

Updated GREC recommendation on the installation of artificial turf at Faber field October 25, 2014

Among the principal roles of the Glen Rock Environmental Commission ("GREC"), are to inform residents about environmental matters and ways to help protect the environment, advise governing bodies on a variety of environmental issues, help explain programs and regulations of the New Jersey Department of Environmental Protection, investigate environmental problems and offer solutions.

In consideration of the recent proposal by Stantec for artificial turf to be installed at Faber Field, the Glen Rock Environmental Commission would like to provide an updated recommendation to the Borough Council. The current recommendation stems from the previous "GREC Report on Artificial Turf Considerations" prepared by GREC in February 2011, with an addendum in July 2013.

Some of the health and environmental concerns referenced in the initial report are no longer relevant, due to the absence of lead in the new infill material currently proposed. However, there are still health and environmental concerns linked to the current artificial turf proposal, especially turf containing plastic and rubber materials.

Health concerns: The health and safety of artificial turf, particularly of the infill containing crumb rubber derived from recycled tires, has not yet been proven safe beyond a reasonable doubt. Special attention is focused on the toxic volatile organic compounds (VOCs), metals, and polycyclic aromatic hydrocarbons (PAH) contained in the rubber. Results from scientific studies are at the moment inconclusive and a consensus has not been reached, except for the allergic reactions of individuals sensitized to latex and other components of recycled tires (see 2008 review study by TRC of Windsor NJ for the New York City Department of Health and Mental Hygiene). Importantly, while past studies have mostly been performed on adult athletes, the EPA has ordered new studies to determine health effects of artificial turf on children, since children are more susceptible to toxins due to their stage of development and higher metabolism, and the fact that they are closer to the ground. Larger, on-going studies are aimed at clarifying potential cancer-inducing effects of rubber crumbs as well as risks of respiratory irritation that may instigate asthma attacks. In addition, high temperatures during summer months are still a highly debated issue with fields only containing crumb rubber particles.

Environmental concerns: Due to the proximity of the location of Faber Field to New Jersey designated wetlands and flood-prone areas, the GREC previously recommended that *"the Glen Rock Borough Council engage an independent, professional engineering firm that specializes in hydrology and wetlands to conduct an independent assessment of this land for the proposed use."* While the NJ DEP has ruled that the wetlands along Diamond Brook are adequately separated from the proposed Lower Faber Field development, there are environmental concerns that toxic chemicals contained in rubber pellet infill and plastic base/fibers may leach out and contaminate the water. Special concern, for example should be taken with regard to potential Zinc contamination. Results from a 2010 Connecticut DEP study found *"water samples that showed elevated levels of zinc leaching from the fields that may present a risk to aquatic organisms."* While an environmental review has been conducted and presented, this was not performed by an independent firm, but rather by the same firm that has provided a preliminary proposal for installing the artificial turf (Stantec).

Recommendation:

In view of the conflicting data reported in the literature on the health and environmental safety of crumb rubber the GREC recommends that the council postpone the project until a better consensus is reached in the medical and scientific community. Other municipalities including Glen Ridge, NJ, Ocean City, NJ, Mt. Lebanon, PA, as well as the New York City Department of Park and Recreation, and Los Angeles Unified School District, share similar concerns and have therefore halted or postponed the installation of crumb rubber-containing artificial turf fields.

The GREC agrees that Faber Field needs to be improved. The Commission's preference is for a new drainage system and natural grass coverage.

If the November 4th, 2014 referendum vote should be favorable for the bond issue/synthetic turf project, the GREC recommends using alternative rubber-free materials, deemed safe or safer by the scientific and medical community. Options containing organic infill, including cork, coconut fibers and rice husk as well as reinforced natural grass fields (hybrid natural grass/artificial fibers) are becoming more realistic options that should be investigated and considered.

Furthermore, regardless of the outcome of the referendum, the GREC strongly recommends that the Mayor name a Select Committee of community leaders to project the future possibilities for the whole Diamond Brook area for the next 10-30 years. Out of this effort can come some near term possibilities that would broaden the planning for Faber Field and for the next Glen Rock Master Plan.