



# Massachusetts Residuals and Biosolids

- ▣ WWTP residuals in MA managed by landfilling, incineration, or land application.
- ▣ Land application has been an important option for beneficial reuse of biosolids in MA for many years
- ▣ Gathering more information on PFAS



# DRAFT MASSACHUSETTS SLUDGE SURVEY 2018\*

Estimated Sludge Leaving WWTFs in 2018=  
180,800 dry tons

\*Report funded by Massachusetts Clean Energy Center and developed by NEBRA. Final report expected soon.



# MassDEP Residuals, Approvals of Suitability (AOS) per 310 CMR 32.00

- ▣ 310 CMR 32.00 Regulations for Land Application:
  - *Classify Residuals for Land Application;*
  - *Include metals and PCB limits*
  - *Pathogen reduction (stabilization)*
  
- ▣ AOS issued/renewed every 5 years



# MassDEP Residuals, Approvals of Suitability (AOS) per 310 CMR 32.00

- ▣ Approximately 140,000 dry tons applied to the land (MA) in 2018
  
- ▣ 29 AOS holders (both in-state and shipped from out of state)
  - *Wastewater treatment plant sludge*
  - *Water treatment plant sludge*
  - *Paper fiber product*



# MassDEP Residuals PFAS Policy

- ▣ As of January 1, 2019 all new or renewed AOS's include annual PFAS monitoring for 9 PFAS compounds.
- ▣ Require testing of solid product and liquid leachate using the Synthetic Precipitation Leaching Procedure (SPLP)
  - ▣ *MassDEP must review and approve of the laboratory Standard Operating Procedures (SOPs)*



# MassDEP Residuals PFAS Add'l Info

- ▣ Currently SOP's from 1 laboratory approved for PFAS. SOPs for 2 others under review.
  
- ▣ Approved SOPs
  - ▣ *MassDEP can share with facilities (AOS holders) the labs for which have approved SOPs*



# MassDEP Residuals PFAS Add'l Info

- MassDEP is not currently working toward setting a limit for PFAS in residuals.
  - *Gathering Information*
  - *Discussing with other states, facilities producing residuals, and NEBRA*
  - *If MassDEP sets limits for PFAS in the future, this would be done through changes to the 310 CMR 32.00 regulations, which would include a public process*



# MassDEP Residuals More Information

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