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Mechanisms of Chronic Disease

Top 3 Hazards of Artificial Turf

1. Long-term health effects for our student athletes
2. Threat to our natural resources:
Lake, Wetlands, Drinking Water
3. Plastic Pollution

Artificial Turf Toxins: Threat to Athletes

flame retardants plasticizers biocides

UV inhibitors colorants herbicides



polyethylene

PFAS

PFAS are Toxic

- A class of >5,000 PolyFluoroAlkyl Substances
- Used since 1950s for grease & water resistance properties



- PFAS are toxic
- “Forever chemicals”
- Accumulate in our bodies / not easily excreted



Low level PFAS exposure: potential link to multiple health issues

- Affects growth, learning & behavior of infants & children
- Disrupts hormones
- Decreases fertility
- Increases cholesterol levels
- Suppresses immune responses
- Increases the risk of certain cancers



National Institute of Environmental Health Sciences
Your Environment. Your Health.

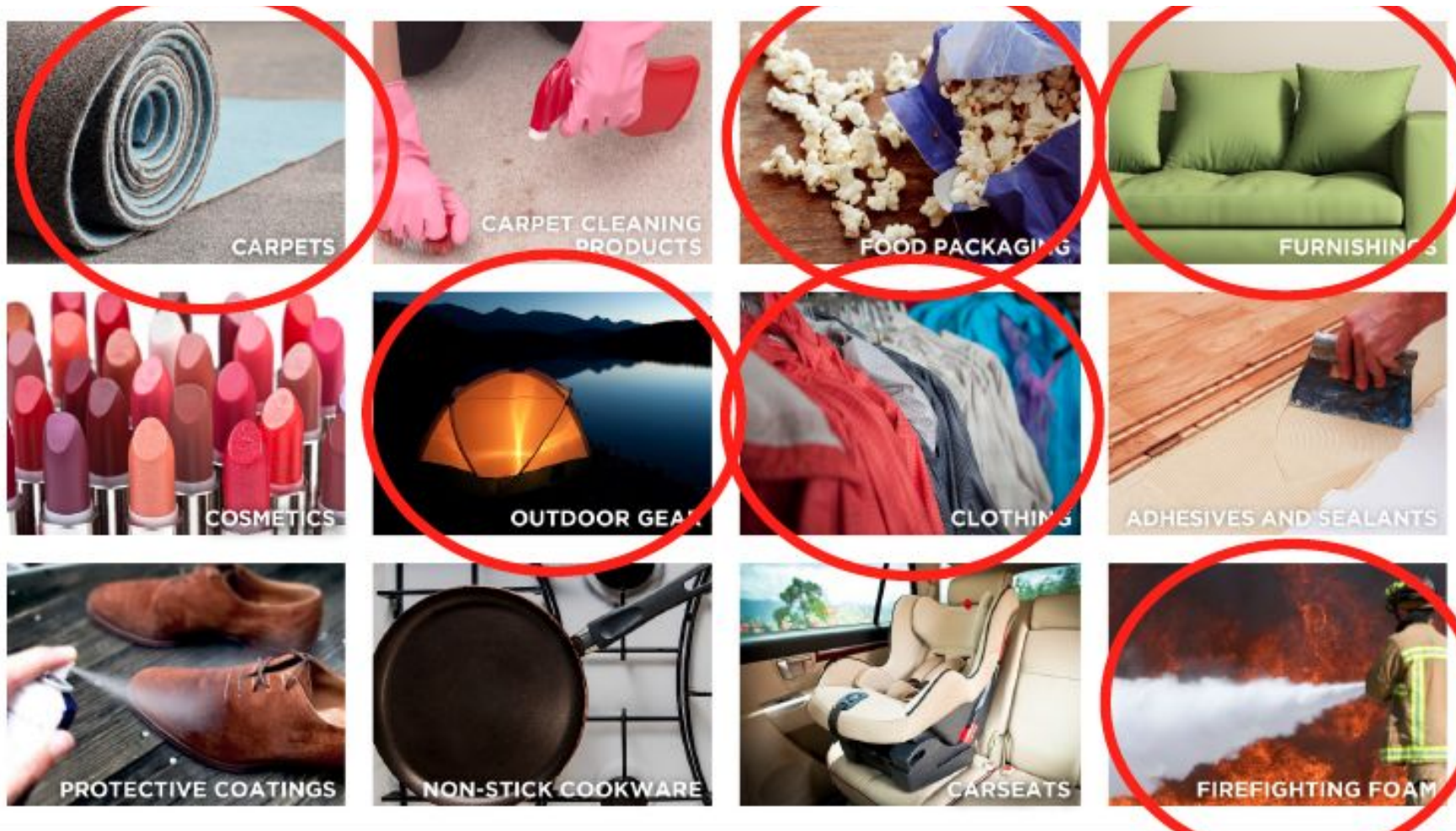
Agency for Toxic Substances and Disease Registry

