PFAS is everywhere

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PFAS chemicals contained in everyday products

Dust in Daycare Center 142 parts per billion (ppb)



Microwave Popcorn Bag 68 – 167 ppb



Fire Training Center 695 ppb



In addition, all kinds organic waste can contribute to low levels of PFAS found in many common soil amendments

> Municipal organic waste recycling programs allow yard waste, food waste and food soiled paper (e.g., fast food wrappers)

> > These waste streams contain PFAS

PFAS ends up in downstream compost, fertilizers, and biosolids

* 1 part per billion is equivalent to 1 second in 31.7 years

PFAS in Food Packaging

<u>Consumer Reports, March 24,</u> 2022

"We know that these substances migrate into food that you eat. It's clear, direct exposure."

> **Justin Boucher** The Food Packaging Forum



Retailer	Product	Concentration (ppb)	
Burger King	Wrapper for Whopper	345,700	
Chipotle	Wrapper for burrito	26,300	
Hannaford	Bakery plate under cake	23,300	
McDonalds	Bag for Chicken McNuggets	219,000	
Panera Bread	Container for flatbread pizza	82,000	
Stop n' Shop	Paper plates, bamboo	368,700	
Stop n' Shop	Paper plates, grease-resistant	226,700	
Whole foods	Container for soup	21,000	

Note, these concentrations can be up to **50,000 X** higher than found in many common soil amendments.

PFAS levels in Common Soil Amendments

	PFAS Derivatives		
Product	PFBS (ppb)	PFOS (ppb)	PFOA (ppb)
Maine DEP Screening Standards	1,900	5.2	2.5
Organic Soil Amendments			4.1
Food & Yard Waste Compost (Choi)	N/D		
Country Soil Mushroom Compost	N/D	8.1	N/D
Coast of Maine – Quoddy Blend Compost	N/D	0.4	N/D
Sprague's Leaf & Yard Waste Compost	N/D	0.8	0.5
Benson's Surf & Turf Compost	N/D	0.9	0.6
Espoma Garden Tone Fertilizer	N/D	15.0	N/D
Neptune Harvest Liquid Fertilizer	N/D	4.6	1.0
Dried Hen Manure, Maine	N/D	33.0	N/D
We Compost It Food Waste Compost	N/D	0.8	4.1
Mr. Fox Food Waste Compost	N/D		5.2
Class A Biosolids Products			
Darmouth Compost	0.5	2.4	3.5
Greater Lawrence Sanitary District, Fertilizer	0.0	5.3	0.8
lpswich Compost	1.7	2.1	3.4
Nantucket Compost	0.4	2.8	1.2
Hawk Ridge Screened Compost, Maine	6.2	19.0	12.2
Hawk Ridge SuperMulch, Maine	15.0	2.0	5.9
Residential Septage (Maine)	N/D	70.8	N/D

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PFAS is Widespread

Common residential and commercial food waste that makes up compost and fertilizer products have regulated PFAS compounds.

While biosolids may contain PFAS, **many** common organic soil amendments can also exceed Maine's screening standard.

Current regulatory efforts are primarily focused on source reduction, industrial monitoring, and many forms of research.

Future federal and state regulations should consider all products containing PFAS, not just biosolids.

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