



June 27, 2024

Los Angeles City Council
Energy & Environment Committee
John Ferraro Council Chamber Room 340,
City Hall 200 North Spring Street,
Los Angeles, CA 90012

Re: Support for Council File #24-0602 (Blumenfeld, Yaroslavsky, & Hernandez)
Submitted online

Dear Honorable Chair Yaroslavsky and members of the LA City Council Energy and Environment Committee:

On behalf of the Sierra Club's Angeles Chapter's 40, 000 members, we strongly support Councilmember Blumenfeld's Motion (#24-0602) concerning artificial turf and protection of environmental and public health.

Synthetic turf is a petrochemical plastic product. Throughout its toxic lifecycle, from fossil fuel extraction through production and disposal, synthetic turf disproportionately impacts environmental justice communities. SB 535 communities face many health disparities, emissions of greenhouse gases (GHGs), particulate matter, volatile organic compounds, and hazardous air pollutants. Residents living in sacrificial zones near petrochemical extraction, refining sites and plastic turf production facilities are especially affected.

Synthetic turf exposes humans to toxic materials including PFAS (per- and polyfluoroalkyl substances), UV stabilizers, heavy metals, plasticizers, and microplastics via inhalation, ingestion or direct contact. These materials are linked to cancer, endocrine disruption, organ damage and other health problems and synthetic turf can heat up to temperatures that are 40 F - 70 F above ambient temperature, leading to heatstroke, dehydration and thermal burns. Independent, peer reviewed research, has found that synthetic turf has a higher incidence of sports injuries compared to natural grass and poses an increased risk of Methicillin-resistant *Staphylococcus aureus* infections.

At the end of its useful life (8-10 years), synthetic turf will end up in landfills or improperly disposed of, often near underserved and under-resourced BIPOC communities. This toxic waste emits methane and other GHGs for many lifespans and generations. Additionally, PFAS, UV stabilizers,

heavy metals, plasticizers, and microplastics from synthetic turf harm ecosystems and wildlife. Runoff from synthetic turf fields contaminates rivers, lakes and oceans and is especially toxic to many aquatic species. A recent study in Environmental Pollution found that 15% of plastics in river and oceans are from plastic turf in the form of nano and microplastics.

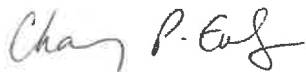
An excellent review of the negative environmental and health impacts of synthetic turf can be found in a letter from officers of the Santa Clara County Medical Association opposing the use of synthetic turf in Sunnyvale:

https://www.sccma.org/LinkClick.aspx?fileticket=cDXbFWx_3Dw%3d&portalid=19.

Sierra Club stands in strong support of this motion from City Councilmember Blumenfeld. This is a crucial step for preventing widespread contamination and protecting public health long term and we hope all jurisdictions follow the City's lead and implement robust testing and reporting to ensure a clean, PFAS-free LA, while supporting the use of compostable, healthy natural materials in urban, suburban and landscaped areas, and oppose the use of petroleum based products, such as, poured-in-place, or other plastics in ground covers, weed barriers, sporting surfaces, and in areas that constitute landscapes. Microplastics and PFAS should have no place in our waterways or in our children's lungs.

Your leadership on this issue is crucial. Let's protect our community and environment from these hidden dangers.

Sincerely,

A handwritten signature in cursive script that reads "Charming Evelyn".

Charming Evelyn
Chair, Water Committee
Vice chair Environmental & Social Justice Committee
Sierra Club Angeles Chapter



Comment submitted in favor of 24-0602 (transition away from synthetic turf)

Ronald Askeland <rask42@live.com>

Thu, Jun 27, 2024 at 3:13 PM

To: "david.giron@lacity.org" <david.giron@lacity.org>

Hi David and Eric,

Here is the comment I submitted in favor of 24-0602

Sincerely,

Dr. Ronald Askeland

PhD Chemist

Council File Number: 24-0602

Comments for Public Posting:

I strongly support the motion to transition away from synthetic turf. Don't risk our children's health by exposing them to the toxic effects of synthetic turf.

