosolids management costs and impact everyone in the commonwealth. The proposed 2 years to implement the P Index requirement will not be adequate to find and permit new farms.

- In a presentation to the Mid Atlantic Biosolids Association, on July 20, 2021, Dr. Jennifer Weld, Penn State University, who developed the P Index, said that more field work on P loss from fields was needed. DEP should not be imposing unfunded mandates and causing increases in sewer bills to everyone who flushes if they don't know for sure that these burdens will have the desired effect.

Depending on the details, companies like Jessie Baro (now Denali) and Synagro say costs will go up by 35% as a result of the P-Index alone, assuming-they can find additional suitable farms with low P concentrations in the soil. It is possible that in some cases, land application may no longer be feasible. It is probable that less biosolids will be recycled and more will be disposed in landfills. If biosolids cannot be land applied and must be disposed in a landfill the costs are likely to double or triple. This is what happened in some New England states.