



McLean Citizens Association Resolution

USE OF SYNTHETIC TURF FIELDS IN GREATER MCLEAN

February 1, 2023

Whereas, synthetic turf for athletic fields was introduced in the 1960s and its use has expanded significantly in the last decade; and

Whereas, today's synthetic turf fields are typically composed of nylon fibers attached to a porous polyethylene backing with crumb rubber filler and a polyurethane pad for cushioning and a gravel/sand sub-base and sideline drains for drainage; and

Whereas, concerns about environmental and health effects related to synthetic turf fields using recycled crumb rubber infill are significant and include the adverse health effects of direct human exposure to the field material, the health and environmental impact of excessive heat generated by the fields in summer, the potential negative effects of the field materials on air quality, the effects of potential leaching of metals from crumb rubber infill on local water quality, the replacement of natural green space with compacted plastic materials which negatively affect the ecosystem, and the waste management implications of limited field life span;¹ and

Whereas, in Fairfax County synthetic turf fields are treated as impervious pavement and the storm water management (SWM) and phosphorous removal requirements are met via aggregate trenches installed in the base material beneath the field which are subject to the standard SWM requirements of Article 6 of the Fairfax County Public Facilities Manual² but the county has imposed no specific requirements to address potentially toxic leachate from the infill material; and

Whereas, athletic fields continue to be in great demand in McLean, driven by population dynamics, as well as the prevalence of year round sports; and

Whereas, the following synthetic turf fields currently exist in McLean: McLean High School (1), Langley High School (1), Holliday Field (1), Lewinsville Park (2), Linway Terrace (1), Spring Hill Recreation Center (3), Westgate Elementary School (1); and the Police Field at the

¹ See, for example, "Synthetic Turf Field Recycled Tire Crumb Rubber Research Under the Federal Research Action Plan, Final Report Part 1 – Tire Crumb Rubber Characterization Volume 1", July 2019, Environmental Protection Agency (EPA), at www.epa.gov, "Heat Risks Associated with Synthetic Athletic Fields," International Journal of Hyperthermia, April 24, 2019, "Say NO to Plastic Fields and Rubber Playgrounds," Sierra Club of Maryland, at <https://www.sierraclub.org/maryland/synthetic-turf>, (undated) and "Support Transparency and Accountability for Disposal of Synthetic Turf Fields, Sierra Club of Maryland at <https://www.sierraclub.org/maryland/disposal-synturf-fields> (undated).

² See [Article 6 of the Fairfax County Public facilities Manual](#).

McLean Government Center (1); and

Whereas, in 2016, in response to growing community concern about the environmental and health effects related to synthetic turf fields, the county reviewed scientific literature existing at that time and engaged with state and federal agencies regarding these concerns, resolved not to reconvene the Synthetic Turf Field Task Force, which had completed its work in 2013, and in 2017 concluded that continued use of crumb rubber infill for turf infields was acceptable;³ and

Whereas, in 2016, the Environmental Protection Agency launched a multi-agency research effort to address the potential human health effects of exposure to crumb rubber in synthetic turf fields, but results related to potential human exposure effects are not yet available;⁴ and

Whereas, synthetic turf fields are expected to require replacement every 8 to 10 years, raising a significant waste management challenge and source of microplastic and toxic pollution in the environment;⁵ and

Whereas, in 2017, the Great Falls Citizens Association asked Fairfax County to consider banning crumb rubber synthetic turf installations, and two Great Falls area athletic fields at Nike Park have already installed an alternative to crumb rubber infill, known as Thermoplastic elastomer (TPE);⁶ and

Whereas, in February 2018, the McLean Citizen's Association (MCA) Board of Directors approved the “Resolution for Study of Synthetic Turf Fields in McLean” which recommended that Fairfax County conduct sampling and testing of the drainage from synthetic turf fields to ensure that infill materials and their potential leachate do not migrate into the watershed via nearby water bodies and storm water sewers, and supported the prompt creation of a task force to include the engagement of local citizens for ongoing exploration of issues of synthetic turf installations;⁷ and

Whereas, numerous municipalities across the United States are now calling for moratoriums on the construction of synthetic turf fields until more comprehensive environmental and health impact studies can be completed. The District of Columbia, city of Boston and other municipalities in the states of Massachusetts, California, Connecticut, and Maryland have each taken action to limit the use of synthetic turf on fields in their jurisdiction;⁸ and

