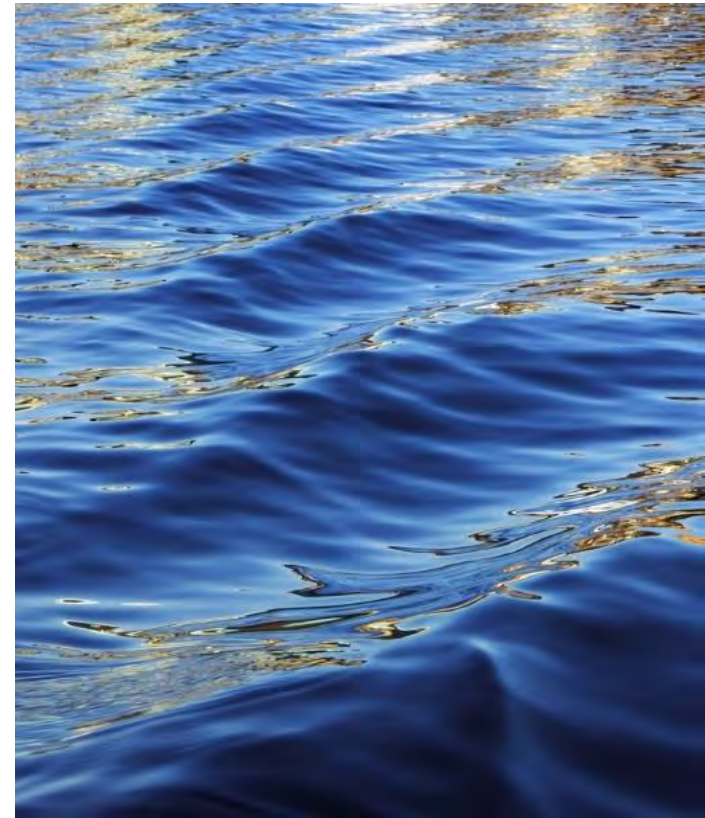


# Responding to the Maine DEP's Biosolids Utilization Moratorium

Presentation at the NEWEA 2020  
Annual Conference  
Marriott Copley Place, Boston, MA  
January 28, 2020

Jeff McBurnie  
Director of Permitting & Regulatory Affairs  
Casella Organics

Chair, ME Water Environment Assn. Residuals Management  
Committee (Governor's (ME) PFAS Task Force)



# Overview

- Background
- March 22, 2019
- Immediate Reaction and Response
- Back in Business
- What's Next



# Biosolids – not just for breakfast any more



# Background

- PFAS had been on Casella's radar for 2+ years
- ME DEP had updated its Screening Levels for PFOA, PFOS, and PFBS in its Beneficial Use of Solid Waste Rules (Chapter 418 Appendix A) – July 2018
- Casella, Maine Water Environment Association and North East Biosolids & Residuals Association had testified in opposition
  - Screening levels were not appropriately modeled
  - No certified methods for testing of biosolids
  - Fate and transport from land applied biosolids had not been adequately researched
  - We did not prevail
- Maine Governor's PFAS Task Force Formed - March 9, 2019



## March 22, 2019

- Friday, mid-afternoon I received a call from the Maine DEP giving me a 'heads up'
- Fifteen minutes later an email was sent to biosolids processors and generators with Program Approval to land apply biosolids
- Shortly after that a general notice/press release was issued
- The start of a very long weekend



# March 22, 2019

- **Biosolids Distribution Moratorium Notification**
  - All sludge/biosolids program licenses and sludge/biosolids composting facilities required to test for PFOA, PFOS, and PFBS
  - Sampling and Analysis Workplans (SAWPs) to be updated to include these three compounds
  - Immediate cessation of the distribution and land application of sludge and sludge-derived products
  - Resumption of business, by Department approval, based on:
    - For materials with results below the screening levels, resume after results reviewed by DEP
    - For materials exceeding one or more of the screening levels, resume after applying BMPs (application rate reduction, for example) that demonstrate no exceedance of the screening levels in soils receiving these material to the satisfaction of the Department
- **Similar Notice sent to Holders of Papermill Residuals Program Approvals (April 16, 2019)**



