



184 Main Street • Port Washington • New York • 11050 • (516) 883-0887 • [www.GrassrootsInfo.org](http://www.GrassrootsInfo.org)

January 20, 2025

Mr. Graham Stieglitz  
Burr & Forman LLP  
1075 Peachtree Street NE  
Suite 3000  
Atlanta, GA 30309

**VIA ELECTRONIC MAIL**

Dear Mr. Stieglitz,

I am in receipt of your letter of January 15, 2025, asserting that the materials associated with our upcoming webinar "The Trouble with Turf" contain false and misleading statements.

Grassroots Environmental Education is a science-based organization with a mission to inform the public and decision makers about the health risks of common environmental exposures and to empower individuals and organizations to act as catalysts for change in their own communities. We take care to ensure our information is accurate and up to date, and we appreciate this opportunity to clarify our position on artificial turf fields and our sources of information.

Let me address your objections in the order they appear in your letter.

1. You dispute our statement that *"Most artificial turf fields contain per- and polyfluoroalkyl substances ("PFAS") that are required for the manufacturing process."*

This statement is based on independent testing showing that PFAS were present on the skin of athletes after playing on artificial turf fields, but not after playing on grass.<sup>1</sup> In addition, we have been told informally by industry experts that artificial turf cannot be manufactured without using one or more of the 15,000 PFAS, which assist in the extruding process and are also used to keep the plastic "grass" blades from sticking together.

Testing for the presence of PFAS is extremely difficult due to the large number of individual chemicals in the class, as well as the extremely low concentrations at which adverse effects may

---

<sup>1</sup> Inter alia, "PFAS in Artificial Turf Coats Players' Skin," Public Employees for Environmental Responsibility, March 12, 2024, .

occur.<sup>2</sup> We note that some industry-funded studies that purport to show no levels of PFAS were conducted measuring parts-per-million. Because of their extreme toxicity at minute levels of exposure, EPA is setting PFAS exposure standards in water at parts per trillion, **not** parts-per-million, and we would expect any reliable testing for PFAS contamination of artificial turf to be conducted using this lower threshold.

We note that PFAS may also be contained in the crumb rubber used as infill,<sup>3</sup> so while your particular product may or may not be free of any PFAS chemicals (when accurately measured), no one can claim with certainty that any artificial turf field is completely PFAS-free.

Finally, please note our statement refers to "most" fields, not all fields.

2. You dispute our statement that *"Artificial turf fields are made from plastic, an unsustainable product made from a combination of fossil fuels and chemicals, many of them toxic to humans. These multi-ton plastic fields cannot be recycled when worn out, and contribute to our worldwide plastic pollution problem."*

This statement is based on numerous news reports and public testimony of industry experts.<sup>4</sup> While we understand the industry is seeking to develop efficacious and cost-effective methods for recycling old artificial turf fields, as yet the technology has not been proven and is not widely used. In fact, most old turf fields are ending up being stored on private disposal sites where they continue to contaminate the environment.

The TenCate technology looks impressive, but we are skeptical that all of the toxic chemicals can be extracted from the used field, and that the process of turning the plastic carpet into pellets does not produce additional toxins along the way, as almost all "advanced recycling" does. We invite you to provide proof that artificial turf fields can be successfully and economically recycled, their toxicity reduced, their constituent parts extracted, and their potential for contamination of the environment eliminated. Absent such proof, we stand by our statement,

3. You dispute our statement that *"Artificial turf fields require the use of pesticides to treat body fluids that grass fields take care of naturally,"* and claim that no pesticides are ever used on your fields.

---

<sup>2</sup> "Per- and Poly-fluoroalkyl Substances (PFAS) in Artificial Turf Carpet," Toxics Use Reduction Institute, University of Massachusetts Lowell.

<sup>3</sup> Recent studies of PFAS in artificial turf which claimed to show no presence of the "forever chemicals" have been limited to the few PFAS for which testing protocols have been developed by EPA, i.e., 29 out of more than 15,000.

<sup>4</sup> "Disposal of school's artificial turf field highlights growing environmental concerns," NBC Bay Area, December 30, 2024. "Tons of abandoned artificial turf raises questions about recycling promises," Boston Globe, July 18, 2024. "Turf recycler hit with environmental violations as it works to open PA plant." Phillyburbs.com, March 20, 2023.

Our statement is based on statements from other manufacturers as well as interviews we have conducted with school and municipal facilities managers, who have informed us that disinfectants (which are registered with the EPA as pesticides) are used occasionally to manage bacteria, mold and fungus, as well as body fluids.

