

Distilled biosolids and residuals news from New England and Eastern Canada

August 31, 2023

Common Sense Restored: VTrans Removes Temporary Moratorium on Biosolids-Based Manufactured Topsoil



*Route 89, Exit 12, Park and Ride Improvement Project in Williston, Vt.
(photos courtesy of Resource Management, Inc.)*

Earlier this year, NEBRA collaborated with the Green Mountain Water Environment Association (GMWEA) to share a “success story” write up about the approved use of manufactured topsoil (MFT) for Vermont Department of Transportation (VTrans) improvement projects. That story was about a specific VTrans project at the Park-and-Ride at Exit 12 on Interstate Route 89 in Williston. Shortly after publishing the success story, NEBRA learned that VTrans had become concerned about per- and polyfluoroalkyl substances (PFAS) and instituted a temporary moratorium on the use of biosolids-based MFT. This concern was generated by conversations VTrans was having with their peer agency at the Department of Environmental Conservation (DEC) about the recent PFAS testing that had been done on biosolids. After many conversations with stakeholders, and review of extensive data, VTrans lifted the moratorium. Here is more on that story.

[Read more...](#)

Committee Spotlight: Carbon and Nutrient Trading Committee

Back in April 2021, the NEBRA Board of Directors, at the urging and direction of Vice President Lise LeBlanc, created two new committees that aligned very nicely with some of the goals in the strategic plan that the Board started working on later that year. One of the new committees is focused on non-biosolids residuals (see [NEBRA Residuals Committee Spotlight — NEBRA \(nebiosolids.org\)](#)) and the other was called the Carbon and Nutrient Trading Committee, charged with learning about carbon credits and nutrient trading programs that could benefit NEBRA members.

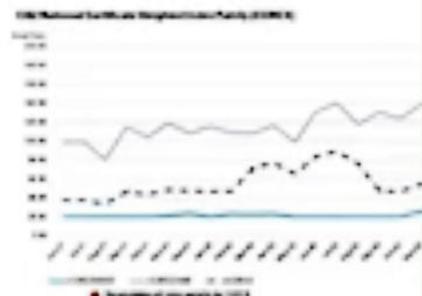
BIOCARBON APPLICATION – BIOCHAR & CARBON CREDITS

- Biochar is produced from organic feedstocks through pyrolysis to create a high-value biochar/fertilizer
- Biochar benefits:
 1. Retains water in dry soils
 2. Improves soil structure
 3. Sequesters carbon in the ground
 4. Holds nutrients in the soil
 5. Reduces odour
- Biosolids biochar can be valued at **\$50-100 USD/t biocarbon**



Biochar Carbon Credits – Voluntary Market

- In 2022, Puro.Earth opened all biochar sources to carbon credit application, and the ability to pre-sell biochar carbon credits (Pre-CORCs) to finance projects!
- Microsoft and Shopify spent \$10 million+ on CORCs in 2022, and Nasdaq recently acquired Puro.Earth
- **The CO2 Removal Certificate Weighted Index Family (CORCX) value has ranged from €80-200 EUR, the current price as of May 2023 is €110 EUR/\$118 USD:**



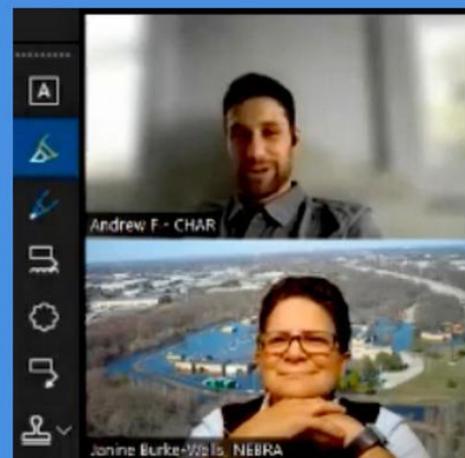
CHAR
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Bill Brower



Megan McCarthy



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PFAS News and Updates

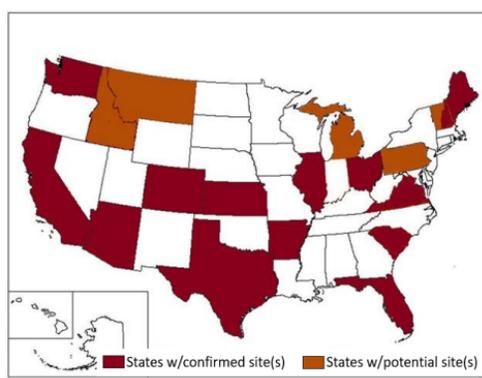


Figure 1. Land Application Sites for PFAS Study

Unregulated Contaminant Monitoring Report Data Released

This month, the U.S. Environmental Protection Agency (EPA) released the initial results of its Unregulated Contaminant Monitoring Rule No. 5 (UCMR-5), which required testing starting in January of 2023 of drinking water sources for 29 per- and polyfluoroalkyl substances (PFAS) as well as lithium.

