From: Richard Webb [mailto

To: Diane O'Neil >; John McMeeking <

Subject: FW: Nantucket

Meant to cc you both.

From: Richard Webb

Sent: Friday, September 24, 2021 9:40 AM

To:

Subject: RE: Nantucket

Yes, we will need to confirm as we look at possible substitute manufacturers if that is the case.

From: Laura Green <
Sent: Friday, September 24, 2021 0:10 AM

To: Dishard Wohh

Cc: John McMeeking

Subject: Re: Nantucket

It occurs to me, though, that **all** of the synthetic turf makers/suppliers are probably in the same boat as Tencate, in terms of being named as defendants in various "PFAS" lawsuits, given the plaintiffs' lawyers' incorrect claim that the fluoropolymer (PVDF) that Tencate and presumably Shaw Sports Turf and others use (but of course do not themselves manufacture) to extrude the plastic grass fibers (which fibers themselves are not fluorinated, of course) is somehow responsible for PFOA/PFOS-contamination either of public water systems (which it's not) or of the bodies of firefighters (ditto). Of course, here in America, defendants named in lawsuits are innocent until proven otherwise, no?

Laura C. Green, Ph.D., D.A.B.T.

President & Senior Toxicologist

Green Toxicology LLC

315 Beach Avenue, Hull, Massachusetts 02045 https://link.edgepilot.com/s/7bf46292/XLSn-opXWkKOEusfz5PmJg?u=http://www.greentoxicology.com/

(cell)

On Fri, Sep 24, 2021 at 8:50 AM Richard Webb <

> wrote:

Yes, I believe they do, will check.

There is also a company Act Global that I believe manufactures something.

John and I are digging......

From: Laura Green
Sent: Friday, Septer Month of the Month

Oh, yes, I did not intend to send any other/follow up emails to her; and I will not.

Regarding other synthetic grasses -- I don't know about woven versus non-woven, but I do know (or at least think I know) that Shaw makes a synthetic grass that it does indeed recycle at the end of its life, here in the U.S. ... the fellow to ask about this would probably be

Joe Kacevich Jr <

He's a lovely fellow (former football coach or perhaps former soccer coach), and I think that Shaw representative who covers (no pun intended) Massachusetts ...

Laura C. Green, Ph.D., D.A.B.T.

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(cell)

From: Laura Green <
To: John McMeeking <
Date: Fri 24 Sep 2021 05:20:22 PM -0400
Cc: "
Diane O'Neil" <
Subject: Re: Act Global Synthetic Turf

@ image001.png ((6 kb))

I've had a quick look at the testing report performed by Alpha Analytical for Act Global's WXF50 Turf product.

There was no detectable PFAS, as defined by the standard list of PFAS (which includes not only the six PFAS regulated by MassDEP, but about 15 other types of PFAS).

However, the lab did not perform any "total organic fluorine test," so we do not know whether this turf-product does or does not contain PVDF ... which, as you know, is an inert fluoropolymer that is also, technically, a kind of PFAS, even though it's just a harmless plastic, like some types of surgical sutures and other similar materials.

So, given the data at hand, this turf-product cannot be said to be "cleaner" than the Tencate turf ...

Please feel free to call to discuss.

with thanks and best regards, Laura

Laura C. Green, Ph.D., D.A.B.T.

President & Senior Toxicologist

Green Toxicology LLC

315 Beach Avenue, Hull, Massachusetts 02045 www.GreenToxicology.com

(cell)

On Fri, Sep 24, 2021 at 3:15 PM John McMeeking <

> wrote:

Hi Laura,

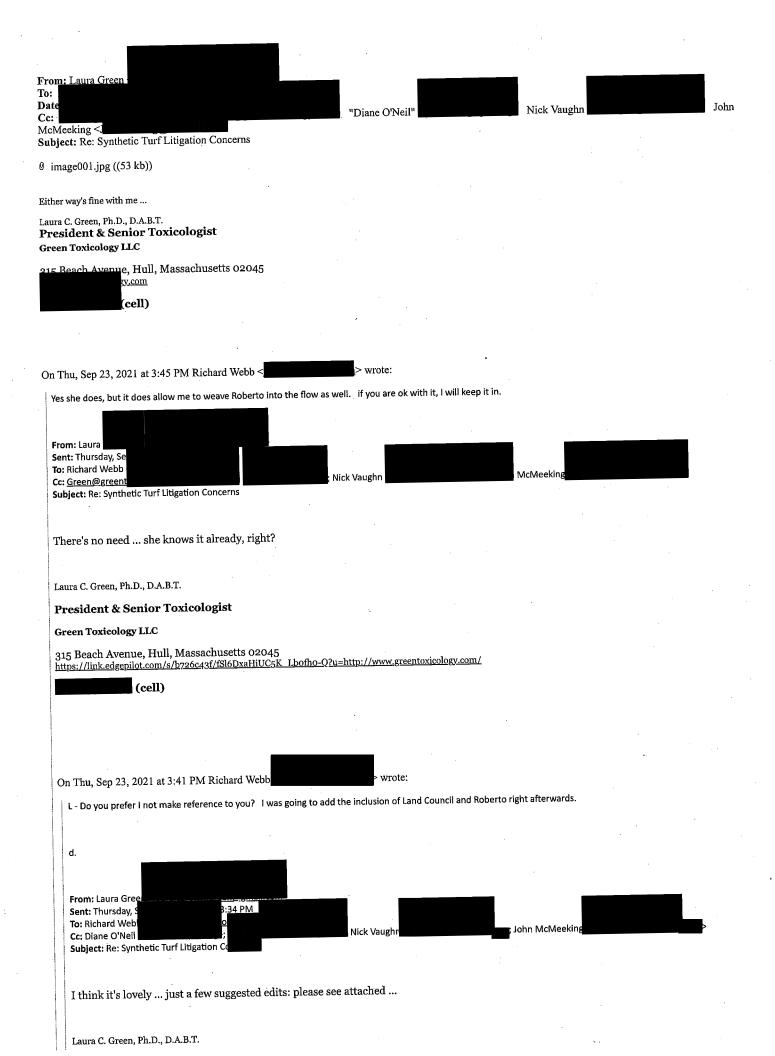
In addition to Greenfields, there are a few other turf manufacturers that are now offering a woven backing, one of which is called 'Act Global'. We have received the attached testing report performed by Alpha Analytical for Act Global's WXF50 Turf product, and hoping you can review and "translate" it for us?

