



Andrea Mackenzie, General Manager
Alex Kennett, District 1
Mike Flaughner, District 2
Helen Chapman, District 3
Garnetta Annable, District 4
Vicki Alexander, District 5
Mike Potter, District 6
Kalvin Gill, District 7

April 15, 2024

Santa Clara County Board of Supervisors
70 W. Hedding St.
East Wing, 10th Floor
San Jose, CA 95110

Subject: SUPPORT Item 11 on April 16, 2024 Prohibition on New Installation of Artificial Turf (LF 24-5361)

Dear President Ellenberg and Supervisors,

On behalf of the Santa Clara Valley Open Space Authority (Open Space Authority), I am writing to express my support for Item 11, the referral on an ordinance prohibiting installation of artificial turf. This referral directs the Administration to report to the Board with options for a County ordinance to prohibit new installation of artificial turf and synthetic grass on Santa Clara County property.

As you know, the Open Space Authority is a public, independent special district created by the California State Legislature in 1993 to conserve the natural environment, support agriculture, and connect people to nature by protecting open spaces, natural areas, and working farms and ranches for future generations.

Artificial turf and synthetic grass contribute to chemical runoff, microplastic pollution, and the heat island effect, all of which are harmful to human health. Some of the chemical runoff from artificial turf includes PFAS, or “forever chemicals.” Many health impacts from PFAS and microplastics have been consistently identified in humans, although research on these impacts is ongoing. Some of these reported impacts for microplastics include decreased immune response, oxidative stress, and organ dysfunction. For PFAS, a few reported impacts include lower antibody response to some vaccines, lower birth weights, and liver damage. Additionally, the elevated surface temperatures of artificial turf that cause the heat island effect have the potential to damage equipment, burn skin, and increase the risk of heat-related illness.

The chemical runoff and microplastic pollution also harm organisms in our environment. PFAS and microplastics have been found to harm the health of animals, with microplastics blocking the gastrointestinal tract of small birds and fish and sometimes causing physical damage internally. Plastic turf also restricts access to the soil and out of the soil for insects and worms, respectively. On top of preventing these harmful environmental impacts, this ordinance would reduce potential greenhouse gas emissions by preventing further demand for plastic and preventing the replacement of natural plants with a synthetic surface that cannot sequester carbon.

These health concerns and the environmental impacts have already led the city of Millbrae to prohibit the installation of artificial turf. Santa Clara County should lead the way for counties and set an example for our cities by taking this step as well.

I urge you to support this referral. An ordinance prohibiting artificial turf will protect community and environmental health, as well as advance County sustainability and climate goals.

Thank you for your consideration.

Sincerely,

A handwritten signature in blue ink that reads "Andrea Mackenzie". The signature is fluid and cursive, with the first name "Andrea" and last name "Mackenzie" clearly legible.

Andrea Mackenzie
General Manager

Cc: Santa Clara Valley Open Space Authority Board of Directors

Helen Chapman

1556 Hester Ave
San Jose CA
hkmchapman@gmail.com

April 15, 2024

Santa Clara County Board of Supervisors
70 West Hedding, East Wing, 10th Floor
San Jose, CA 95110

Via email: BoardOperations@cob.sccgov.org

Dear President Ellenberg, Vice President Lee and Honored Supervisors,

I would like to share my support for the referral from Vice President Lee to direct the Administration to report to the Board on options for consideration relating to a County Ordinance to prohibit new installation of artificial turf and synthetic grass on Santa Clara County property (Agenda Item #11).

Many years ago as a former San Jose Parks Commissioner and Board member with the Shasta Hanchett Park Neighborhood Association took action to successfully ensure the rejection of the proposal from San Jose Unified School District to replace the turf at Trace Elementary School with artificial turf. We knew back then the health benefits for children and adults using the field outweighed the short term cost savings to the district as the turf would need to be maintained every 5 years and fully replaced after 20 years. The material used radiates heat more than natural grass and does nothing to address carbon sequestration to help reduce greenhouse gas emissions.

I applaud the Board of Supervisors for addressing this issue and taking forward thinking steps to safeguard our community's health and addressing climate change.

Sincerely yours,



Helen Chapman



Santa Clara County Board of Supervisors
70 West Hedding Street
San Jose, CA 95110

April 16, 2024

Subject: County Administration Report on Artificial Turf Installation
Re: **Agenda Item 11**, LF 24-5361

Dear Supervisors Ellenberg, Lee, Arenas, Chavez & Simitian,

Sustainable Silicon Valley strongly supports Vice President Lee's Agenda Item 11, the referral directing the Administration to report to the Board options for a County ordinance to prohibit new installation of artificial turf and synthetic grass on Santa Clara County property.

