

**January 15, Public Hearing on Wooten HS Special Appropriation for partial initial cost of an artificial turf field at Wootton High School-
CONCERN OVER HEALTH AND SAFETY RISKS**

Safe Healthy Playing Fields Coalition
www.safehealthyplayingfields.org

Dear County Council and members of the community,

We would like to enter into the record the clear and present environmental, health and fiscal hazards of artificial turf. Although a private entity will pay for part of the initial cost of the Wootton Field, **the students will pay the ultimate cost in long term consequences to their health.**

There is a fiscal health cost as well. Yearly maintenance is increased the more the field is used by outside entities and the plastic degrades and tire crumb migrates from the carpet making it less safe as time goes on. In addition unlike a natural turf field artificial turf fields need to be replaced every 8 years or so at \$750,000 or so. As with Richard Montgomery there is no guarantee that the current “partner” will be there to pick up the substantial cost which will then come from the funds that should be used for educational facilities for our children, not for plastic and tire crumb carpets.

Please see below for some of the recent scientific concerns published in scientific journals and peer –reviewed (unlike most of the industry and government cited studies) which raised significant concerns over the health risks associated with these fields.

Note also that lower extremity injuries such as and especially ACL tears are at higher rates * and are more extreme when they happen* on artificial turf. The recent loss of FIVE University of Maryland Football players to ACL tears immediately after installing the new artificial turf field is NOT just bad luck.

Best regards,
Kathleen Michels, PhD (neuroscience)
Safe Healthy Playing Fields Coalition
1701 Ladd St.
Silver Spring , MD 20902
301-922-3816

Memo on health and safety issues for Wooten HS hearing - January 15, 2013

Recent Scientific Research and Supporting Documents

Safe Healthy Playing Fields Coalition www.safehealthyplayingfields.org

www.peer.org/news/news-releases/2012/09/06/artificial-turf-field-heat-dangers-require-safeguards

Public Employees for Environmental Responsibility: News Release – **Artificial Turf Field Heat Dangers Require Safeguards: Synthetic Turf Temps as High as 200 Degrees Pose Particular Peril to Children** (September 6, 2012)

www.peer.org/news/news-releases/2012/07/12/lead-limits-needed-on-tire-crumb-playgrounds

Public Employees for Environmental Responsibility: News Release – **Lead Limits Needed on Tire Crumb Playgrounds: CPSC Ruling on Artificial Play-Areas as Children’s Products Sought**

<http://www.nj.gov/dep/dsr/publications/artificial-turf-report.pdf>

An Evaluation of Potential Exposures to Lead and Other Metals as the Result of Aerosolized Particulate Matter from Artificial Turf Playing Fields Submitted to: Alan Stern, Dr.P.H. New Jersey Department of Environmental Protection Submitted by: Stuart L. Shalat, Sc.D. (July 14, 2011) **IMPORTANT STUDY ON INHALATION HAZARD POTENTIAL OF ARTIFICIAL TURF!**

What are some of the specific known carcinogens in tire dust?:

[Http://www.sciencedirect.com/science/article/pii/S0045653512009848](http://www.sciencedirect.com/science/article/pii/S0045653512009848)

Hazardous organic chemicals in rubber recycled tire playgrounds and pavers Review Article; Chemosphere, 22 August 2012 Maria Llompart et al.

Abstract: In this study, the presence of hazardous organic chemicals in surfaces containing recycled rubber tires is investigated.The analysis confirmed the presence of a large number of hazardous substances including PAHs, phthalates, antioxidants (e.g. BHT, phenols), benzothiazole and derivatives, among other ...toxic chemicals in these recycled materials. The concentration of PAHs in the commercial pavers was extremely high, reaching values up to 1%. In addition, SPME studies of the vapor phase above the samples confirm the volatilization of many of those organic compounds. **Uses of recycled rubber tires, especially those targeting play areas and other facilities for children, should be a matter of regulatory concern.**

Automobile Tires a Potential Source of Highly Carcinogenic Dibenzopyrenes to the Environment <<http://pubs.acs.org/doi/abs/10.1021/es204257d>> Environ. Sci. Technol. Feb 21, 2012, 46, 3326–3334; Ioannis Sadiktsis, et al. “...Through the release of PAHs from stockpiled scrap tires, PAH emissions from pyrolysis of scrap tires or leaching of PAHs from recycled tire rubber material, **tires are a source of environmental pollution of PAHs throughout their entire lifecycle.**”

Why is this important? See a video explanation at: www.tirecrumbfields.com

Interview with Emeritus Toxicologist Dr. David Brown who has extensively reviewed the studies on the potential and known toxicity of tire crumb fields and explains that, “... tire crumb off-gases 24 harmful materials. We know the off-gassing yield increases as the tire crumb heats. Carbon black, which makes up 30% of black tires, is carcinogenic and breaks down into very small particles. Those small carbon black particles adsorb (attach) onto the surface of the gases, which then providea pathway to the deep lung, as the child breathes in during exercise. These gas/particle mixtures are 10-20 times more toxic than the materials alone. We know from air pollution studies that looked at these mixtures that they cause serious disease at much more dilute levels than what might be expected from 30,000 pulverized tires in close proximity.”

This is only a sampling of the information that raises concerns about artificial turf in general and tire crumb infill in particular.

FOR MORE SCIENCE AND INFORMATION Please see:

www.safehealthyplayingfields.org

and specifically see: <http://www.safehealthyplayingfields.org/#!environment/c16nf>

and www.syturf.org for a compilation of the available information overall.

and www.ehhi.org/turf/

Artificial Turf: Exposures to Ground Up Rubber Tires - Athletic Fields, Playgrounds