



15 October 2019

Juanita Stewart, Property Manager, Retail  
Peterson Companies  
12500 Fair Lakes Circle, Suite 400, Fairfax, VA 22033  
jstewart@petersoncos.com

Dear Ms. Stewart:

Friends of Sligo Creek is a nonprofit community organization dedicated to protecting, improving, and appreciating the ecological health of Sligo Creek Park and its surrounding watershed. Downtown Silver Spring is in our watershed and has been a focus of our attention for many reasons including its impervious surfaces, pollution potentials, and lack of open spaces. Ellsworth Drive is one of the main conduits of stormwater from downtown Silver Spring directly into Sligo Creek. So it's a major focus of concerns about urban pollution flowing into the creek.

We support the open spaces on Ellsworth in general, though opportunities for more living, native plantings, and stormwater projects have been missed. Our specific concerns now have to do with the plan for synthetic carpet on Ellsworth, the possibility that any infill will wash away and if tire crumb, be dangerously toxic, and again little stormwater capture. We understand there is still the opportunity for modifications, and hope we can participate effectively in those choices.

A more appropriate solution would be a pervious surface of which there are several options. It would be non-toxic and much more environmentally friendly. Below are our more detailed concerns specifically with synthetic carpet.

Synthetic plastic turf carpets are inappropriate and unhealthy choices for spaces frequented by people, especially outdoors. For all the reasons listed below, and more, Friends of Sligo Creek asks that plastic outdoor carpeting (aka synthetic turf) NOT be used for any outdoor project in the Sligo Creek watershed, including Silver Spring:

- 1) **HEAT:** They become scorching hot under the sun (hotter than asphalt);
- 2) **HARDNESS:** They are rugs on a hard surface and become hazardously hard.
- 3) **UNSANITARY:** Because blood, sweat, pet and bird droppings, etc. build up, they breed bacteria and cannot be effectively cleaned. Anti-bacterial coatings used to try and address this problem have their own toxicity and cause their own health problems as they promote anti-microbial resistance.
- 4) **GREENHOUSE GAS** emissions (ethylene and methane) under the sun (see Royer et al.)
- 5) **WATER (and air) POLLUTION:** They are a source of microplastic and related toxic pollution to Sligo Creek to which it directly drains (see storm drains near any synthetic turf full of shredded plastic carpet debris).

- a. **TOXIC HEAVY METALS:** Nylon synthetic turf especially but polyethylene as well have been shown to have **high levels of heavy metals including neurotoxic lead** (used to keep the colors bright). <https://www.safehealthyplayingfields.org/lead-in-synthetic-turf> . (Lead is a brain damaging metal for which there is no safe level according to the American Academy of Pediatrics and the Centers for Disease Control). Also cadmium and zinc are found at dangerous levels.  
<<http://www.usatoday.com/story/news/2015/03/15/artificial-turf-health-safety-studies/24727111/>>
  - b. **TOXIC CHEMICALS:** Artificial turf plastics have also been found to contain and leach out the toxic fluorinated chemicals collectively called **PFAS**:  
<<https://theintercept.com/2019/10/08/pfas-chemicals-artificial-turf-soccer/>>  
**PFAS information:** <http://pfashealth.info/index.html>. The push now is to get materials containing PFAS chemicals OUT of human use- not introduce more into the environment especially since once PFAS chemicals leach out and into water-supplies they are with us forever.
  - c. **Phthalates** which are hormone-disrupting chemicals are found in the debris.
  - d. **PAHs**, Polycyclic Aromatic Hydrocarbons, which are carcinogens, settle out and pollute soils and sediment. Montgomery County has limited PAH in asphalt sealants at lower levels than found in rubber/tire waste often used in fill.
  - e. **Microplastics**, a product of these synthetic carpets, are increasingly ubiquitous and dangerous to animals of all sizes, aquatic and otherwise.
- 6) **PLASTIC WASTE:** Worn out synthetic turf is dumped in landfill and NOT recycled adding forever to the burden of plastic waste.
- a. <http://www.recyclingartificialturf.com/what-happens-used-turf>
  - b. <https://theintercept.com/2019/10/08/pfas-chemicals-artificial-turf-soccer/>

**For more information:**

[www.sierraclub.org//Maryland/synthetic-turf](http://www.sierraclub.org//Maryland/synthetic-turf)

[www.safehealthyplayingfields.org](http://www.safehealthyplayingfields.org)

[www.ehhi.org](http://www.ehhi.org)

[www.synturf.org](http://www.synturf.org)

Our FOSC expert on the topic is Kathleen Michels, and her contact information is:

Kathleen Michels, PhD  
[michelskm2016@gmail.com](mailto:michelskm2016@gmail.com)  
301-922-3816

Sincerely,

Kit Gage  
Advocacy Director  
Friends of Sligo Creek  
[advocacy@fosc.org](mailto:advocacy@fosc.org)

cc: Bryant Foulger, Chairman, Foulger-Pratt