



**Op-Ed - Yet Another Reason Environment and Human Health, Inc. (EHHI) Continues to Maintain that Grass is the Best Surface for Students and Athletes to Play on.**

Quinnipiac University has a synthetic turf field infilled with Geofill. Geofill for synthetic turf fields is commonly known as coconut husks and cork infill. Industry says it is 90% coconut and 10% natural derived plant based matter and claims Geofill is an environmentally-friendly alternative infill for synthetic turf systems.

Quinnipiac University is presently in the process of vacuuming-up Geofill out of its synthetic turf field - why would this be? What could have gone wrong?

**According to Geofill industry's own publication:**

**Geofill can freeze in the winter and then it gets hard.**

"The system typically contains moisture, so without any type of treatment it

stands to reason that some freeze/thaw will take place. We recommend a pre-winter treatment with a salt solution of 0.2 lbs. salt/sq. ft. mixed into the Geofill infill system. While this will decrease the freezing potential, Geofill, like natural grass and traditional synthetic turf fields, will become harder during freezing weather."

**After heavy rains the Geofill may become saturated.**

"During heavy rains the Geofill may become saturated, but the drainage and playability should not be affected."

**Weeds can grow in the fields and pesticides will be needed.**

"While this does not happen in most environments, some environments have led to weed growth. The system has been treated with a herbicide (that is naturally washed out of the system) to effectively to kill the weeds. A pre-emergent has also been used to further control weed growth in those areas."

**Now we understand why Quinnipiac University is vacuuming-up their Geofill.** Their synthetic turf field gets wet, retains water and the Geofill freezes and the field becomes slippery.

How are the synthetic turf fields and infills holding up under scrutiny?  
Waste tire crumb rubber infill has 11 carcinogens and 20 irritants, many of the irritants are lung irritants. EPDM rubber infill contains toxic chemicals and according to the Material Data Safety Sheet is a "Possible Carcinogen" and the International Agency for Research on Cancer (IARC) evaluation is that Carbon black, which is contained in EPDM is a possible carcinogen,

and the dust from carbon black is a lung irritant. EPDM rubber has never been proven safe for children and students to play on. This product was not designed to be put where students play. EPDM is used for roofing, hoses, cable joints, car hoses and vehicle sealants.

Now we learn that Geofill freezes in the winter and causes synthetic turf fields to become too slippery to play on. We now also learn that the Geofill fields need toxic herbicides to keep weeds from growing in the fields, and that Geofill systems need to be de-compacted on a yearly basis by a Shaw Sports Turf crew or a Shaw Sports Turf certified maintenance crew.

As well, the Centers for Disease Control and Prevention (CDC) recommends that all synthetic turf fields that have come in contact with bodily fluids, such as blood or vomit, be disinfected to eliminate bacteria including Methicillin-Resistant Staphylococcus Aureus (MRSA).

Synthetic turf fields are in continual need of applying one toxin after another. Some synthetic turf fields need the applications of flame retardants, some need antimicrobials, some need herbicides, and some need all of them. The more we learn about the maintenance of synthetic turf fields the more complicated the fields become.

**Over 50 percent of professional football teams have now removed their synthetic turf fields and replaced them with Kentucky Blue Grass fields.**

Environment and Human Health, Inc. (EHHI) has maintained, and will

continue to maintain, that grass is the best and safest surface for students and athletes to play on.