Synthetic turf is a clear health hazard with a high social cost, as the Santa Clara County Medical Association's Environmental Health has exhaustively detailed. Plastic athletic fields are dangerous heat islands, breeding grounds of Staph (MRSA) infections and the cause of a significantly higher rate of student knee and head injuries. Artificial turf and synthetic grass contribute to chemical runoff including PFAS, microplastic pollution and contamination of groundwater.

Industry marketing still maintains against any evidence that their petroleum-based plastic turf product is recyclable, requires "no" maintenance and uses "no" water. But the top carpet layer, infill, backing, drainage and padding on an average synthetic field comprises some *220 tons of single-use plastic* destined for landfill or incineration. Producer service advisories directing a fair amount of surface and sub-surface chemical treatment and water use for cleaning and cooling makes savings illusory.

If the biggest decision factor is cost, synthetic turf fails here as well. Over the eight-ten-year life cycle of a plastic field, one could install two-to-three natural turf fields at a fraction of the cost. Xeriscaping throughout the Bay Area makes sense in most all cases, but an athletic field should be our special oasis.

There are serious clouds on the state horizon. Last legislative session Governor Newsom corrected an unfortunate 2014 drought restriction by signing SB 676, which excludes artificial turf definitionally as drought tolerant. He did veto AB 1423, which would have banned turf installation on PFAS grounds, but expressed a keen interest in uniformly implementing oversight. Lastly, SB 499, addressing school heat islands and mandating "cool" surface solutions, stalled in Assembly Appropriations but most likely will be taken up again this year.

Properly prepared and maintained turf is by far the best path. Please address this downward artificial turf spiral. Feel free to contact me should you have any questions or comments. Sustainable Silicon Valley is committed to help.

Sincerely,

Dennis Murphy
Director, Water & Sustainable Life
Sustainable Silicon Valley
dmurphy@sustainableSV.org

From: Cynthia Fan
To: Cynthia Fan, Chavez, Similian, Arenas, Lee, and Ellenberg
Subject: [EXTERNAL] Support for a ban on artificial turf 4/16/2024, Item #11, LF 24-5361
Date: Tuesday, April 16, 2024, 3:28:57 AM

Public comment on item #11, LF 24-5361, of the 4/16/2024 Santa Clara County Board of Supervisors meeting:

Dear Supervisors Chavez, Similian, Arenas, Lee, and Ellenberg,

I STRONGLY support a ban on artificial turf installation and a ban on outdoor storage of used artificial turf.

I'm Los Gatos resident Cynthia Fan. I researched artificial turf when it was proposed for installation at my son's elementary school and learned it sheds microplastics and PFAS, both of which are pollutants that circulate in our environment essentially FOREVER, contaminating our drinking water, food supply, and bodies. We need to REDUCE environmental concentrations of microplastics and PFAS, NOT permit their concentrations to increase. Fortunately, OVERWHELMING COMMUNITY OBJECTION persuaded our school district to NOT install artificial turf.

Opposition to a county ban may come from sports leagues that remain UNAWARE that for the cost of plastic fields and their periodic replacements (necessary approximately every 8-10 years), field owners can afford professionally managed natural turf that CAN be kept in safe condition with a consistent and level surface through high use and rain. This is accomplished by the field owner getting trained and coached in modern field management techniques by a professional sports field manager that has a track record of natural grass field management success.

Banning artificial turf does not have to mean sentencing the community to poor-condition, often-closed grass fields. If you're skeptical, have a detailed and unbiased feasibility study written up comparing natural and artificial turf fields in terms of cost, hours of play, and hours of maintenance. Field management companies exist (like [Field Source Ohio](#)) that have plenty of experience managing both types of fields for Parks & Rec departments and school districts around the country. For under \$10K, they can prepare a detailed report factoring in the county's weather, soil, and field usage needs to reassure you and local sports leagues that natural turf CAN be kept in safe condition while affordably satisfying community usage needs.

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- Equipment and Infrastructure
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- Develop and implement Integrated Pest Management policies and procedures
- Operational Improvement and Efficiencies

Performance Management

- Field Performance Metrics and Data Tracking for Sports Fields
- Productivity and Accountability of Internal Stakeholders

To learn more about our athletic field organizational management process or to get and estimate on your project, [CLICK HERE!](#)

Please take the next step towards banning artificial turf ASAP.