# Immediate Reaction and Response

- **Halted In-state Distribution**
  - Stopped Deliveries
  - Turned Away Walk-in Customers
- **Requested and Granted a Meeting with the DEP Commissioner**
- **Revised our SAWP – Submitted to DEP**
- **Gathered Sample Results – Submitted to DEP**
  - Collected Prior to the Moratorium
  - Some Reformatting Necessary



## Immediate Reaction and Response

- Compost Operations were Beginning to Ramp Up Distribution for the Spring Application Season
  - Inventory at Its Peak
- Biosolids Land Appliers were within Two Weeks of Starting
- Options Limited
  - Landfill Disposal is Complicated
  - Incineration is not Available
- Internal Discussions – Nuclear Option?





# HRCF – early April 2019



## Back in Business (4/17/19)...However

- **Biosolids, Residuals and Compost Testing**
- **Comparison to Questionable Screening Levels**
- **Exceedance of Screening – Risk Determination**
- **Direct Land Appliers Also had to Test Site Soils**
  - **Exceedance of Screening – Site Suspension**
- **'One Year' Approval**

**Please note that this approval will expire on June 30, 2020.** During this period of permitted distribution, staff at the Department will work with you to address any requests for additional information that are necessary in order to inform an appropriate decision beyond June 30, 2020.



# Cart Before the Horse?



**We don't  
even have  
the horse  
yet**



# A Different Approach – Food Packaging

- **Legislative Mandate – LD 1043**
  - An Act To Protect the Environment and Public Health by Further Reducing Toxic Chemicals in Packaging (PFAS & Phthalates)
- **Two Years to Remove from Commerce**
  - **If** a safe, affordable and abundant substitute can be found
  - January 1, 2022 would be its Earliest Implementation
- **Probably not Enforceable**



## What's Next?

- The Governor's Task Force recently concluded its work:
  - identify the extent of PFAS exposure in Maine
  - examine the risks of PFAS to Maine residents and the environment
  - recommend State approaches to most effectively address this risk
- Final Task Force Report delivered to the Governor on January 23, 2020



# Managing PFAS in Maine

Final Report from the Maine PFAS Task Force  
January 2020



## What's Next?

- **Additional Samples will be Collected & Analyzed**
  - **PWS Sources of Supply near Biosolids Use Sites**
  - **Ongoing Biosolids and Residuals Testing**
  - **Soils from Long-term Use Sites**
  - **Ag Samples (Milk, Feed, Animals?)**
  - **Fish Tissue**
  - **....and much, much more**



## What's Next?

- **Research is On-going, but More is Needed**
  - NEBRA sponsoring leaching to groundwater & risk assessment studies
  - Other Work Nationwide
  - Still Waiting for Certified Test Methods for Media Other than Drinking Water
  - Drinking Water MCLs – US EPA?





