



Update on Virginia DEQ's Water Division's PFAS Activities

Neil Zahradka

Manager, Office of Land Application Programs

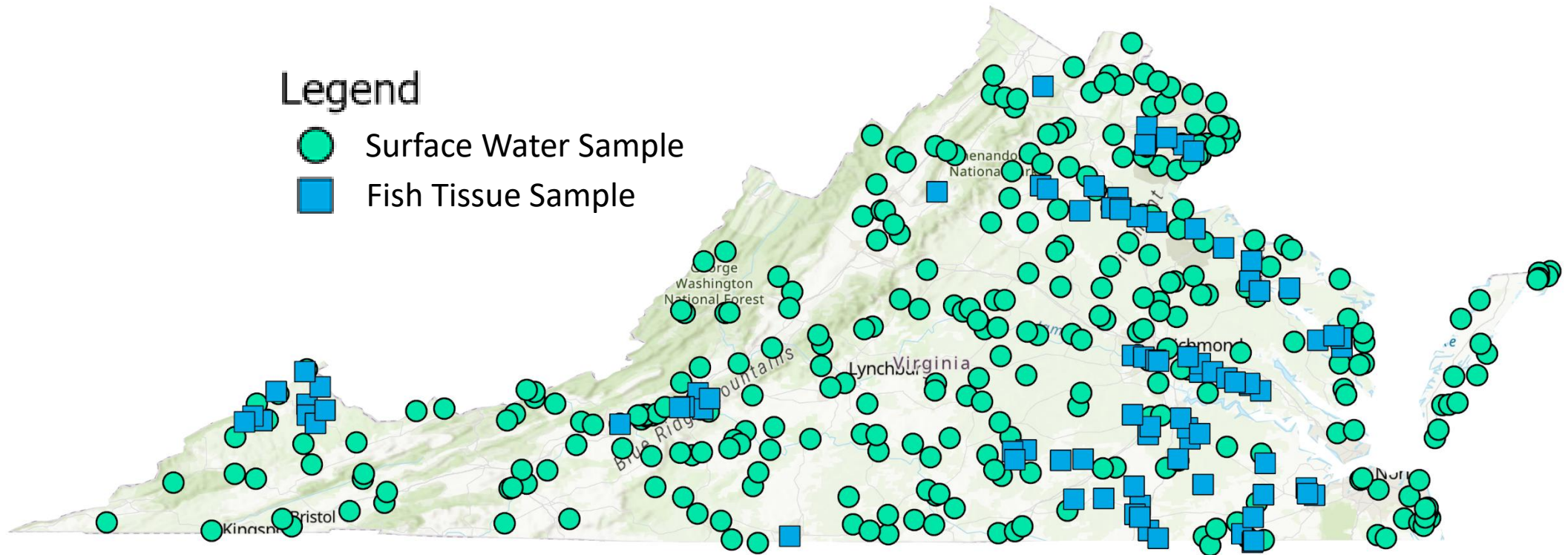
Virginia Department of Environmental Quality

October 9, 2025

Virginia's PFAS Legislative Action Implemented by DEQ

- 2022 General Assembly Session
 - Allocated funding for surface and groundwater monitoring
- 2023 General Assembly Session
 - Establishes requirements for certain industrial users discharging PFAS to Publicly Owned Treatment Works (POTW) to test for PFAS chemicals and report results to the receiving POTW
- 2024 General Assembly Session
 - Requires DEQ to perform PFAS source assessments for drinking water systems with detections of PFAS above EPA's Maximum Contaminant Levels
- 2025 General Assembly Session
 - Requires certain facilities in the Occoquan Reservoir watershed to monitor for PFAS and ensure the concentration of PFAS in their discharge does not exceed EPA's drinking water Maximum Contaminant Levels