Whereas, in late 2022, the FCPA received a proposal from McLean Little League to fund the conversion of the grass baseball diamond at Linway Terrace Park to synthetic turf, and on

³ See “Update of County Actions to Date Regarding Synthetic Turf Fields,” memo from County Executive Edward L. Long, Jr. to the Board of Supervisors dated May 3, 2016 at [2016 Long Memo to BOS re Synthetic Turf](#) and “Update on Synthetic Turf Fields,” memo from County Executive Edward J. Long, Jr. to the Board of Supervisors dated February 2, 2017 at [2017 Long Memo to BOS re Synthetic Turf](#).

⁴ See <https://www.epa.gov/chemical-research/federal-research-recycled-tire-crumb-used-playing-fields>.

⁵ See <https://www.theatlantic.com/science/archive/2019/12/artificial-turf-fields-are-piling-no-recycling-fix/603874/> and <https://www.wusa9.com/article/tech/science/environment/rockville-indoor-soccer-facility-artificial-turf-waste-legislation-in-maryland/65-29ae76ce-d296-4eb0-9e3b-26a0863e7dec>.

⁶ See https://www.insidenova.com/health/fairfax-park-authority-great-falls-residents-at-odds-over-field-surface/article_1cb66dea-5ff5-11e7-aec0-fbccbd19b3d0.html and <http://www.connectionnewspapers.com/news/2017/jun/28/opposition-against-crumb-rubber-grows-great-falls/>.

⁷ See [MCA 2018 Synthetic Turf Resolution](#).

⁸ See, for example, <https://www.theguardian.com/environment/2022/sep/30/boston-bans-artificial-turf-toxic-forever-chemicals-pfas>.

January 12, 2023, in coordination with the Dranesville District Supervisor's Office, held a virtual information meeting for members of the community to discuss the proposal;⁹ and

Whereas, during the January 12, 2023 virtual information meeting, members of the community shared concerns about the potential impact of the synthetic turf field on stormwater runoff, the health of nearby Bryan Branch and Pimmit Run streams, heat generated by the synthetic turf fields, and other environmental and health effects related to the conversion; and

Whereas, at the January 12, 2023 virtual information meeting on the proposed Linway Terrace synthetic turf field, FCPA reported that they are considering talking to county SWM officials about the possibility of a partnership on this project to install enhanced SWM measures beyond the basic regulatory requirements; and

Now, therefore, be it resolved that, given the concerns cited above regarding synthetic turf fields, MCA recommends that the Environmental Quality Advisory Council (EQAC) investigate how the county is reviewing the environmental and health risks associated with the county's current practices related to synthetic turf fields to determine if the county should 1) revisit its 2017 decision that crumb rubber is an acceptable infill material, and 2) consider alternative infill materials such as thermo plastic elastomer (TPE), and 3) modify its approach to synthetic turf fields in other ways, including the SWM aspects of the fields and associated runoff; and

Now, therefore be it further resolved that, the MCA recommends that, if FCPA approves the Linway Terrace proposed baseball synthetic turf field, FCPA partner with county SWM/Department of Public Works and Environmental Services (DPWES) to install enhanced SWM measures that exceed the basic regulatory requirements, and establish a protocol for testing of runoff from the synthetic turf field, publish the results, and expand the enhanced measures county-wide if called for; and

Now, therefore be it further resolved that, the MCA recommends that Fairfax County put in place a synthetic field disposal tracking system (including whether and to what extent they are recycled or discarded in landfills) to improve transparency and accountability regarding the disposal of synthetic turf field material; and

Now, therefore be it finally resolved that, the MCA reaffirms its 2018 support for the prompt re-creation of a task force, to include the engagement of local citizens, to monitor and review environmental and health effects of synthetic turf fields and infill as new information becomes available, including the results of any analysis conducted through the SWM/FCPA-DPWES partnership recommended above for the proposed Linway Terrace field, and information related to synthetic turf recycling and disposal.

*Approved by the MCA Board of Directors
February 1, 2023*

McLean Citizens Association, PO Box 273, McLean, Virginia 22101

cc: John Foust, Dranesville District Supervisor

⁹ See <https://www.fairfaxcounty.gov/parks/planning-development/development/linway-terrace>.

Tim Hackman, Dranesville District FCPA Board of Directors

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