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

- 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

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Brands: Cumberland Farms; Dairy Pure; Great Value; Hannaford; Hood; Horizon; Houlton Farms; Lucerne; Oakhurst; Shur Fine; Smiley’s; Smiling Hill
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 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)
- 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.fda.gov/food/chemicals/and-polyfluoroalkyl-substances-pfas

- DACF Staff are a resource!
Thank you!

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