Ambient PFAS Monitoring 2021 – 2024



Biosolids Law and Regulation

- Federal Law and Regulation
 - Clean Water Act – Congress
 - Code of Federal Regulations
Title 40, Part 503 - EPA
- Virginia Law and Regulation
 - State Water Control Law – General Assembly
 - Virginia Pollutant Discharge Elimination System Permit Regulation - DEQ
 - Virginia Pollution Abatement Permit Regulation - DEQ



Biosolids Management and Permitting Structure

Wastewater Treatment Plants

- Virginia: VPDES permits
- Out-of-state: federal or other state req
- Biosolids quality, treatment, monitoring, reporting
- May land apply or contract with a land applier
- Pays fee to DEQ for biosolids land applied

Land Application Contractor

- Holds contracts with wastewater plants
- Identifies farmers who wish to receive biosolids
- VPA Permit for land application
- One permit per county specifying locations for land application

Farmers/Landowners


- Permits not required
- Receive a DEQ Fact Sheet from the land applier
- Landowners must provide written consent to have biosolids land applied on their property

How is a Permit Protective?

Federal and Virginia regulations: biosolids content and treatment

Virginia also requires:

- Additional setbacks
- Nutrient Management Plans (NMPs)
- Site and soil restrictions
- Notification to the public
- Financial assurance
- Local authority
- Compliance inspections
- Land applier training


COMMONWEALTH of VIRGINIA
DEPARTMENT OF ENVIRONMENTAL QUALITY

Permit No. VPA00831

Effective Date: July 13, 2016
Modification Date: July 16, 2019
Expiration Date: July 12, 2026


AUTHORIZATION TO MANAGE POLLUTANTS UNDER THE
VIRGINIA POLLUTION ABATEMENT PERMIT REGULATION
AND
THE VIRGINIA STATE WATER CONTROL LAW


In compliance with the provisions of the State Water Control Law and the Permit Regulation adopted pursuant thereto, the following owner is authorized to manage pollutants in conformity with the application, plans, specifications and supporting data submitted to the Department of Environmental Quality and other conditions set forth in this permit.

Owner: Synagro Central, LLC
Owner: 1681 Tappahannock Blvd
Address: Tappahannock, VA 22560

Permit Name: Synagro Central LLC - Essex County

The authorized pollutant management shall be in accordance with this cover page, Parts I and II, and Attachment A, as set forth herein.


Melanie D. Davenport
Director, Water Permitting Division


Date July 16, 2019

Permitting Process

- Permit Applicant
 - Site suitability
 - Contracts with farm operators
 - Landowner agreements
 - Financial assurance
 - Sitebooks
 - Proposed biosolids sources
 - Permit application fee



- DEQ
 - Application receipt
 - Notification to locality, other agencies, adjacent landowners
 - Site reviews
 - Public meeting
 - Draft permit
 - Public comment period
 - Public hearing if public response is significant
 - Permit decision

