



Distilled biosolids and residuals news for New England and eastern Canada

February 24, 2020

NEBRA Members Garner Numerous Awards at NEWEA Annual Conference

EVENTS...

Updates on Novel **Coronavirus** for Water Professionals from WEF on **February 25th** from 2:30 to 4:00 pm. Click [here](#) for more information and to register.

Relating PFAS Leaching for Sewage Sludge and Biosolids to Water and Sludge Quality [webcast](#) on **February 27th**, presented by WEF in conjunction with the Water Research Foundation.

New NEBRA Lunch & Learn series kicks off with sludge dryer technology on **February 28th**. Email [NEBRA](#) to sign up!

Call for abstracts for the [Canadian Biosolids and Residuals Conference](#) closes on **March 31st**.

Northeast Waste Management Officials Association (NEWMOA) conference on [The Science of PFAS: Public Health & the Environment](#) in Framingham, Massachusetts beginning on **March 31st**.

There's still time to sign up for WEF's annual [Residuals & Biosolids Conference](#) is in Minneapolis, Minnesota, **March 31st through April 3rd**.

Vermont Organics Recycling Summit "**2020 and Beyond**", **April 7th** in Randolph Center, VT. Features presentations by Ned Beecher (microplastics and other CECs in composts/residuals) and Andrew Carpenter (PFAS).

Fourth annual [Phosphorus Forum](#) on **April 30th** in Washington D.C.

[More events...](#)

EPA's Draft Greenhouse Gas Emissions Inventory is now available for public comment. Comments are due by March 13, 2020. Click [here](#) to learn more.

CHECK IT OUT:

NACWA Article on the recent [Presidential Candidate Infrastructure Forum](#) where wastewater was discussed.

Report on a research study from India which looked at [using municipal wastewater sludge to build roads](#).

New [software tool](#) to help in solving sludge pumping challenges using a **sludge rheology** database.

A new article in Civil Eats with the headline "[Questions Remain About Using Treated Sewage on Farms](#)". It is an improvement on previous articles in its balance and tone, with professor Sally Brown defending biosolids.

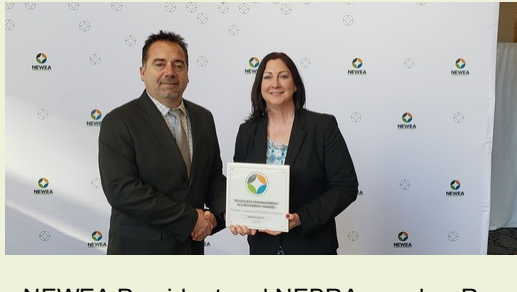
WEF's [Words On Water #123](#): Dr. Linda Lee on the Science of PFAS in Water Treatment.

Speaking of Dr. Lee, she has co-authored a new [research paper](#) on PFAS concentrations in biosolids products after various types of treatment.

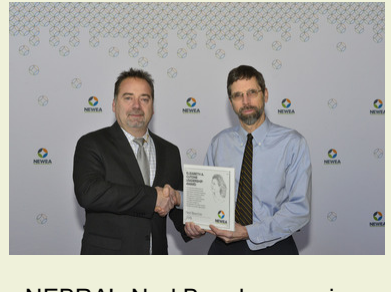
Treasures uncovered in the [sludge from an ancient cesspool](#).

Numerous long-time NEBRA members were recognized for their contributions to the water environment at the New England Water Environment Association's annual conference in Boston on January 29th. Clean water professionals are a humble bunch and go about their work way too quietly so its good to pause at least once a year to celebrate our individual and collective accomplishments. In her comments at the awards ceremony, WEF President-Elect Lynne Broadus urged everyone to take the opportunity to brag about what we do and our accomplishments. NEBRA is pleased to oblige and proud to acknowledge our members recognized by NEWEA.