One of the manufacturers of artificial turf, American Athletic, states on its website:

*“Beyond surface cleaning, the artificial turf should be sanitized weekly or monthly to protect the players’ and coaches’ health. This disinfection requires special solvents, cleansers, and anti-microbial products to remove invisible particles and bacterial growth. You should strive to sanitize the field after every game and throughout the school day if it’s used for physical education classes.”*<sup>5</sup>

4. You dispute our statement that *"High lead and other toxic chemical levels have been detected in aging artificial turf fields made from nylon and polyethylene. Sun and wear break down the turf fibers into a dust contaminated with lead that can be rubbed off onto hands or other parts of the body."*

This statement is supported by a Health Advisory issued by Centers for Disease Control,<sup>6</sup> as well as numerous scientific studies,<sup>7</sup> and warnings from state agencies. For instance, I refer you to the Connecticut Department of Health which published a fact sheet in 2017 stating *"Children who play on artificial turf surfaces may be exposed to lead dust released from turf fibers."*<sup>8</sup>

Although we appreciate that manufacturers have sought to eliminate lead from their products, many old fields remain in use, and we believe it is incumbent to warn parents, coaches and athletes of the potential harm from exposure.

I also note that most crumb rubber used as infill on artificial turf fields also contains lead.

5. You dispute our statement that *"Most artificial fields use rubber from recycled tires ("crumb rubber") to infill spaces between plastic grass blades, cushioning the surface. Chemical toxins cannot be removed from recycled tires, and exposure to this hazardous waste material presents significant potential human health risks."*

---

<sup>5</sup> <https://trackandturf.com/blog/caring-for-your-synthetic-turf-field>

<sup>6</sup> "Potential Exposure to Lead in Artificial Turf: Public Health Issues, Actions, and Recommendations," CDC Health Advisory, published 2008;

<sup>7</sup> Van Ulirsch, et al, Evaluating and Regulating Lead in Synthetic Turf, Environ Health Perspect. 2010 Oct 1;118(10):1345–1349

<sup>8</sup> [https://portal.ct.gov/-/media/departments-and-agencies/dph/dph/environmental\\_health/lead/educational-materials/fact\\_sheets/lead-in-artificial-turf-factsheet-pdf.pdf](https://portal.ct.gov/-/media/departments-and-agencies/dph/dph/environmental_health/lead/educational-materials/fact_sheets/lead-in-artificial-turf-factsheet-pdf.pdf)

All three of these statements are supported by facts. According to the Synthetic Turf Council, eighty-five percent of artificial turf fields use crumb rubber infill. Constituent chemicals cannot be extracted from tires any more than eggs can be extracted from a fully-baked cake. And there are literally hundreds of published, peer-reviewed studies documenting biological harm from exposure to one or more of the chemicals typically contained in vehicle tires and thus in the crumb rubber infill often used on artificial turf fields.

As a starting point, we refer you to our Digest of Independent Science on Public Health & Environmental Concerns Regarding Artificial Turf<sup>9</sup> which contains more than 120 recently published, peer-reviewed studies documenting the health risks associated with exposure to the myriad chemicals contained in crumb rubber, including 1,3 butadiene, arsenic, arylamines, benzene, benzothiazoles, butylated hydroxyanisole (BHA), cadmium, carbon black, lead, manganese, mercury, phenols, phthalates, polycyclic aromatic hydrocarbons (PAHs), styrene, toluidine and trichloroethylene (TCE).

6. Regarding your dispute of our news stories about Cape May, New Jersey and Boston, Massachusetts, although the statements were true and correct when we added them to our website, we have now updated the information accordingly.

In conclusion, as outlined herein, we believe our statements are completely factual and strongly supported by numerous independent scientific studies, documented news reports, government fact sheets and health advisories, and the industry's own statements. Our webinar is intended simply to inform the audience of the state of the science regarding the public health and environmental issues surrounding artificial turf fields, and permit decision makers to reach their own conclusions. It is not our intent to interfere with any individual business operation.

Sincerely,

A handwritten signature in blue ink, appearing to read 'D. Wood', with a stylized flourish extending to the right.

Douglas A. Wood  
Associate Director

DW:nl

cc: Andrew Campanelli, Esq.

---

<sup>9</sup> [https://www.grassrootsinfo.org/\\_files/ugd/2cea04\\_4ea7a97a3f4045368b5af20bd4d92696.pdf](https://www.grassrootsinfo.org/_files/ugd/2cea04_4ea7a97a3f4045368b5af20bd4d92696.pdf)