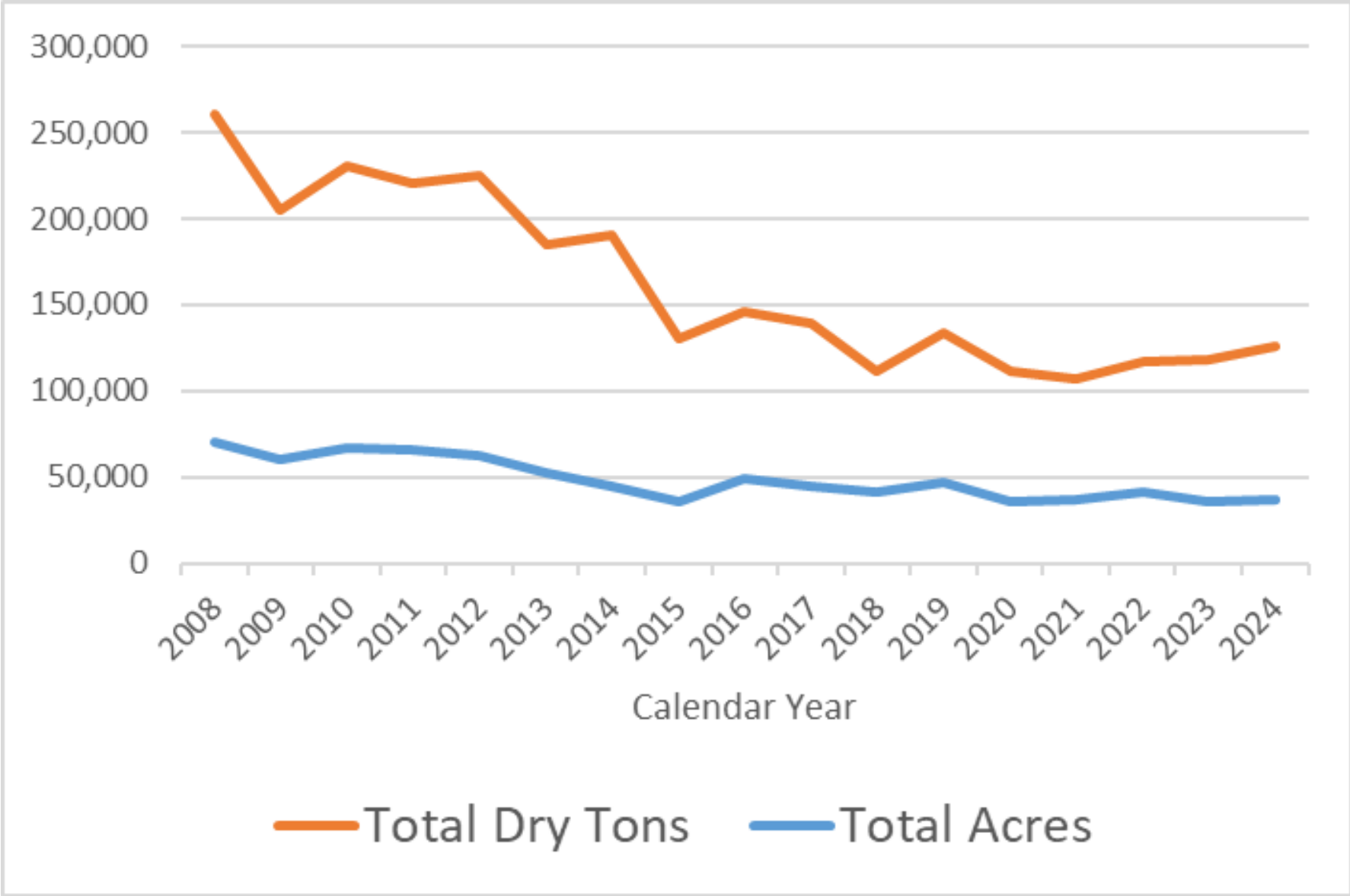
Biosolids Source Approval

- Historic biosolids analyses
- Virginia Environmental Laboratory Accreditation Program
- DEQ reviews
 - Metals data
 - Pathogen reduction process data
 - Vector attraction reduction process data

