



PFAS and Maine Agriculture Agricultural Trades Show, Jan. 14, 2020

Nancy McBrady, Director, Bureau of Agriculture, Food and Rural Resources

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.



DACF Milk Testing Overview

- Conducted state-wide retail fluid milk testing in June 2019.
- **All Maine-produced milk below Lab Reporting Limit.**
- DACF tested milk from three (3) dairy farms, two (2) that spread biosolids. **All 3 below Lab Reporting Limit.**
- Action Level for PFOS in cow's milk: 210 ng/L
- Lab Reporting Limit: 50 ng/L



Retail Milk Sampling: Maine Milk Below Reporting limits

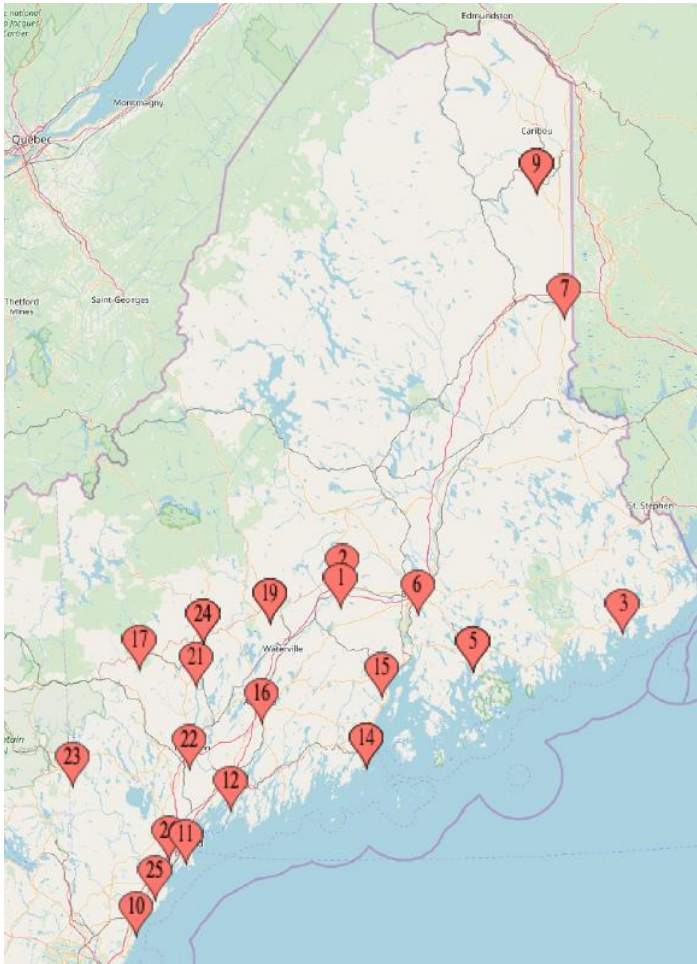
Dairies	Results
HP Hood	< RL
Oakhurst	< RL
Houlton Farms	< RL
Smiling Hill	< RL
Horizon Organic	< RL
Garellick	< RL

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
- Two with **long-term** histories of biosolid application from different waste water treatment plants and/or paper mill residual. Third close to Stoneridge Farm.
- Soil samples ranged from 5.6 $\mu\text{g}/\text{Kg}$ & 20.9 $\mu\text{g}/\text{Kg}$ (PFOS) and 2.6 $\mu\text{g}/\text{Kg}$ & 12.9 $\mu\text{g}/\text{Kg}$ (PFOA)
 - DEP RAG: 5.2 $\mu\text{g}/\text{kg}$ (PFOS); 2.5 $\mu\text{g}/\text{kg}$ (PFOA)
- Based on the survey and these three farm results, DACF has high confidence in the safety of Maine-produced milk.



DACF Activities 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:
 - Historic spreading activities
 - Residual type
 - Spreading locations & amounts
 - Crops/livestock produced, rotation, etc.
- DACF and CDC collaborating to research on-farm feeding practices, biosolid application history, etc. to strengthen soil screening levels for agronomic pathway model.



DACF Activities Going Forward, cont'd.

- Dairy remains the priority focus given established action threshold. Retail dairy testing will continue.
- Data driven process. Based on review of historic records, could pursue review of other products.
 - Recent FDA testing of 88 products: breads, cakes, fruits, dairy, vegetables, meats, poultry, fish, bottled water. One detectable result in tilapia.
- PFAS Task Force finalized report December 2019.
- Possible state legislative activities? Federal support needed to assist states, municipalities, waste water treatment facilities, and farms.



Sources of Additional Information

- <https://www.maine.gov/pfastaskforce/index.html>
- <https://www.maine.gov/dep/spills/topics/pfas/index.html>
- <https://www.maine.gov/dacf/ag/pfas/index.shtml>
- <https://www.fda.gov/food/chemicals/and-polyfluoroalkyl-substances-pfas>
- <https://www.atsdr.cdc.gov/pfas/index.html>

- DACF Staff are a resource!



Thank you!

Nancy McBrady

Director, Bureau of Agriculture, Food & Rural
Resources

Nancy.mcbrady@maine.gov

(207) 287-3491