## What's Next?

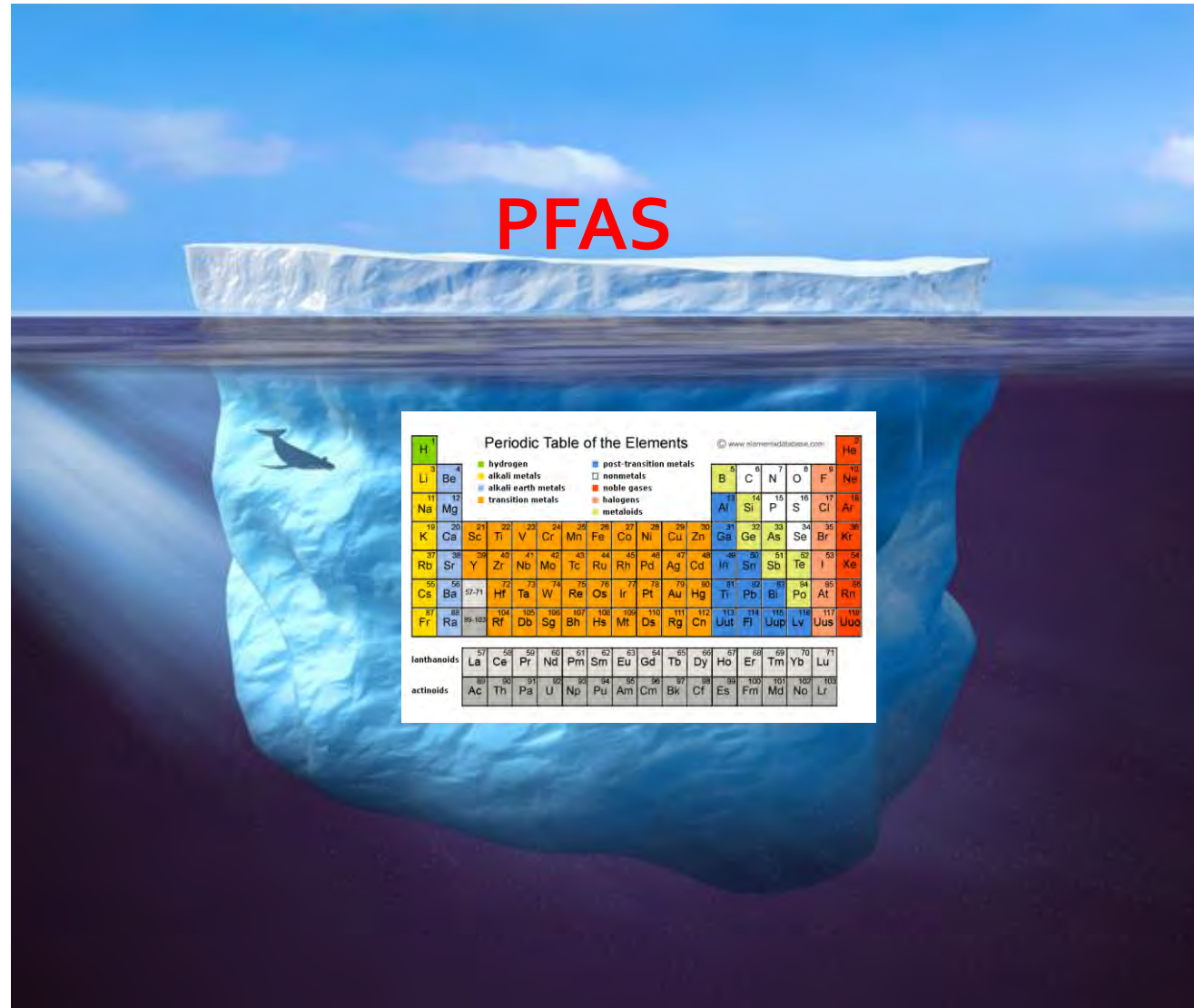
- **Regulatory & Legislative Action**
  - Growing Nationwide with Little to No Coordination
  - Mostly Drinking Water MCLs by Individual States
    - Tired of Waiting for US EPA
    - May Lead to Significant Increases in Water and Wastewater Treatment Infrastructure Needs and O&M Expenses
  - Some Soil Remediation Standards Recommended
  - Hazardous Substance Designation?
    - CERCLA
    - Water and Wastewater Utilities could become Potentially Responsible Parties (PRPs)





PFAS

# Tip of the Iceberg?



# QUESTIONS?

2. Determine if the following integrals converge or diverge:

(a)



$$\int_1^{\infty} \frac{7 \cos^2(x)}{3 + x^2} dx$$

(b)

$$\int_0^{\pi/2} \frac{2}{x \sin(x)} dx$$

(c)

$$\int_1^{\infty} \frac{2}{\sqrt{4x^2 - 2}} dx$$



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