



Synthetic Turf and Turf Infill Chain of Custody

House Bill 299

Did You Know?

Synthetic turf playing fields have an 8-10 year average lifetime and produce a huge volume of waste when they're replaced.

- An average synthetic turf field is 80,000 square feet and comprised of 40,000 lb of mixed plastic carpet and 400,000 lb of infill between the plastic blades, usually crumb tire waste and silica sand, or other material.
- The materials in synthetic turf carpet systems contain aquatic and human toxins.



There is no official inventory of the number or location of synthetic turf playing fields in Maryland or where used fields have gone. However, as of January 1, 2023, Sierra Club volunteers have identified 398 fields in 19 counties and Baltimore. For the 378 fields for which field size could be estimated, the waste produced over the next decade as they are replaced would amount to:

- More than 74,000 tons of plastic carpet and infill;
- Nearly 135,000 cubic yards of infill, the equivalent of 4,460 30-yard dumpsters; and
- 26.7 million square feet of plastic carpet (612 acres), the equivalent of a circle 1.1 miles in diameter.



Photo courtesy of Amanda Farber.

The fate of this enormous amount of plastic waste and infill is difficult, if not impossible, to track. There is only one certified facility in the world that reportedly can recycle synthetic turf field components on an industrial scale – in Denmark. The industry admits that incineration is not an option for most components. Many waste facilities don't accept synthetic turf field waste because of its high volume, weight, and toxicity. It can end up in rural stockpiles and dumped in the environment. When improperly disposed of and uncontained, especially near waterways, these materials pose risks to humans, wildlife, and the environment.

Ask your legislators to support the bill requiring a chain of custody for the reuse, repurposing, recycling, and proper disposal of synthetic turf and infill!

What This Bill Will Do

- Require the Maryland Department of the Environment (MDE) to establish a system to track the chain of custody of synthetic turf and turf infill installed on sports playing fields sold or distributed in Maryland, from installation to removal, reuse, repurposing, recycling, and disposal.
- Require the current and future custodians (owners, transporters) of fields to report to MDE certain information on the custodian, contractors, characteristics, and location of the synthetic turf and turf infill whenever it changes custody.
- Require MDE to post the chain of custody information on the synthetic turf and turf infill for every synthetic turf playing field on its website.

Why is this necessary?

- The Synthetic Turf Council's guidelines recommend a chain of custody for turf and infill,¹ but accountability for proper disposal requires that it be reported and that the information be publicly disclosed.
- A publicly disclosed chain of custody will serve as a deterrent for illegal dumping of used synthetic turf fields and infill (see below) and as an incentive for proper disposal.

Cleona, PA (photo at right): About 6,000 rolled pieces of turf were stacked about 10 feet high on more than an acre of private land, according to Mayor Larry Minnich. The rolls had been sitting in Cleona for two years, and he decided that was long enough. He was getting complaints from people in town, and there were safety concerns about the pile's flammability and proximity to a fueling station. "This is what it looks like when someone gets rid of a dozen turf fields and there's nowhere to send them," he said.²



Google Earth©2019



Photo by Virginia Department of Environmental Quality

Albemarle County, VA (photo at left): When the University of Virginia decided to replace two synthetic turf fields, no one accounted for where the synthetic turf waste was going. The contractor drove truckloads into rural Albemarle County and the rolls were dumped on a hillside just up from a stream. A neighbor noticed and alerted authorities. After regulators stepped in, the landowner moved the rolls to a more private site, where it was partially buried. When it was found a few months later it was finally taken to a landfill (199 tons worth).³

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¹ Synthetic Turf Council. 2017. *A Guideline to Recycle, Reuse, Repurpose, and Remove Synthetic Turf Systems*.

https://qhi7a3oj76cn9awl3qcqrh3o-wpengine.netdna-ssl.com/wp-content/uploads/2019/11/CR-STC_Guideline_for_Recycle_Re.pdf

² Candy Woodall. 2019. "Old turf fields raise environmental, health concerns across country," *Rome Sentinel*, Rome, NY, November 30. <https://romesentinel.com/stories/old-turf-fields-raise-environmental-health-concerns-across-country,87558>

³ Myers, Pete. 2019. "Hidden gotcha in artificial turf installations," *Environmental Health News*, December <https://www.ehn.org/hidden-gotcha-in-artificial-turf-installations-2641507579.html>