



MONTGOMERY COUNTY COUNCIL  
ROCKVILLE, MARYLAND

Testimony of Councilmember Marc Elrich (At-large)  
In Support of Senate Bill 763

*Use of Public Funds - Playground and Athletic Field Surfaces - Preferences and Prohibitions*

Budget and Taxation Committee  
March 7, 2018

I want to thank Senator Roger Manno for sponsoring SB 763, and I thank all of the supporters of this bill.

As an elected official, I am asked to fund the installation of artificial turf athletic fields and playgrounds made from ground up tires and/or synthetic rubber. Because of these requests, my staff and I have talked extensively with scientists, public health and grass experts, environmentalists, parents, and others regarding the use of these products.

It is assumed that if we fund these surfaces, then they must be safe.

However, we don't know if they are safe. In fact, multiple safety questions have been raised about these fields. There are multiple other concerns about these fields as well – premature failure, excessive heat, hardness, and high cost.

We cannot confidently say that these fields and playgrounds are safe. We do know that ground-up tires contain known carcinogens and multiple other chemicals of concern. We also know that the research is increasingly looking at combined chemical effects and studying chemicals that are not carcinogenic in and of themselves but can affect normal cells in ways that make them more prone to becoming cancerous.”<sup>1</sup>

Dr. Phillip Landrigan<sup>2</sup> has long expressed major concerns with the use of ground up tires. His concerns carry great weight; his landmark studies in the early 1970s of children

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<sup>1</sup> Environmental Working Group, <http://www.ewg.org/research/rethinking-carcinogens/executive-summary>

<sup>2</sup> Phillip Landrigan, M.D., M.Sc. is the Dean for Global Health, and Professor of Environmental Medicine & Public Health and Pediatrics at Mount Sinai School of Medicine. Dr. Landrigan is a pediatrician and epidemiologist. He has been a member of the faculty of Mount Sinai School of Medicine since 1985 and served as Chair of the Department of Preventive Medicine since from 1995 to 2015.

exposed to lead were among the first to show that lead can cause brain damage to children at *levels too low to cause clinically evident signs*. Dr. Landrigan explained that the major chemical components of crumb rubber – styrene and butadiene – are a neurotoxin and proven human carcinogen, respectively, and that the types of exposure risks have not been adequately studied.<sup>3</sup> Additionally, multiple other well-respected medical researchers have raised and continue to raise serious concerns about tire and synthetic rubber playing surfaces and called for their prohibition until they are proven safe.<sup>4</sup>

We probably would not be discussing this issue today if our fields and playgrounds had better maintenance, design, and installation. For example, parents at one elementary school in Montgomery County have worked for years to plant grass on the recess field so that the students are not playing on dirt and mud. Each time they improved the grass, one heavy rain would destroy all their work, leaving the field with numerous puddles and endless mud, proving that the field was poorly designed. The parents are understandably and needlessly frustrated – the right drainage and design on that field could have saved them 100s of hours of work and given the students a much better recess area. I have heard from parents all over the county – and witnessed – the lack of maintenance to our many grass athletic fields.

Our Soccerplex in Montgomery County has shown how grass fields can withstand torrential downpours and be used immediately afterwards without harm to the fields. And the staff at Soccerplex continue to use best practices to improve the grass fields.<sup>5</sup>

Excessive heat on the synthetic surfaces is another major concern. These surfaces (regardless of their color) – both playgrounds and athletic fields – are significantly hotter than the surrounding grass and other surfaces.<sup>6</sup> My staff as well as many others have taken temperature readings at these fields and playgrounds; those temperatures have been 120 degrees and higher while adjacent grass surfaces have been 20 to 40 degrees cooler.

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<sup>3</sup> “Artificial Turf and Children’s Health,” Written Testimony to the Environment Committee re Proposed Bill No. 924, Submitted by The Center for Excellence in Children’s Environmental Health at the Mount Sinai School of Medicine, March 2, 2009.

<sup>4</sup> “Perspective: Recycled Rubber Playing Surfaces Should be Prohibited Until Proven Safe,” Connecticut by the Numbers, by Robert Wright and Sarah Evans, 5/20/17, <http://tceee.icahn.mssm.edu/perspective-recycled-rubber-playing-surfaces-should-be-prohibited-until-proven-safe/>; Llompart, M; Sanchez-Pardo, L; Lamas, J; Garcia-Jares, C; Roca, E. (2013). Hazardous organic chemicals in rubber recycled tire playgrounds and pavers. *Chemosphere*. 90(2):423-31. Children and Athletes at Play on Toxic Turf and Playgrounds, Nyedra W. Booker PharmD MPH and Stephanie Fox-Rawlings PhD, National Center for Health Research <http://www.center4research.org/children-athletes-play-toxic-turf-playgrounds/>

<sup>5</sup> “Weathering the storms: How Md. SoccerPlex stayed open last weekend amid six inches of rain,” By Charles Boehm / October 18, 2013; <http://www.soccerwire.com/news/weathering-the-storms-how-md-soccerplexstayed-open-last-weekend-amid-six-inches-of-rain/>; “Sand Channels-What are they?”, Turf talk with the Maryland SoccerPlex, 10-24-17; “Fields 8 and 10 are getting a MAKEOVER!”, Turf talk with the Maryland SoccerPlex, 9-12-17; Mother Nature: We can’t control it, but we can prepare for it; Turf talk with the Maryland SoccerPlex, 7-21-15

<sup>6</sup> Consumer Product Safety Commission (CPSC) Fact Sheet, Burn Safety Awareness on Playgrounds, <https://www.cpsc.gov/s3fs-public/3200.pdf>; “Are Playground Safety Mats Too Hot to Handle?”, New York Times, Sewell Chan, 7/21/08, <https://cityroom.blogs.nytimes.com/2008/07/21/are-playground-safety-mats-too-hot-to-handle/>; Images of St. Louis Parks, [http://www.synturf.org/images/Temperatures\\_of\\_Saint\\_Louis\\_Area\\_Parks.pdf](http://www.synturf.org/images/Temperatures_of_Saint_Louis_Area_Parks.pdf); “Hot Park Equipment No Child’s Play,” by Elisabeth Leamy, Susan Rucci, Mary Pflum, ABC News, 7/24/08; <http://abcnews.go.com/GMA/Parenting/story?id=5437790>

Dangerous hardness is also a concern for both the athletic fields and playgrounds. Compaction on grass fields – which is one source of hardness – can be addressed through regular maintenance. Engineered wood fiber chips are a safe alternative for playgrounds and they reliably provide sufficient cushioning on playgrounds.<sup>7</sup> Hardness on an artificial surface is more complicated – and potentially more expensive - to resolve.

Reliability is also a concern. The most recent example is the field at Montgomery County’s Blair High School where the field failed before the expiration of the warranty. As a result of the premature failure, the Parks Department, which owns the field, has joined a national class action lawsuit against the manufacturer of the field, Field Turf.

As elected officials, it is our job to be good stewards of our resources. The concerns about the use of synthetic surfaces – toxic chemicals, excessive heat, dangerous hardness and questionable reliability – as well as their higher costs -- clearly point to the need for this legislation directing our funds to natural surfaces which are safer for our children and better for the environment. I urge you to support SB 763.

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<sup>7</sup> National Center for Accessibility, Indiana University; “The Evolution of Playground Surfacing,” Walt Henderson, 12/22/14; Children and Athletes at Play on Toxic Turf and Playgrounds, Nyedra W. Booker PharmD MPH and Stephanie Fox-Rawlings PhD, National Center for Health Research <http://www.center4research.org/children-athletes-play-toxic-turf-playgrounds>