Biosolids Technical Advisory Committee Recommendations – January 2019

Water quality and the improvement of water resources in Florida are a key priority for the Florida Department of Environmental Protection. As such, the Department is examining the nutrient impacts of the land application of biosolids. In 2018, the Department created a Biosolids Technical Advisory Committee (TAC) to evaluate current management practices and explore opportunities to better protect Florida’s water resources. The TAC members represent stakeholders from all arenas including environmental and agricultural industry experts, large and small utilities, waste haulers, consultants and academics.

The TAC convened on four occasions from September 2018 to January 2019 and discussed the following:

• What are the current options for biosolids management in the state?
• Are there better ways to manage biosolids to improve the protection of our water resources?
• What research gaps exist and need to be examined to build upon and improve biosolid management?

The meetings included presentations related to biosolid management and regulations, water quality, innovative technologies and research. Each public meeting included open public comment, as well as discussion among the TAC members, the audience and the Department.

Based on the deliberations of the TAC and feedback from public participants, the following actions were recommended:

• Permit biosolids in a manner that minimizes migration of nutrients to prevent impairment to waterbodies. The Department should modify current permitting rules to:
  o Establish the rate of biosolids application based on site specifics, such as soil characteristics/adsorption capacity, water table, hydrogeology, site use, distance to surface water. This would better prevent nutrient pollution offsite;¹
  o Evaluate the percentage of water extractable phosphorus in all biosolids to inform the appropriate application rate; and
  o Establish criteria for low, medium and high-risk sites that guide application practices and required water quality monitoring.
• Increase the inspection rate of land application.
• Develop site specific groundwater and/or surface water monitoring protocols to detect nutrient migration.
• Develop and conduct biosolid and nutrient management research on nutrient run-off through surface and groundwater flow.
  o This should be done with various application rates, various types biosolid application and different geologic conditions.
• Promote innovative technology pilot projects for biosolids processing that could provide a wider range of beneficial end products.

The TAC disbanded on January 23, 2019, and these recommendations are currently being further developed by the Department for implementation.

¹ Some of these parameters may be contemplated in the draft revised Phosphorus-index.