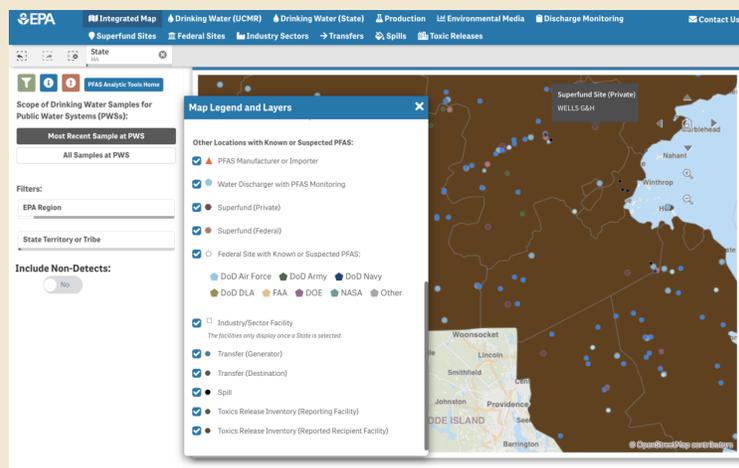
PLUS: [4th Draft Method 1633](#) released, an update on the [National Collaborative PFAS/Land Application Research Project](#) update, and [Saint-Gobain leaving Merrimack, NH, and PFAS behind](#).

[Read more...](#)

Tools to Try: Mapping, Graphing, and Analyzing PFAS Detections Near You

Anna Meyer for NEBRA

Finding in-depth information about PFAS detections in the communities where we work and live is now a lot easier. As of January 2023, the U.S. EPA's [PFAS Analytic Tools](#) are up and running. The tools make it simple to do mapping, graphing, and analysis of [PFAS](#) detections. They draw in data from a wide set of databases, including those with information on Superfund hazardous waste sites and PFAS manufacture and imports, as well as drinking water sampling, ambient environmental sampling, discharge monitoring, and more.



EPA PFAS Data for Eastern Massachusetts

[Read more...](#)

En Bref -- In Brief

EPA, ECOS and NASDA Issue Joint Principles for PFAS in Biosolids

The U.S. Environmental Protection Agency (EPA), the Environmental Council of the States (ECOS) and the National Association of State Departments of Agriculture (NASDA) recently issued a [joint statement](#) outlining their principles for preventing and managing PFAS in biosolids. In the announcement, EPA states that it “is committed to working with its federal, state, and other partners to continue to prioritize protecting public health, support our nation’s farmers, and work to ensure the availability of appropriate methods to manage biosolids.” The document acknowledges the “presence of PFAS in biosolids is the result of the continued manufacture and use of these compounds throughout society, including by households, as well as industrial discharges of PFAS to wastewater.” The statement includes guidelines for regulators and stakeholders to work collaboratively to “ensure the fate and transport of PFAS in contaminated biosolids do not result in harm to human health or the environment.” The principles include:

- Protect communities
- Reduce the discharge of PFAS to prevent the contamination of biosolids
- Aim to preserve flexibility and availability of options for the use and disposal of biosolids, while prioritizing public health protection
- Ensure the continued safety of the food supply and support impacted farmers and ranchers
- Educate stakeholders and communicate risk
- Build capacity
- Embrace transparency

In Case You Missed It – EPA Webinar on PFAS Monitoring Strategies

On June 22nd, the U.S. Environmental Protection Agency’s National Pretreatment Program hosted a webinar on “**Developing and Implementing a PFAS Monitoring Strategies for NPDES Pretreatment Programs and POTWs**”. EPA speakers include Justin Pimpare, Industrial Pretreatment Program Coordinator for EPA Region I. In the webinar, EPA provides guidance and information on how to identify PFAS sources and create a PFAS Industrial User Inventory, how to develop a PFAS sampling plan for water resource recovery facilities, and examples of permitting language and monitoring results. The webinar is two hours long. The unedited version of the recording can be found here: [Developing and Implementing a PFAS Monitoring Strategies for NPDES Pretreatment Programs and POTWs - Zoom \(zoomgov.com\)](#). To learn more about the national pretreatment program, visit: <https://www.epa.gov/npdes/national-pretreatment-program>.

