Comments on synthetic turf

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To: The Martha's Vineyard Commission,

I am the former Chair of the West Tisbury Energy Committee and current member, as well as a member of the Town's Climate Advisory Committee, and the West Tisbury representative on the Cape Light Compact Board. West Tisbury has just passed the Town's non-binding resolution to eliminate the Island's reliance on fossil fuels by 2040.

This might be my second letter. Let it be said that I am highly concerned about addressing issues that impact our energy profile on the island.

I am grateful for the leadership the Commission has shown regarding the climate crisis, forming the Martha's Vineyard Commission Climate Action Task Force and passing an emergency climate crisis resolution. I strongly agree that factoring climate impacts into the review/permitting process is critical at this juncture.

When this issue started perhaps the Climate Crisis was not as apparent to many as we now see, and perhaps many don't see plastics as an issue in the climate crisis. They are. If it were easy to have our blood cultured so that many parents could see what their children are already carrying in their bloodstreams in terms of toxic chemicals and metals, perhaps they would have a different opinion about the risks of continuing to use plastics in many of our facilities. So to me, it is both an urgent climate issue as well as an urgent health issue. I speak as someone whose health has been impacted by such things.

I urge The Martha's Vineyard Commission to prohibit the installation of synthetic turf playing fields on Martha's Vineyard and instead promote regenerative land care.

Just from an energy standpoint, synthetic turf is problematic for several reasons:

1. Synthetic turf is made from polyethylene, which is produced by fossil fuels. Given the cost and engineering involved in its installation, a synthetic turf field means a decades-long commitment to a petrochemical system. The approximately 2.5 acre plastic carpet would need to be replaced at least every 8-10 years, in perpetuity. With quality electric mowers, organic fertilizers and compost now widely available, the carbon footprint traditionally associated with grass field maintenance can be lowered significantly.

2. In addition to the release of carbon dioxide during the manufacturing of synthetic turf, a 2018 study found that common plastics -- particularly polyethylene -- emit methane gas. Methane is more than 20 times more potent than carbon dioxide. Ambient solar radiation initiates the off-gassing process, but the off-gassing continues, accelerating as the plastic fragments. Given the large surface area of a synthetic turf field and its inevitable exposure to solar radiation, the plastic carpet likely contributes significantly to greenhouse gas emissions over its lifespan. On the flip side, healthy natural grass fields are powerful carbon sequestration tools. If we could increase global soil carbon stocks by just .4% per year, we would halt the increase in CO2 concentration in the atmosphere from human activities. That critical increase in soil carbon sequestration can be supported by decisions big and small, including this one regarding materials and maintenance practices for playing fields.

3. Synthetic turf traps heat, elevating surface temperatures and creating a heat island. When we replace a natural grass field with synthetic turf, we are adding a hot surface while taking away a cool one. A double whammy.

Finally there are health effects. Below I am quoting a Washington Post article regarding risks of artificial turf.

"Even though artificial turf does not have to be mowed, it turns out that crab grass and other weeds can start growing in it. To keep its finely manicured appearance, weedkillers need to be applied, a relatively common practice.
Unfortunately, a variety of health concerns have been linked to these products.
Also, artificial turf is often treated with biocides, as turf has been associated with increased risk of infections from methicillin-resistant Staphylococcus aureus. MRSA is a dangerous infection because it is resistant to many antibiotics. It can lead to pneumonia, sepsis and bloodstream infections that can prove fatal. An MRSA infection can happen after skin is scraped or cut, which can occur from sliding on artificial turf.
Biocides, however, may have toxic effects of their own. And they may also contribute to increased resistance of bacteria to the efficacy of these agents."

https://www.washingtonpost.com/national/health-science/does-playing-on-artificial-turf-pose-a-health-risk-for-your-child/2017/03/17/0c61b7b4-0380-11e7-ad5b-d22680e18d10_story.html

In short, synthetic turf would pose both critical environmental and health risks. If we know these things now and do not act to reconsider our life styles, shame on all of us.

I urge decision-makers like you to use a climate-focused lens when considering land management practices and resist the push for plastic fields on Martha's Vineyard.

Respectfully,

Sue Hruby
West Tisbury

CC: Oak Bluffs Planning Board