

**Chesapeake Bay Program
Toxic Contaminants Workgroup**

Meeting Minutes

Date: Tuesday, January 14th, 2025

Time: 1:00 – 3:00 PM

Location: Conference Call (remote only)

Calendar Page: [January Meeting Materials](#)



Chesapeake Bay Program
A Watershed Partnership

Actions and Decisions: *There were no actions and decisions at this meeting.*

Agenda Item and Desired Outcome	Time	Background Docs, Notes, and Action Items
<p>1. Introductions and Announcements –Greg Allen, EPA and Emily Majcher, USGS</p> <ul style="list-style-type: none"> • TCW Co-Chair position open • Meeting goals and background 	1:00	<ul style="list-style-type: none"> • TCW Co-Chair Position Description • Sources and Pathways of PFAS Occurrence in Water Sources: Relative Contribution of Land-Applied Biosolids in an Agricultural Dominated Watershed Environmental Science & Technology • Draft Sewage Sludge Risk Assessment for Perfluorooctanoic Acid (PFOA) and Perfluorooctane Sulfonic Acid (PFOS) US EPA • Greg Allen, EPA provided updates and announcements including the release of EPA draft risk assessment on PFAS in biosolids, and the TCWs Co-Chair position opening. • Emily Majcher, USGS covered background and updates including the new EPA regulations and associated webinar and a paper by Linda Lee on PFAS.
<p>2. Technical Presentations: An Introduction to Research on PFAS in Agricultural Systems</p> <ul style="list-style-type: none"> • <i>USDA Agricultural Research Service: Building Roadmaps for PFAS Research and Mitigation</i>, Tamie Veith, USDA-ARS • <i>Penn State PFAS Efforts in the Agroecosystems Research and Extension Network</i>, Heather Preisendanz, PSU • <i>USGS PFAS Research as part of the Food Resources Lifecycle Science Team</i>, Dana Kolpin, USGS 	1:10	<ul style="list-style-type: none"> • Meeting materials can be found on the Calendar page • Relevant Links • Emily Majcher, USGS introduced the PFAS Quarterly series and to this meetings topic, PFAS in agricultural systems. This included specifics on the reports and management strategies that led to the quarterly meeting series, the role of these meetings, and a preview of the talks. • Tamie Veith, USDA presented on the USDA ARS’s recent work on PFAS Research and Mitigation. Tamie went over the details and issues involved with the reuse of biosolids for agriculture, the National PFAS Strategic Plan, and an overview of a recent ARS workshop of PFAS in Agriculture. Tamie covered the format of the workshop and went in depth on the focal points arrived at by participants as roadmaps for addressing key research and communication needs. Focal points included Analytical Methods and Validation, Alternatives, Abatement & Remediation, Thresholds and Action Limits, Data, Tools & Mapping, Scale, Scope, and Source Tracking, Environment, Food, Livestock, Materials, and Plants, and Communication and Education. Tamie ended with suggestions for

	<p>future action and ways to get involved with ARS' work. Questions for Tamie addressed pesticides and their ingredients, which she said is an issue she is looking into, the prioritization of the focal points, and the geographic scale of the effort, which Tamie said was primarily national.</p> <ul style="list-style-type: none">• Heather Preisendanz, PSU went over Penn State's recently launched PFAS in Agroecosystems Research and Extension Network. Heather provided an overview of the PSU SAFES institute and its various projects, affiliated staff, and coordination. She then covered PFAS projects at Penn State's Beneficial Reuse Site, a project on Fate, Transport, and Mitigation at Biosolids-Amended Fields, a project at a Headwater Catchment, and takeaways from the latter project. Findings included that PFAS was present but below the drinking water standard in many instances and that the source was likely septic tanks. Heather went on to discuss PFAS Occurrence in Private Wells, which due to dependence on private wells in rural areas is a priority issue in PA. Data from private wells included PFAS detected in over 50% of samples, and high maximum concentrations in a small amount of samples. Finally, Heather covered projects related to crop uptake of PFAS. These projects had findings including that grass took up more than corn, foliar sorption is an unlikely contributor to PFAS concentrations, and that root uptake was primarily short chain compounds. Additionally, a project on hemp showed that it wasn't a good accumulator of PFAS, which means it may be a good crop for biosolid amended fields. Questions for Heather covered whether technologies existed for in situ detection (not yet), sampling techniques (Odette Mina, PSU mentioned EPA Method 1621), national scale efforts (PA is taking part, but there are no state level efforts in PA), specific source relationships to biosolid concentrations (should be easier to track down with the new dataset being put together), agricultural application of pesticides as a potential source (pesticide applications are happening in the watershed, but their potential contributions to surface water PFAS levels have not been explored), and bioremediation (proposals have been written for projects beyond hemp but they have yet to be funded).• Dana Kolpin, USGS covered PFAS agriculture research being conducted by the PFAS Food Resources Lifecycle Integrated Science Team. Dana went over the role of the IST and its research questions, pathways for PFAS in agriculture, the national assessment of food production wastewater (FPWW) which found it to be a complex mixture of organic chemicals, bacteria, and other components, the SoyOil Food Web PFAS Study which covered trophic transfer, a study characterizing land applied reuse materials (LARMs), a paper on PFAS concentrations in biosolids, a project on transport and uptake from corn management practices, a study on uptake in hay fields which compared fields with different histories of
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		<p>biosolid application, an assessment of contaminants in white tailed deer (waiting for results), a study of contaminants in milkweed, statewide stream assessments which found PFAS in 32% of samples and included a follow up stream sampling finding PFAS in 47% of samples, and a multi matrix study that included water, sediment, and fish (PFAS frequency 60% in water, 80% in sediment, and 100% in fish). Finally, Dana covered a study on the co-occurrence of pesticides and PFAS in agricultural streams, which found ubiquitous detection of pesticides, and many examples of PFAS. Questions for Dana included one on fish analyses in agricultural streams (this was done in the multi matrix study), one on the acronym ARG which stands for Antibiotic Resistant Genes (a contaminant of global concern), and one on whether there are pesticides that should no longer be used due to PFAS concentrations (can't definitively say yet, but by OECD definition there are pesticides that are fluorinated).</p>
<p>3. PFAS in Agricultural Systems in the Chesapeake Bay watershed – Ongoing efforts, needs, and priorities – Emily Majcher, USGS</p> <ul style="list-style-type: none"> • Additional efforts underway in the Chesapeake Bay watershed • What ongoing efforts would you like to hear more about? • Interest/format for a follow up meeting 	2:25	<ul style="list-style-type: none"> • Meeting materials can be found on the Calendar page • Emily Majcher, USGS facilitated a discussion covering the questions on the left, using a whiteboard format. Comments included efforts such as modeling wastewater contaminants in the Potomac, funding from USDA-NIFA, community science, and effectiveness of riparian buffers, and interest in hearing from stakeholders/landowners, and hearing about soil health and PFAS remediation. Participants expressed interest in follow up meetings on this issue.
Wrap Up and Adjourn	2:55	Next meeting: February 12th, 2025