Thank you, and all the best for the weekend.

John McMeeking RLA, ASLA

Landscape Architect

Licensed in CT & MA



President & Senior Toxicologist

Green Toxicology LLC

315 Beach Avenue, Hull, Massachusetts 02045

lot.com/s/a451cf28/RZhvDoLksU6oGbNMoi_ewg?u=http://www.greentoxicology.com/

(cell)

On Thu, Sep 23, 2021 at 3:21 PM Richard Webb

> wrote:

DRAFT SMRT RESPONSE - FOR EVERYONE'S COLLECTIVE COMMENTS: PLEASE REPLY ALL WITH COMMENTS

Ayesha, I apologize for the tardy response to your email, but have been traveling out of state all day.

But I do wish to clarify a couple of items noted in your earlier email.

First, please understand that SMRT designs both natural grass and synthetic turf fields. Our natural grass field design experience includes amended topsoil, underdrained, irrigated, and full sand-based athletic fields. When we make a professional recommendation as to the type of field construction, we evaluate many factors, assessing current field conditions, program requirements [how often the field will be used], maintenance and equipment requirements, and available areas for field development. Even the very best constructed natural grass fields have a limit of the amount of play the field can tolerate and maintain a safe playing surface. Due to the limited size of the Nantucket Public Schools campus, there is a very high program/use need to each of the current fields; this is one of the key factors in our recommendation for the project to include synthetic turf on two of the renovated fields.

The technical specifications for each of the synthetic turf fields remain to be finalized, as the project is not scheduled to be bid in early 2022, with construction beginning in the Summer, 2022. When we met in Diane's office [our previous discussion], I believe we indicated we were evaluation varying synthetic turf system components. We have recommended the project turf components to be similar to what has been tested and proposed for Martha's Vineyard – ie, a turf product with a woven backing to eliminate the use of urethane backing, the installation of an organic, wood infill product [Brockfill] and a shock attenuation pad. We are not proposing the use of any SBR rubber and sand as infill material. Based on these components, the referenced testing of the Woodbridge field is not applicable in any way to what is proposed for rubber and sand as infill material. Based on these components, the referenced testing of the Vineyard's evaluation of turf products for your review. In addition, we are now testing the existing topsoil in both fields to determine a baseline presence of any heavy metals or PFAS components. We will forward those test results to you when completed, hopefully by end of October.

With the use of a woven backing, the turf material can be recycled. Current typical turf system life cycle is 12-15 years. Similar to the Vineyard project, the contract specifications for the Nantucket fields will require the shipping and recycling of the turf to the current operating recycling plant in Europe. This will be a bonded requirement, and include appropriate chain of custody documentation. The infill material and shock attenuation pad products are proposed to be re-used when the replacement turf is installed.

As we have stated often in our presentations, synthetic turf is not <u>no</u> maintenance, rather <u>lower</u> maintenance compared to natural grass fields. This project will include specific maintenance equipment and training to allow NPS staff to maintain a safe playing surface for the athletes. The synthetic turf system will require periodic infill grooming and annual testing for HIC/GMAX to ensure a safe playing surface. But as we evaluate the overall environmental impact of these fields, I do wish to highlight that the synthetic turf system will not require irrigation, mowing, striping, and applications of fertilizers and other chemical treatments.

Nantucket Public Schools has engaged Dr. Green to assist the entire project team in our due diligence/research efforts regarding product selection, testing interpretation, and understanding any and all environmental impacts. We will continue to explore these issues, and appreciate any comments or further input you have.

. I believe we share the same concerns – providing the athletes and the Nantucket community with safe and playable athletic fields.

Regards, Dick Webb