Synthetic turf is a petrochemical plastic product. Throughout its toxic lifecycle, from fossil fuel extraction through production and disposal, disproportionately impact environmental justice communities. These areas face health disparities, emissions of greenhouse gases (GHGs), particulate matter, volatile organic compounds, and hazardous air pollutants. Residents living in sacrifice zones near petrochemical extraction and refining sites and plastic turf production facilities are especially affected.

When in use, synthetic turf exposes humans to toxic materials including PFAS (per- and polyfluoroalkyl substances), UV stabilizers, heavy metals, plasticizers, and microplastics via inhalation, ingestion or direct contact. These materials are linked to cancers, endocrine disruption, organ damage and other serious health problems. On sunny days, synthetic turf reaches temperatures that are 40 F - 70 F above ambient temperature, leading to heatstroke, dehydration and thermal burns. Independent, peer reviewed research, has found that synthetic turf has a higher incidence of sports injuries compared to natural grass and poses an increased risk of Methicillin-resistant Staphylococcus aureus infection.

At the end of its useful life (8-10 years), synthetic turf ends up in landfills or improperly disposed of, often near low-income communities and people of color. This toxic waste emits methane and other GHGs for up to conceivably 1000 years.

Additionally, PFAS, UV stabilizers, heavy metals, plasticizers, and microplastics from synthetic turf harm ecosystems and wildlife. Runoff from synthetic turf fields contaminates rivers, lakes and oceans and is especially toxic to many aquatic species.

Review Article: An excellent review of the negative environmental and health impacts of synthetic turf can be found in a letter from officers of the Santa Clara County Medical Association opposing the use of synthetic turf in Sunnyvale: https://www.sccma.org/LinkClick.aspx?fileticket=cDXbFWx_3Dw%3d&portalid=19.

I've attached a Score Card that provides an overview of the pros and cons of synthetic turf vs. natural grass playing fields.

Attachment:

Score Card: Synthetic Turf vs. Natural Grass Playing Fields

Impact	Synthetic Turf	Natural Grass	Comments
Oil extraction/fracking	Yes	No	Emissions of GHG, particulate matter, VOC's and hazardous air pollutants in sacrifice zones ¹ Source: Sierra Magazine 9/15/22
Petrochemical refining	Yes	No	
Manufacturing synthetic turf & underlayment pads	Yes	No	
Field Temperature - heatstroke, dehydration and thermal burns	Temperature is 40-70 F above ambient air	Temperature is equal to ambient air	Measured on warm sunny days
Release of PFAS, UV stabilizers, heavy metals, plasticizers ...	Yes	No	Natural grass fields need to avoid synthetic pesticides and fertilizers
Release of microplastics	Yes	No	Inhaled/ingested/released to env.
Infection risk - MSRA (Methicillin-resistant Staphylococcus aureus)	Pathogens survive on plastic surface	No	Synthetic turf fields require bactericidal chemical treatment
Sports injuries	Higher incidence	Absorbs impacts better	
Robustness to intense use	Yes	Yes	Both require maintenance
Water use	Manufacturing process Cooling and cleaning	Drought tolerant turf grass	
Installation and maintenance cost	\$1.2M/field; 8-10 yr life	Lower installation cost	Maintenance costs ~equal ²
Climate change	Methane from mfg. End of life off gassing for 450 years	Carbon sequestration	
Soil biome health	Baked/compacted soil	Maintains healthy soil	
Hazardous waste disposal of at end of life (8-10 years)	Yes, 50 tons/acre	No, composted	

¹ These Are the New Titans of Plastic: Pennsylvania is just the latest sacrifice zone for the plastics industry
<https://www.sierraclub.org/sierra/2022-3-fall/feature/these-are-new-titans-plastic-shell-pennsylvania-fracking>

² Costs: Grass vs. Synthetic Turf <https://www.safehealthyplayingfields.org/cost-grass-vs-synthetic-turf>