

PFAS is everywhere

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



Foundation Makeup
2,370 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

Consumer Reports, March 24, 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

Product	PFAS Derivatives		
	PFBS (ppb)	PFOS (ppb)	PFOA (ppb)
Maine DEP Screening Standards	1,900	5.2	2.5
Organic Soil Amendments			
Food & Yard Waste Compost (Choi)	N/D	N/D	4.1
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	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
Ipswich 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

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.

References

Slide 1

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Slide 2

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Slide 3

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