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**Sent:** Wednesday, June 28, 2017 5:49 PM

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**Subject:** Re: public comments

Our group, Safe Healthy Play Fields Coalition is a group of about 40 scientists and public health professionals have been studying the "safety" studies that supposedly show "no impact", "no harm" and "no inhalation, ingestion or dermal absorbability" from the loose, unencapsulated, pulverized, waste tire and plastic athletic field surfaces that are now on over 18,000 play fields, schools, and sports centers throughout the United States. We figure there are about 5 billion pounds of the pulverized material on the play surfaces and with normal intended use (running, downward play forces, sliding, etc.) coupled with heat and weathering, generate small particulate dust that covers the crumbs and plastic "grass" of the enormous surface area fields. That dust can include all the substances in waste tires, factory plastic/synthetic waste (such as Nike Grind), and field treatments such as antimicrobials, antifungals, flame retardants, fabric softeners, herbicides, and heat shield type coatings. The known harmful substances include 11 known carcinogens, and 37 known neurotoxins, and many many more concerning substances. We know that the dust/particulate occurs in sizes that are known to be harmful to humans and the environment, and aerosolizes with normal intended use. Extreme heat on the field surface (routinely above 165F) accentuates the off gassing and exposure risks to an array of gas/particulate mixtures.

Since the toxic particulate is in the breathing zone directly above the fields, and on the skin and contact surfaces in the area of the fields, exposure to the harmful particulate is unavoidable for players and those with both direct and indirect contact with the fields (such as spectators, coaches, and school children in adjacent schools.) Furthermore, the fields loose from 10-30 tons of crumb/dust material into the local storm water systems, and generate unwanted "heat island" effects in communities where they are used. From a regulatory perspective, the field surfaces are created from waste products (tires, plastics, shoe factory, or plant based/coconut, etc.) that get "recategorized" under the RCRA 2008 when they are repurposed for fields. So, while they can be considered toxic waste as tires due to the flammability, leachate and contact issues with tire ingredients, when they are pulverized into a higher surface area product and poured onto school play fields they are technically considered "products" under RCRA, and apparently no longer subject to toxicity scrutiny. We hope that your group can help set the record and the regulations straight.

We have documented the failure to test the fields properly for exposure and risk, documented the extremely high substance variability, non-uniform quality and noted many, many attributes of these fields which, alone or together, present sufficient reason to warn schools, parents and sports clubs... who may not have access or ability to conduct toxicity due diligence on their own. And, importantly, we have found about 100 filed legal actions (most appear to be fraud; failure to perform and not toxicity interestingly) against the principal maker/consolidator of the fields, which in any case point to increased liability concerns for the schools and communities

that purchased the fields. We firmly believe that most of those buyers were grossly misinformed or uninformed about the safety, health and liability concerns that come with these fields.

We have 6 years of research for your team, and would like to present it to your team. Some of the docs are attached below. We would appreciate the opportunity to make a short statement tomorrow, but importantly, would like to contribute a more substantial and documented body of research to your team. Tomorrow may not be the best venue for a full presentation, and so I am happy to fly down there, or to arrange a longer call to share our findings and concerns.

Many thanks for your attention to this extremely important issue.

Amy Stephan  
Safe Healthy Play Fields Coalition