

Links to research on athletic turf options

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To: elvin@mvcommission.org <elvin@mvcommission.org>; morrison@mvcommission.org <morrison@mvcommission.org>; Oak Bluffs Planning Board <planningboard@oakbluffsma.gov>; Gina Ciganik <gciganik@healthybuilding.net>; Ryan Johnson <rjohnson@healthybuilding.net>; Bill Walsh <bwalsh@healthybuilding.net>

 1 attachments (32 KB)

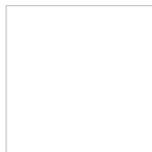
HBN Martha's Vineyard memo 11-13-20.docx;

Martha's Vineyard Commission and Oak Bluffs Planning Board:

Please see the attached memo with information that is pertinent to the proposed installation of a synthetic turf field for your high school. Included are links to our research and recommendations as well as a recent webinar on the impacts associated with different turf options (both synthetic and natural). We also highlight in the memo specific recommendations for your project.

We hope you consider this information in this important and impactful decision.

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Adam Turner
Executive Director
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Mr. Turner and Mr. Hopkins,

Recently Healthy Building Network (HBN) completed research on synthetic turf and various infills used on athletic playing fields. Following a webinar that we held on the topic in late October, HBN received comments from concerned members of the Martha's Vineyard community regarding the proposed installation of a synthetic turf field with BrockFILL engineered wood particle infill at Martha's Vineyard Regional High School. As a result, we wanted to share our guidance related to selecting athletic playing fields that minimize the introduction of chemical hazards into the environment.

This detailed guidance is based on in-depth research that HBN conducted in 2020 by reviewing synthetic turf product literature, patents, peer-reviewed articles, and government documents analyzing the chemical content present in synthetic turf and infill. The HBN Turf Hazard Spectrum is intended as a tool that communities can use to select playing fields that minimize the use of chemicals harmful to human health and the environment. It can be accessed freely online at <https://homefree.healthybuilding.net/products/70-turf-hazard-spectrum>

HBN's webinar on athletic turf, geared towards a non-scientific audience, may be viewed at <https://vimeo.com/473234739>.

While the links above describe our guidance in detail, we want to highlight two points.

1. HBN recommends choosing natural grass over synthetic turf. Synthetic turf carpet, infill, and shock pads can contain hazardous chemicals. Hazardous chemicals may also be used during production, installation, and maintenance of these fields. Natural grass fields avoid the introduction of hazardous chemicals into the environment via the turf carpet and infill, and prevent microplastic pollution resulting from synthetic turf, which is a growing environmental concern. High quality fields can be achieved on natural grass without the use of synthetic pesticides or fertilizers.
2. Organic infills still can carry chemical hazards. This is because some organic infills are chemically treated. For instance, patent US20190203425A1 filed by Brock USA LLC suggests that BrockFILL may be treated with quaternary ammonium compounds (QACs) as antimicrobial and antistatic agents. QACs have a number of health related concerns, including respiratory irritation. Consequently, they have recently been added to Biomonitoring California's list of [designated chemicals](#). Moreover, organic infills do not avoid the concerns related to the synthetic turf carpet and shock pad including lack of end-of-life recycling options.

About HBN

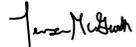
Since 2000, HBN has defined the leading edge of healthy building practices that increase transparency in the building products industry, reduce human exposures to hazardous chemicals, and create market incentives for healthier innovations in manufacturing. We are a team of researchers, engineers, scientists, building experts, and educators, and pursue our mission on three fronts:

1. Research & Policy: Uncovering cutting-edge information about healthier products and health impacts,
2. Data Tools: Producing innovative software platforms that ensure product transparency and catalog chemical hazards, and
3. Education and Capacity Building: Fostering others' capabilities to make informed decisions

We work to reduce toxic chemical use, minimize hazards, and eliminate exposure, especially to those chemicals of concern deemed unnecessary or fail to improve product performance. We promote the development of affordable green chemistry solutions that support a healthy, successful, circular economy. This particular project was funded by the Passport Foundation.

We hope this information is helpful to you when making this important and impactful decision. We would be happy to answer any additional questions you may have.

Sincerely,



Teresa L McGrath
Chief Research Officer
Healthy Building Network