First off, the Greater Lawrence Sanitary District (GLSD) garnered this year's Biosolids Management Award for their sustained commitment to biosolids utilization. [More...](#)



NEWEA President and NEBRA member Ray Vermette congratulates Cheri Cousens from the Greater Lawrence Sanitary District



NEBRA's Ned Beecher receives NEWEA's leadership excellence award

Legislative and Regulatory Updates

PFAS continues to drive numerous bills in New England legislatures, although the number of proposed bills and the pace of action seem to have diminished compared to 2019.

In Maine, the DEP has clarified its plans for biosolids regulations for summer 2020 and beyond. Essentially, the requirements that were put in place in the spring of 2019 will become routine going forward, in accordance with typical procedures under the Chapter 419 agronomic use regulations. This clears up the uncertainty that DEP had left in place in June last year when permits for distribution of many biosolids were allowed to proceed, but for just one year. Now, those programs are receiving letters from DEP that allow for continued biosolids use, but with the following restrictions going forward indefinitely:

- permittees must add PFAS to their sampling plans and test regularly going forward
- frequency of testing is based on what they do with materials
- loading rate calculations must be done for any biosolids that exceed the screening standards (2.5 ppb PFOA and 5.2 ppb PFOS) and must be redone if PFAS levels change; and
- testing site soils will be required for any long-term land application sites if the biosolids have levels of PFAS above the screening standards.

For the latest on developing state and federal legislation and regulations, [read on...](#)

PFAS Cost Impacts Survey -- We Want to Hear From You!

In October, NEBRA opened a short online survey on the costs of managing biosolids. Stakeholders nationwide were asked to complete the survey, providing estimates of costs for 2018 and 2019. The goal is to understand and track the impacts of PFAS regulation and uncertainty on actual costs as well as on perceptions and planning for biosolids management. The initial fifty responses -- from around the nation but mostly New England -- show that, so far, only relatively few programs have been impacted with measurable, real cost increases for biosolids management. These impacted programs have been forced to shift from land application to composting or landfill disposal, resulting in costs two or three times higher than before.

Besides those few highly-impacted biosolids programs, there are many more that report some price increases from 2018 to 2019 or 2020. These price increases appear to be due to the fact that, in New England especially, markets are jittery about:

- the potential for PFAS regulations further restricting options and
- the potential for PFAS liability to be placed on municipalities and their biosolids programs.

A large percentage of the biosolids program managers completing this NEBRA survey also report unanticipated and sometimes substantial costs for sampling and analyses for PFAS as well as staff time and effort related to tracking the PFAS issue. The NEBRA survey is not representative of the universe of water resource recovery facilities biosolids programs; those taking the survey are self-selecting and likely more impacted by PFAS issues than the nationwide average. The intent of the survey is to capture stories and evidence of changes in the biosolids management markets around the country. The survey remains open. Responses are welcome from new participants and from those who have responded before but have updates to share. Please let us know how much it costs to manage biosolids where you are and if there has been any change since 2018: [NEBRA PFAS Costs Survey](#).

In Brief / en bref...

MABA Elects New President

Synagro's **John Uzupis** was recently elected President of the Mid-Atlantic Biosolids Association. Uzupis is the Director of Technical Services for Synagro with overall responsibility for directing land base management for biosolids, food, water treatment, and pulp and paper residuals. He is also in charge of regulatory compliance for beneficial reuse of residuals products. "John is the government's go-to-guy for understanding phosphorus and responsibly recycling biosolids so this honor comes as no surprise," said Synagro's chief commercial officer Matt Robertson.

Vermont Reports on Extensive PFAS Sampling

The Vermont Department of Environmental Conservation (VTDEC) released a [series of reports](#) in early February, commissioned to understand where and how much PFAS has accumulated in various waste streams. The first report reviews the results of additional investigations at water resource recovery facilities (WRRFs). VTDEC contracted with Weston & Sampson to conduct the WRRFs study which included sampling and analysis at 19 WRRFs around the state; a total of 400 samples for 24 PFAS. PFAS was detected at all WRRFs -- in the influent, effluent and biosolids -- some of which have no industrial inputs. Not surprisingly, the WRRFs in Montpelier and Newport had the highest concentrations in their wastewaters due to inputs from landfill leachate. For a great summary with graphics, see a recent [article in Vermont Business Magazine](#).