Division of Community Health Investigations



Industries removing PFAS from product lines

Home Depot, Lowe's, IKEA, Cardi's



PFAS are still used to make artificial turf

From: Susan Farris

Date: Wed, Oct 9, 2019, 6:32 PM

Subject: Re : Shaw Inquiry regarding Turf



“...commonly used by synthetic turf manufacturers as a non-stick agent in the manufacturing equipment. ... We are exploring alternatives ... but have not yet identified a substitute that provides the non-stick properties required for manufacturing synthetic turf.”

Current PFAS Testing is Extremely Limited

- Any testing Sharon can do at this time will be limited to 30 older PFAS chemicals which are no longer used
- No testing is available for 4,900+ PFAS chemicals
- We need full disclosure from turf manufacturers

Threat to Beach

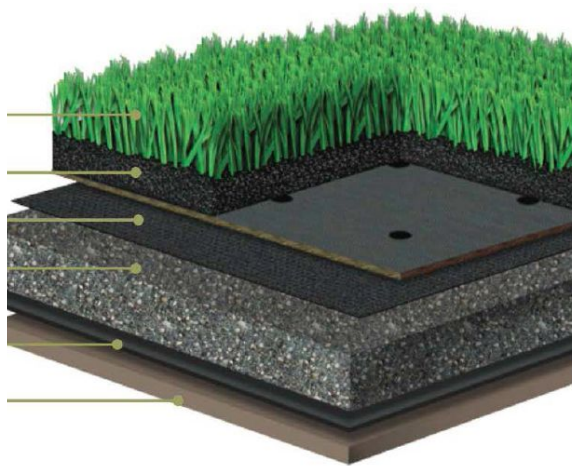
Ditch drains directly from field to beach

PFAS are “forever chemicals”



Wetland Impact

PFAS* & other toxins



polyethylene
polyurethane
polypropylene

*“Forever”

↓
Microplastics *

Drinking Water Threat

Wells 2-4: downgradient from football field, provide 60% of drinking water

MA DEP: regulating PFAS 20 parts per **trillion**

1000 times less than the allowed level of lead, mercury & cyanide

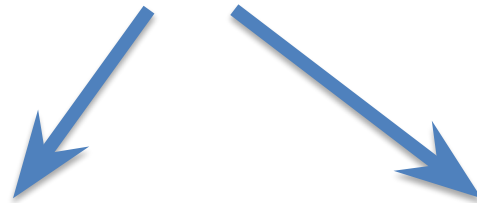


Plastic Grass = Local Plastic Pollution & Plastic Waste



Over 50 years

6 plastic carpets = **120 tons polyethylene**



Local

15 tons polyethylene bits
& microplastic equals
2.5 million plastic bags

Landfill

105 tons polyethylene

No US facilities recycle turf

Please

VOTE NO PFAS/Plastic Grass

Let's Explore Organic Grass



Sustainable
Sharon
Coalition

