

# Maine's Policy Response to PFAS-Laden Sludge

Addressing immediate sources and hope for reducing future ones

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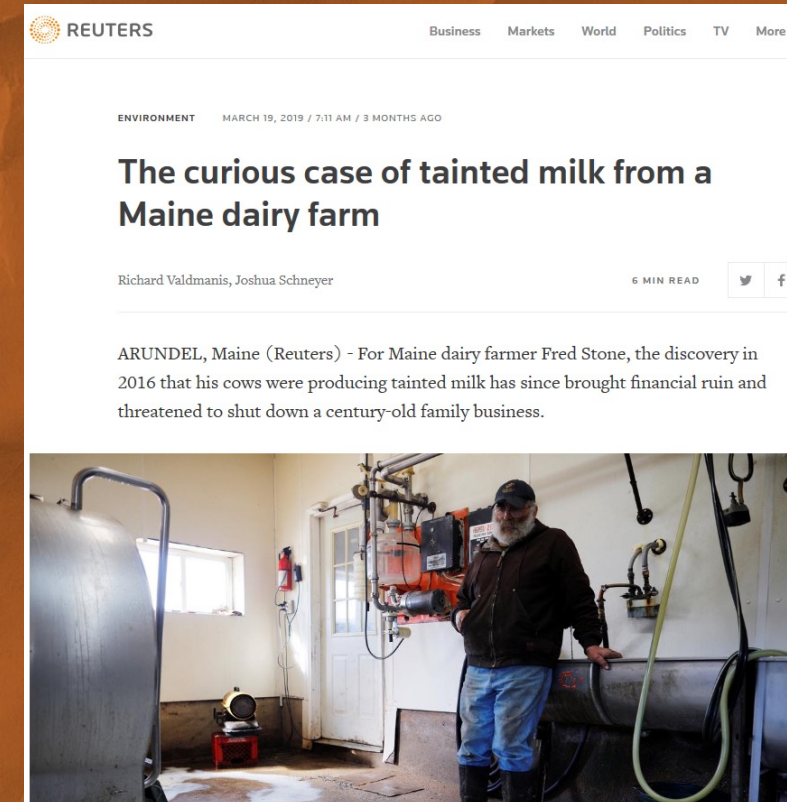
# Defending Our Health Since 2002

We work to create a world where all people are thriving, with equal access to safe food and drinking water, healthy homes, and products that are toxic-free and climate-friendly.



# Discovering PFAS Contamination in Maine

- Stoneridge Dairy notified of potential PFOS contamination of their ground water by a public water utility and subsequently had cows milk tested in late 2016
- Milk was up to 1420 ppt PFOS, then the highest level reported in North America
- Detailed site investigation determined source was land-spreading of sewer and industrial sludge as fertilizer
- A second dairy that also utilized sludge was identified in 2020 with even higher levels of PFOS in the milk
- 200+ residential wells surrounding the second dairy identified as contaminated, likely from the sludge



# PFAS & Sludge

- Following publicity around Stoneridge in March of 2019, Maine required sludge to be tested before allowing it to be land applied – with screening limits of 5.2 ppb PFOS, 2.5 ppb PFOA, and 1900 ppb PFBS.
- ~95% of sludge & compost exceeded the levels –no correlation to size of community generating it, nor obvious industrial source – septage had highest average levels
- Loopholes allowed sludge to continue to be applied:
  - If sludge composted, could be used without (meaningful) restriction
  - If soil it was applied to was tested and was “low,” sludge could be used



# Closing the Loopholes

- We introduced LD 1911 this year, prohibiting any land application of sludge or compost in exceedance of screening levels and requiring screening levels to be updated based on revised drinking water standards.
- State testified that nearly all sludge and compost failed screening, and practically none would pass revised levels
- Amended bill just banned land application of sludge or sludge derived compost – in effect this summer!