The second report is the result of work done by Sanborn, Head & Associates looking at the concentrations of PFAS in various waste streams going to landfill. This study involved 100 samples including municipal sludges from WRRFs. PFAS was detected in 95% of samples with concentrations ranging from 0.043 to 2,030 parts per billion (ppb). The sludge samples contained PFAS ranging from 20 to 214 ppb. The highest PFAS concentrations were found in bulky items such as furniture as well as textiles and carpeting. These reports will be used by VTDEC as it moves ahead with its plans for developing water quality standards for PFAS.

NPDES Permits for Storm Clouds?

The news continues to pour in on PFAS. PFAS is literally everywhere -- including rain water. A recent study by the National Atmospheric Deposition Program (NADP) tested rain water for PFAS. NADP tested 37 samples for 36 different PFAS compounds. They found concentrations up to 5 parts per trillion (ppt) in a sample from Massachusetts. In an interview for WKAR Public Media from Michigan State University, NADP researcher Martin Shafer was quoted as saying

["In the rainfall, we're seeing levels that are not too far off from the water quality limits that have been proposed."](#)

The Weather Channel also did a short (1 1/2 minute) [video](#) about the report.

Swedish Study is Good News for Biosolids

The Swedish government released a report on January 17th recommending continued use of sewage sludge on crops. The recommendation was one of many resulting from the study of agricultural use of biosolids (still called sludge in Sweden) especially with respect to phosphorus recycling. The primary recommendations were to require greater than 60% recycling of phosphorus from water resource recovery facilities of a certain size and the development of specifications for other organic carbon-containing fertilizers, specifically sewage sludge biochars. The [report](#) was commissioned to look at the use of sewage sludge in agriculture. The "enquiry" came up with two options: either ban the use of sludge (and separated urine) completely with very few exceptions or continue using "sanitized and quality-assured sludge", along with strict quality requirements, regulatory oversight, and regular reevaluations of the policy.



More Good News from Michigan

Testing of drinking water in Ann Arbor has detected no PFOS or PFOA in the past five months following the installation of activated carbon filters at the City's drinking water plant. For more on that story, go to [Michigan Public Radio](#). Statewide in Michigan, the Department of the Environment reports a "substantial drop" in PFOS being discharged to Michigan surface waters from businesses. An effort at PFAS source reduction/pre-treatment working with 95 water resource recovery facilities (WRRFs) was credited with the reductions in PFOS coming out the end of the pipe at the WRRFs. For a report on Michigan's program, click [here](#).

Correction
In the January 24th NEBRAMail, we incorrectly reported that Concord, New Hampshire produces "~15,000 wet tons" of biosolids annually. The correct figure is ~7,500 wet tons.

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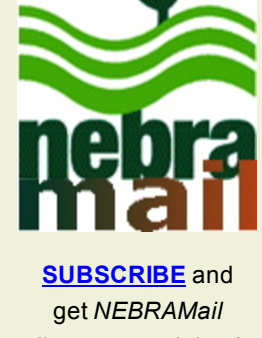
[THANK YOU!](#)

NEWS from NEBRA

Past news stories are available on the NEBRA website "[News](#)" page.

Updated PFAS Webpages

NEBRA has updated its restricted-access PFAS information pages with simplified subtopics like PFAS Sampling & Analysis Guidance and Research (an updated literature review and bibliography will be posted soon). You can also find all NEBRA's comments and slides for any member or PFund contributor to use as templates for your PFAS work. See [PFAS page](#) and contact [NEBRA](#) for access.



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