



# PFAS and Maine Agriculture

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# DACF ensures a safe, high quality food supply in Maine.

- Bureau of Agriculture, Food and Rural Resources
  - Quality Assurance and Regulation Division
    - Dairy Inspection – inspecting processors and farms to ensure the safe supply of milk for the public.
    - Milk Quality Laboratory – FDA certified regulatory lab for the analysis of all milk and milk products produced in the State of Maine.
    - Maine Meat & Poultry Inspection – ensuring livestock and products humanely handled, disease-free, wholesome, not adulterated, and correctly labeled and packaged.



# Adulterated Product

- DACF is charged with determining whether food is adulterated and may take steps necessary to test and remove such food from the market.
- Focusing on milk: PFOS discovered at Stone Ridge Farm in 2016.
- Maine CDC developed Action Level for PFOS in cow's milk: 210 ng/L. This level provides guidance to determine when cow's milk is considered adulterated.



# Adulterated Milk or Milk Products Not Permitted

- Rule: 01-00 DACF Chapter 329

- Section II: Adulterated or Misbranded Milk or Milk Products

No person shall, within the State of Maine, produce, provide, sell, offer, or expose for sale or have in possession with intent to sell any milk or milk product which is adulterated or misbranded. (...)

Any adulterated or misbranded milk or milk product shall be impounded by the Department and disposed of in accordance with applicable laws or rules.



# DACF Milk Testing Overview

- Recently conducted state-wide retail fluid milk testing. **All Maine-produced milk below reporting limits.**
- DACF tested milk from three (3) dairy farms, two (2) that spread biosolids. **All 3 below reporting limits.**
- Action Level for PFOS in cow's milk: 210 ng/L
- Reporting limit: 50 ng/L
- Testing between May and early June 2019.



# Retail Milk Sampling: **Maine milk below reporting limits**

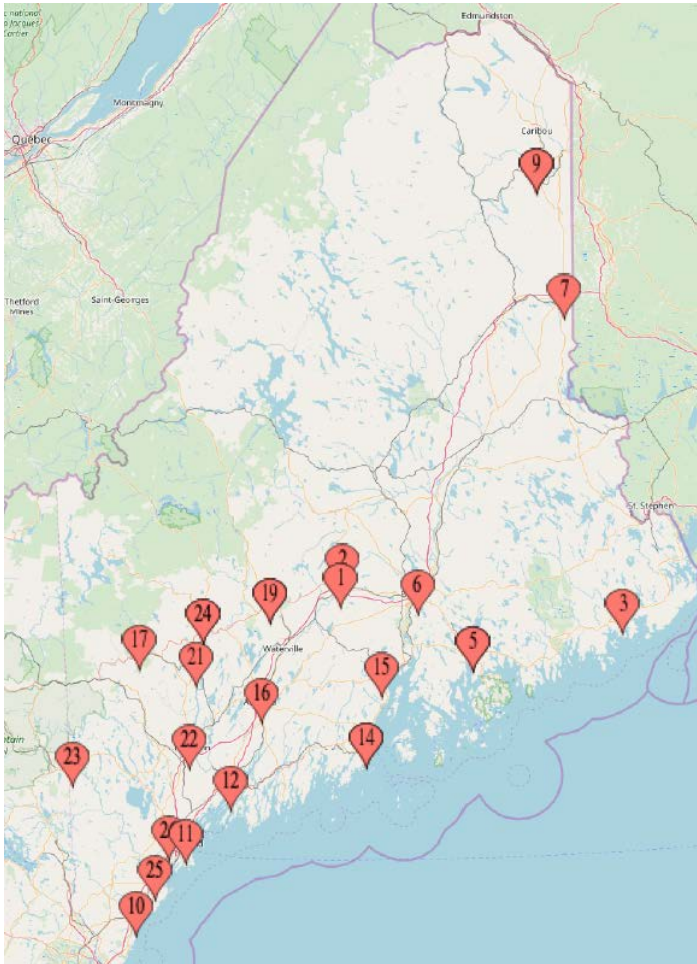
Dairies	Results
HP Hood	< RL
Oakhurst	< RL
Houlton Farms	< RL
Smiling Hill	< RL
Horizon Organic	< RL
Garellick	< RL

Brands: Cumberland Farms; Dairy Pure; Great Value; Hannaford; Hood; Horizon; Houlton Farms; Lucerne; Oakhurst; Shur Fine; Smiley's; Smiling Hill

- Criteria: Pasteurized Maine-produced milk either bottled and sold in-state or bottled outside of Maine and sold in-state.
- Samples collected 5/29-6/3.
- Tested for PFOS & PFOA
- 26 samples
- Four ounce sub-samples shipped in HDPE bottles
- Vista Analytical Laboratory, CA



# Retail Sampling Sites & Strategy



- Goals of the sampling effort:
  - Capture all producers in the state.
  - Broad consumer retail experience/geography.
  - Broad population exposure.
  - Focus on milk produced in Maine.

# Dairy Farm Test Results to Date: Below reporting limits

- Tested three commercial dairy farms across the state.
  - ***All three farms <50 ng/L Reporting Limit***
- 2 with long-term histories of biosolid application from different waste water treatment plants and/or paper mill residual. 3<sup>rd</sup> close to Stoneridge Farm.
- Soil samples ranged from 5.6 µg/Kg & 20.9 µg/Kg (PFOS) and 2.6 µg/Kg & 12.9 µg/Kg (PFOA)
  - (DEP RAG: 5.2 µg/kg (PFOS); 2.5 µg/kg (PFOA))
- Farms growing some of their own feed.
- DACF and CDC collaborating to research on-farm feeding practices, biosolid application history, etc. to strengthen soil screening levels for agronomic pathway model.





# DACF Priorities Going Forward

- Currently reviewing DEP's database of historic land application sites to inventory current and former farms with documented\* history of land spreading.
  - \* = data gaps exist
- Relevant factors:
  - Farm crop/product
  - Length of application history
  - Generator; type of amendment; amounts (if captured)
  - Farm characteristics
- Dairy remains the priority focus given established action threshold. Other products: beef, livestock, fruits, vegetables, hay, and grain.