WEF Releases Book on PFAS Management

PFAS in the Water and Wastewater Sectors: Fundamentals, Management and Treatment is a collection of essays, providing a current state of the field on PFAS from a variety of perspectives within the water sector. Contributors include experts in industrial wastewater, municipal water management, and public health. Each contributor highlights a different facet of the impact of PFAS in water and wastewater and providing guidance on the responses necessary to limit the chemicals’ negative effects. The collection covers the current understanding of PFAS, the implications for human health, and the growing regulatory framework, as well as the various treatments available for water, wastewater, groundwater, biosolids, leachates, and soil/sediments. Our understanding of PFAS, its effects, and the necessary responses is still evolving—this collection is not intended to answer all outstanding questions, but rather to further this critical conversation within and around the water sector. Chapter 19 is on Biosolids and Residuals. See [PFAS in the Water and Wastewater Sectors: Fundamentals, Management, and Treatment \(wef.org\)](#).

What NEBRA Members Are Up To

The **Narragansett Bay Committee** received the Environmental Business Council Award for corporate leadership: [Corporate Leadership - Environmental Business Council of New England, Inc. \(ebcne.org\)](#).

Black & Veatch will be leading a Water Research Foundation (WRF) grant projects to study PFAS: [Black & Veatch Awarded Water Research Foundation Grant to Study “Forever Chemicals” | Business Wire](#)

See this thoughtful piece from a NEBRA member on the complex issue of managing municipal biosolids, especially in Maine: [Commentary: Managing municipal biosolids is a complex issue that requires collaboration - Portland Press Herald – John Casella](#)

Eric Spargimino is featured in this informative video from CDM Smith about PFAS in biosolids. Eric talks about the impacts on management and the cost increases in [How should WWTPs manage PFAS in biosolids? - YouTube](#)

Board Member **Cheri Cousens** was “Cover Girl” for the March 2023 Treatment Plant Operator magazine which did a terrific, full-length feature on Cheri’s career in water: [Through a Long Career, This Massachusetts... | Treatment Plant Operator \(tpomag.com\)](#)

Popular Webinar Recordings From the NEBRA YouTube Station

This year’s lineup of NEBRA Lunch & Learn webinars included sessions with the three participants from the Shark Tank Event at the 2022 Northeast Residuals & Biosolids Conference. You can find all the Lunch & Learn recordings on [NEBRA's YouTube station](#). But here’s some recommended sessions from the last few years:

From the Shark Tank:

C-Green’s **OxyPower HTC** (hydrothermal carbonization) <https://youtu.be/2dSlezgl9bo>

Bioforcetech/Our Carbon (biodrying/pyrolysis) <https://youtu.be/At8e1hLuxF0>

ctec Energy U.S.A. (clean thermodynamic energy conversion) <https://youtu.be/9nUVtM6t0h8>

Past webinars with lots of views:

Talking to Farmers about PFAS: <https://youtu.be/vagpNgkENXE>

Landfill Capacity in the Northeast: <https://youtu.be/g9bQuTj5nAA>

North East Digestion Roundtable #24 on Codigestion (hosted by BioCycle editor Nora Goldstein) <https://youtu.be/70xLVX0ztL8>

The History of Biosolids Management in the U.S. (*Earth Day 2022 special webinar featuring Ned Beecher*): <https://youtu.be/BPRJlgIpyTE>

CHECK IT OUT!!

Deeper Dives into Poo Discussions

[Good Shit: How Humanure Could Save Agriculture—and the Planet - Gastropod](#)

[The Upper Cape Catch | The Great Flush: Meet The Sewer Doers | Podcast | capenews.net](#)

[The Atlas Obscura Podcast - Exploring the underworld with Jessica Leigh Hester on Stitcher and National Poo Museum](#)

[Podcast: Here’s what happens when wastewater treatment facilities fail \(acs.org\)](#)

[What do lava and sewer sludge have in common? - UBNow: News and views for UB faculty and staff - University at Buffalo](#)



Upcoming Events

September 8: RICWA Annual Trade Show, Warwick, RI

September 19: MABA webinar on responsible recycling of phosphorus (NEBRA members email to get MABA member discount code!)

September 20–22: Maine WEA Fall Convention, Sunday River, ME

September 22: Lunch & Learn about the latest advances in PFAS destruction technologies with ECT2

October 13: North East Digestion Roundtable with UConn researchers

October 27: Lunch & Learn on Navigating Dark Waters: The Importance of Proactive PFAS Communications

For a complete listing of Events, go to www.nebiosolids.org/events.

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