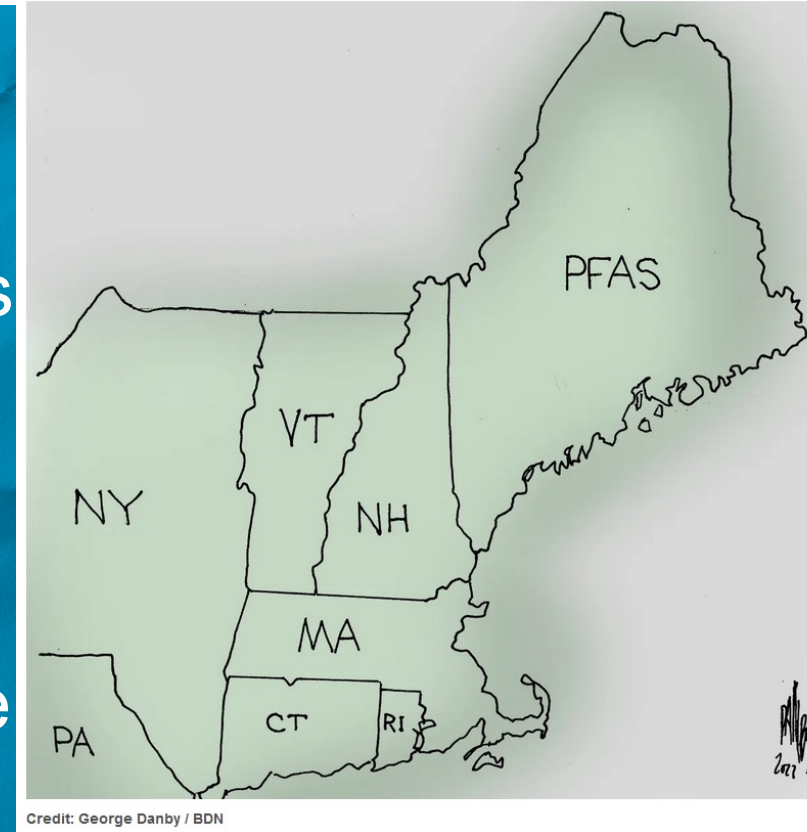


Gov. Mills pretending to sign PFAS legislation



# Moving Towards Prevention - Addressing PFAS in Products

- LD 1503 creates one of the most aggressive plans for addressing PFAS in products in the nation
- All manufacturers have to report PFAS in products sold in Maine starting 1/1/23
- PFAS banned in carpets, rugs, and fabric treatments 1/1/23
- PFAS presumptively banned in all products in 2030 unless specifically exempted as unavoidable – no alternative and necessary for health, safety, or functioning of society



# Thank You

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# PFAS in sludge is well documented

- Sepulvado, et al (2011): PFOS levels in municipal sludge ranged from 80,000 to 219,000 ppt. Soils where sludge was applied had levels of PFOS ranging from 2,000 to 485,000 ppt. Linear relationship between volume of sludge and soil levels.
- Venkatesan & Halden (2013): archived samples of sewer sludge collected in 2001 were analyzed for 13 PFAS. PFOS averaged 403,000 ppt, PFOA 34,000 ppt. They calculated 1,375 to 2,070 kg of PFAS were applied to agricultural land in 2001.
- North East Biosolids & Residuals Association (2017): PFOS in the sludge from 22 facilities in NH and the Northeast averaged 34,000 ppt, with a high of 390,000 ppt. Eight other PFAS were sampled - PFBA had the highest average at 34,600 ppt.



# Legislature Takes Action

- 2019: Maine became the second state (after WA) to ban PFAS in food packaging
- 2021: Lots of PFAS Action, implementing and going beyond most task force recommendations:
  - One of the strictest PFAS in drinking water standards (LD 129)
  - Extending statute of limitations for private actions (LD 363)
  - Banning PFAS in firefighting foam (LD 1505)
  - Testing land and ground water where sludge has been historically applied (LD 1600)
  - Allocating \$15 million in state funds to support PFAS work
  - And....





# Maine Task Force

- Following coverage of Stoneridge, Gov. Mills appointed a PFAS task force, consisting of 2 health advocates, 4 industry reps, and 4 state officials
- Recommendations published in January 2020 – state officials generally sided with industry and status quo, leaving the two health advocates dissenting on many key recommendations
- However, report called for addressing PFAS upstream – identifying sources, require reporting of PFAS use, and ultimately eliminating uses that were causing pollution