

Article 47

Petitioner: Grass Fields for Safe Sports

Beverley Bryant, 175 Conant Street, Concord. 28th March 2016

Article 47 - To determine whether the Town will adopt a moratorium on the construction or installation of any synthetic turf (monofilament carpet with infill) and any surface covering of loose fill made from scrap tires on any land, of any size, owned by the town for a three-year time period starting on April 18, 2016 and ending on April 18, 2019; or take any other action relative thereto.

This moratorium does not include pour-in-place surfaces that are currently in use on running tracks and in children's playgrounds e.g. the Emerson playground running track. Town land includes, but is not limited to, that of the Concord Public Schools but does not include that of the Concord-Carlisle Regional High School or private land.

So what is synthetic turf?

It was originally promoted as a way of recycling and disposing of old tires instead of putting them into a landfill. They are ground up into tiny pellets and put into a plastic carpet to produce playing fields. The process of breaking up the tires varies but the product is the same – crumb rubber pellets which are loosely held in place by the carpet. These pellets are not coated with anything or rendered “inert”.

So why the moratorium?

Crumb rubber, made from discarded automobile tires and used in synthetic turf, contains about 40% rubber, together with dozens of chemicals. Some are known carcinogens and endocrine disrupters. Those found in samples tested by Haley and Aldrich for Concord include:

- Benzo(a)pyrene
- Benzo(b)fluoranthene
- Chrysene
- Indeno(1,32,3-cd)pyrene
- Bis(2-ethylhexyl)phthalate

The first four of them are carcinogens and the last is an endocrine disrupter that blocks the effect of the male hormone androgen. These are not safe at any level in the environment. There are many other chemicals in crumb rubber, that have never been investigated and for which there is no data available.

In Europe, heavy oils containing benzopyrenes and other toxic chemicals have been banned in automobile tires since 2010 because they are highly carcinogenic. Tires in the US, however, still contain them and are a potential source of benzopyrenes in the environment.

Exposure in Children

To have these chemicals in close contact with children is a major concern. Children are more susceptible to both carcinogens and hormone disrupters since their bodies are still developing. These chemicals can be absorbed through the skin, inhaled during “gassing off” of the rubber on hot days and eaten. One athlete estimated that she swallowed crumb rubber every time she played on synthetic turf. The crumb rubber is also carried home on clothing, in hair and in shoes. Any parent whose child has played on these fields can attest to the quantity of this material that routinely comes home.

Of additional concern are young siblings who play with the crumb rubber on the fields while their parent are watching the games and are also in contact with pellets that are brought home.

National Response

In response to the growing health concerns around synthetic turf nationwide, four US congressmen from the Committee on Energy and Commerce and two US Senators have written letters of inquiry regarding these concerns to the Environmental Protection Agency (EPA). They asked very specific questions about health and safety and these questions have yet to be answered.

The Consumer Product Safety Commission (CPSC) has not rated synthetic turf or crumb rubber as a child-safe product despite the high level of exposure in young children playing on them. The CPSC has backed away from its 2008 position of approving these fields.

The EPA no longer backs the use of crumb rubber. Together with the CPSC and the Centers for Disease Control and Prevention and the Agency for Toxic Substances and Disease Registry, they have launched the **Federal Research Action Plan**. This multi-agency effort will investigate the effects of crumb rubber on human health.

The objectives of this Federal Research Action Plan are to identify gaps in our knowledge of crumb rubber, to understand exactly what chemicals are in it, to investigate the level and means of exposure to these chemicals and to identify further research that would provide information about their potential health risks.

State Response

The cancer cases found in Washington State soccer goalies are now being investigated to determine whether they represent a cluster linked to synthetic turf.

California’s three-year study is already underway.

In Conclusion:

A three-year moratorium will allow time for the current research on synthetic turf to be carried out. From the data gathered, scientists and public health professionals will be better able to assess the risks involved in using synthetic turf. We will continue to monitor this research and its conclusions and communicate it to the relevant town boards. Since there are no artificial turf fields currently being planned, this moratorium will ensure that the Town of Concord will have ample time to make a considered and informed policy about them for the future.