

Elizabeth Durkee
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October 14, 2020 (revised October 19, 2020)

Martha's Vineyard Commissioners
Marth's Vineyard Commission
PO Box 1447
Oak Bluffs, MA 02557

RE: Proposed Artificial Turf Playing Field, MVRHS

Dear Commissioners:

I am writing to express my strong opposition to the use of artificial turf at the Martha's Vineyard Regional High School playing field.

Climate Change

Climate action is alive on the Island in no small part because children are demanding it to protect their climate-threatened future. Artificial turf runs counter to everything we as a community are doing to address the impacts of climate change.

Climate action includes the following: eliminating the use of greenhouse gas-emitting fossil fuels and protecting the restorative values of the natural environment. Artificial turf is a step backward on both counts.

The entire life cycle of artificial turf contributes to climate change. The plastic product is made from petroleum (a fossil fuel), it produces heat islands (areas warmer than surrounding areas) that are unhealthy for the climate and the athletes, and emits greenhouse gasses as it degrades. As the planet heats up plastic gets even hotter and emits more and more methane, a greenhouse gas that is twenty times more potent than carbon dioxide.

Covering natural grass and soil with an artificial surface destroys the environmental values of the land. Natural groundcover and soil help protect our groundwater, filter pollutants, reduce surface water run-off, absorbs carbon, generates oxygen, absorbs heat and is habitat for insects and other living organisms.

Temperatures are rising. Between now and mid-century the local temperature is expected to rise by between 2.5 and 5.8 degrees. Artificial turf creates heat; natural grass cools.

Climate change brings heavier and more frequent rainfall. Pollutants that build up on the artificial turf will run-off in rain events, during storms, and when the turf is washed. Run-off pollutes our groundwater, coastal ponds and shellfish habitat. Natural grass helps absorb rainwater and filter pollutants.

More powerful storms with stronger winds and heavier rainfall could cause serious and repetitive damage to the synthetic fields.

Plastic

The Island community, including students, has been at work for several years to reduce the amount of on-Island plastic use. Actions include a ban on thin film plastic bags at check-out counters and a first in the nation ban on the sale of single-use plastic soda and water bottles. The use of artificial turf will set an extremely poor example for the Island's children.

In addition to contributing to climate change the plastic blades can degrade, break off, and become micro plastics that seep into the aquifer (our drinking water) as well as into the ponds and oceans where it is ingested by fish and shellfish. We then ingest it when we eat seafood. We eat and drink plastic.

Toxicity

According to a report in the October 9, 2019 Boston Globe, tests on plastic turf blades revealed the presence of fluorine, which is suggestive of the presence of PFAS. PFAS are known as a 'forever chemicals' because they do not break down; they can contaminate water supplies, cause kidney and liver damage and increase the risk of some cancers. Several countries (Germany, Sweden, the Netherlands and Denmark) have committed to restricting the use of PFAS compounds.

Chemicals are also used in the plastic blades to add color and to protect them from ultraviolet rays. Lead has been found in the blades. Chemicals are used to clean the turf. The high school playing field is in a Zone II wellhead protection area. Toxic chemical use in a wellhead area can contaminate our drinking water.

In an October 24, 2019 letter to the Oak Bluffs Planning Board, Chris Huntress of Huntress Associates recommended removing crumb rubber from the turf system because doing so "REDUCES (the emphasis is mine) the threat of heavy metals, PAH, and carcinogens." So indeed there was a threat of toxicity in the use of crumb rubber. And eliminating the crumb rubber only "reduces" the threat.

Huntress Associates is now recommending use of "organic infill material." Organic infill material is completely unregulated. Use of the term 'organic' does not guarantee safety.

The safety data sheet for Brockfill, which is made of southern yellow pine, states that “inhalable wood dust is not expected to be generated during normal use.” It also states that “inhalable wood dust can be carcinogenic.” This product is new. Who knows if inhalable wood dust will be generated during use? In addition to being carcinogenic wood dust inhalation can cause respiratory problems. The changing climate is increasing air pollution and low level ozone, both of which also contribute to an increase in respiratory diseases.

The pines may well be organically grown and sustainably harvested, but that doesn't speak to the use of chemicals in the production process

Some organic infill products contain silica, a known carcinogen.

Is there proof that PFAS are not in any part of the proposed turf? If it does not contain PFAS, what chemical has taken its place?

Claims that the proposed product is safe because it is a fourth generation synthetic turf hold no weight. AstroTurf, the first generation of synthetic grass, was originally called “Chemgrass” and was developed by Monsanto, the company that manufactured DDT, PCBs, Agent Orange and Roundup. The third generation used carcinogenic crumb rubber. Industries are known for claiming that their products are harmless – how many times have they been proven wrong? Cigarettes, opioids and asbestos come to mind. Who is to say the fourth generation of synthetic turf is any safer than previous generations?

If there is even a hint that artificial turf is unsafe how can its use possibly be justified for a youth playing field? Natural grass, sustainably maintained, is a safer choice.

Sustainable Landscaping

At the risk of stating the obvious - if the existing grass fields are in poor condition they need to be properly maintained! The fact that the school has failed to maintain the playing fields is a black eye for the school. If the grass fields were maintained they would not be a safety hazard.

Sustainable landscaping is practiced on the Island. It can be practiced on grass playing fields. As the need for climate action takes hold there is a growing movement toward more natural land care. Artificial turf will soon be seen for what it is – an unnecessary climate disruptor. Furthermore, high school students could be trained in sustainable field maintenance/landscaping and thus learn a useful and growing trade.

Disposal

Organic infill-based products may be recyclable but there is no place in the United States to recycle them. As they sit in landfills they pollute and emit greenhouse gasses and continue contributing to climate change.

The Message We are Sending the Students

What is a more important lesson to teach children – to care for the natural environment that sustains us, and that is suffering from the effects of a warming planet, or to embrace the latest playing field fad?

This is Martha's Vineyard; we are community that prides ourselves on the beauty of the natural environment. The incremental destruction of the environment, acre by acre, diminishes the values and functions of the natural world and affects the local economy - our livelihood - that relies on a clean, natural environment. Just because off-Island schools use artificial turf doesn't mean it is the right choice for the Island.

One of our responsibilities as adults is to be positive role models. The Island's current and upcoming students will inherit a gravely climate-disrupted Island. We fail in our duty as role models if we contribute to the problem by choosing plastic over natural grass for a high school playing field.

As a cancer survivor and conservation professional I strongly encourage denial of the proposed artificial turf field.

Thank you for your consideration.

Sincerely,

Elizabeth D. Durkee

Elizabeth Durkee
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Oak Bluffs, MA 02557

October 19, 2020

Commissioners
Martha's Vineyard Commission
PO Box 1447
Oak Bluffs, MA 02557

RE: Letter Concerning MV High School Turf Field Proposal

Dear Commissioners:

I am writing to clarify that my correspondence to you regarding the High School turf field proposal reflects my personal opinions and not those of the Town of Oak Bluffs or the Oak Bluffs conservation commission.

My original letter (and a subsequent letter) were forwarded to you on Town of Oak Bluff letterhead. That was my mistake and I apologize for the confusion.

I have attached a revised letter written on personal letterhead.

Thank you for your attention to this matter.

Sincerely,

Elizabeth Durkee