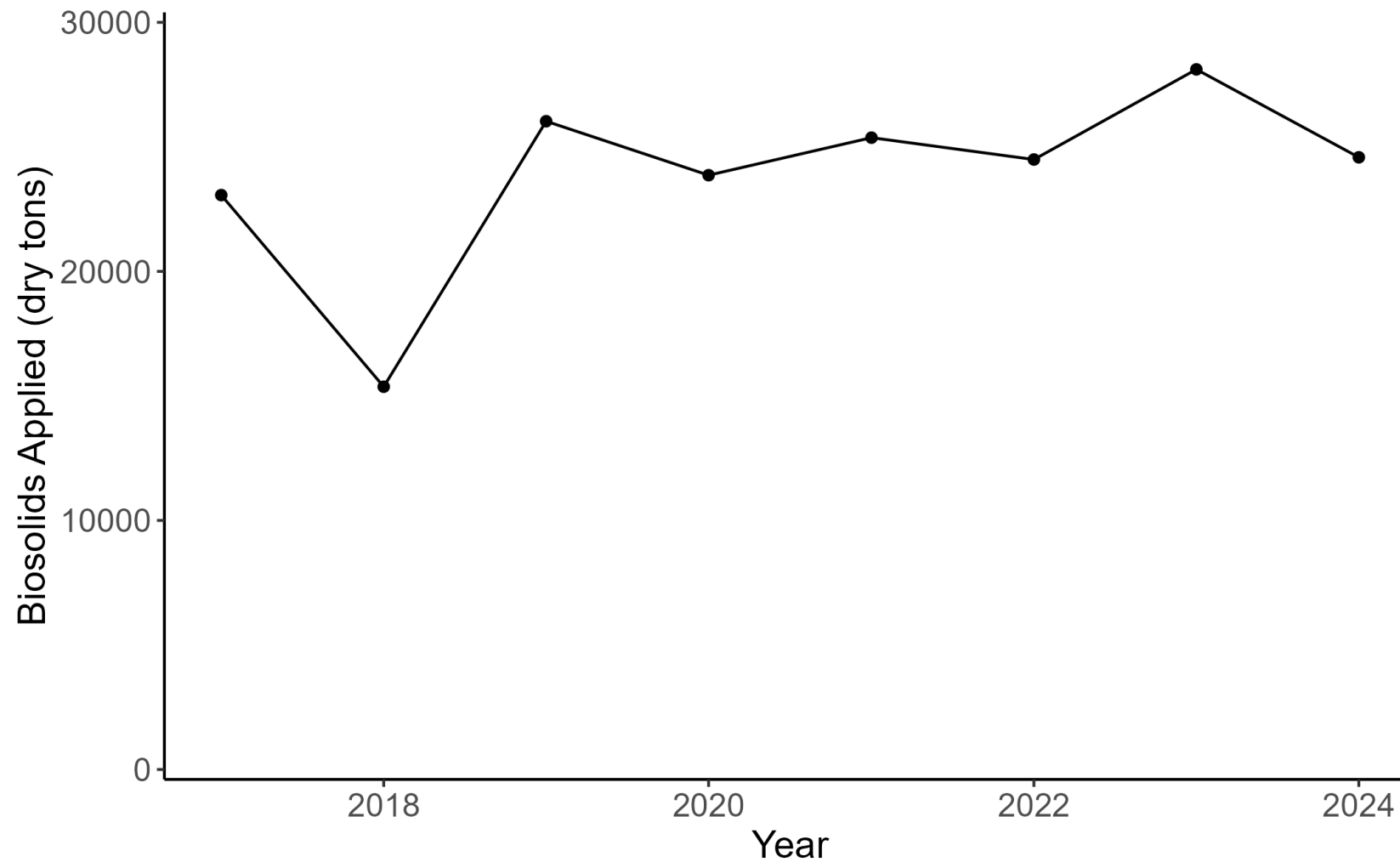
Same standards for biosolids from Virginia and out-of-state



Biosolids Land Application in Virginia



Maryland Sources Applied in Virginia



Federal Action - Draft Risk Assessment for PFOA and PFOS in Biosolids

- Is not a regulatory mechanism
- No comparison of risk to other sources of exposure
- No evaluation of quantitative effects of risk mitigation strategies
 - Additional setbacks to surface waters and wells
 - Distance to bedrock and groundwater
 - Timing and rate restrictions
- No measure of effect of additional VA site requirements
- Virginia biosolids land application rate is approximately one-third that used in the risk assessment

Next Steps

- Virginia - DEQ
 - Follow federal requirements for all states
 - Implement any future General Assembly PFAS legislation
 - Continued focus on PFAS source identification for drinking water systems with PFAS exceedances
 - Continued ambient PFAS water column and fish tissue monitoring





Questions?

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