Thank you,
Cynthia Fan
resident of Los Gatos (Santa Clara County Supervisorial District #5)

From: [Leanne McAuliffe](#)
To: [Arenas, Sylvia](#); [Chavez, Cindy](#); [Lee, Otto](#); [Ellenberg, Supervisor](#); [Supervisor Simitian](#); [BoardOperations](#)
Subject: [EXTERNAL] Item #11, LF 24-5361 - 4/16/2024 Support for a ban on artificial turf: (Ordinance to Ban Artificial Turf on County Property and on the Santa Clara County Fairgrounds)
Date: Tuesday, April 16, 2024 8:19:34 AM

Dear Santa Clara County Board of Supervisors:

I am writing to express strong support for Item 11, which proposes an ordinance prohibiting any new installations of artificial turf on Santa Clara County property as well as the Santa Clara County Fairgrounds where a new sports complex is under consideration. (I trust that when the Earthquakes understand that full implications of artificial turf on our youth and the environment that they will also be in full support natural grass alternatives over plastic.)

I believe that you will have received a plethora of referenced information and data so I am writing purely as a resident of Santa Clara County, and as a parent of four children who are working their way through the school system here. As such, I am extremely concerned about the amount of artificial turf installations throughout the county both on residential, commercial, town, city, school and county properties which are potentially compromising the quality of our soil, air and water both now and for future generations.

Oftentimes these artificial turf systems are purchased by people who are totally unaware of the myriad of issues with artificial turf, or they have trusted in the greenwashing of the artificial turf industry or they have been informed of the issues but chose to ignore them for simply unjustifiable reasons.

It is imperative that electeds take the lead and begin to understand the detrimental short and long term implications of these artificial turf installations and, in doing so, they will clearly see that the only option for the environment, our children and future generations is to ban artificial turf in favor of the myriad of other natural alternatives, whether that be for functional or non-functional spaces.

Those in the artificial turf industry will tell you there is proof artificial turf is safe. (Analyze those studies, look at who sponsors them.) And those advocating against artificial turf will tell you there is a plethora of information to counter the artificial turf industry's narrative and that indeed artificial turf is holistically bad for the environment and human health. I am not a scientist but when you have "experts" sponsored by an industry driven by profit and growth saying plastic grass is fine, and then we have independent child and environmental health experts saying it's a health risk to children, students and their environment, what side errs on the side of caution when it comes to our children's health and the healthy of future generations? What else matters more than our children's health?

There are ever increasing studies and reports about micro/nanoplastics and PFAS'

negative health and environment effects, not to mention greenhouse gases. Artificial turf is entirely made of forever degrading plastics, chemicals, and PFAS and offgases. PFAS are called “forever chemicals” because they are, for the most part, Persistent, Bioaccumulative and Toxic. Likewise, artificial turf is a “forever polluting” plastic ground cover for its entire existence. You only need to visit a plastic artificial turf field or plastic lawn on an average sunny day in Santa Clara County to feel the heat (even see the heat) and see the degrading plastics shedding into the greater environment. (And that’s just what you can see, much is invisible to the eye.) The natural environment, schools, playgrounds and sports fields are no place for a degrading, polluting, plastic ground cover. There is no place or circumstance where plastic turf, plastic lawn or plastic ground cover should be.

To go some way to undoing the damage of the past, each generation’s goal should be to leave this Earth (We aren’t calling it Plastic, yet!) in a slightly better state than when we came into it, for our kids. Plastic fields do NOT do this. We have to care enough to look at natural, safer alternatives to artificial turf to set the right example that will filter up the generations.

It seems apparent that unless there are laws and bans on artificial turf, potential artificial turf purchasers will either unwittingly continue to believe the artificial turf industry’s false narrative, or ignore the potentially negative human health and environmental effects because, well, they can.

It’s up to you as our electeds to take control and lead the way and set the best example for our kids and future generations to follow by protecting their health and the health of the environment. The health of the two are intrinsically and inexplicably linked.

In trust,

Leanne McAuliffe
Concerned Resident of Santa Clara County.

From: [John Kehoe](#)
To: [BoardOperations](#)
Cc: [Supervisor.Lee](#); [Pachoud, Emily](#)
Subject: [EXTERNAL] Synthetic Turf item, (4/16/2024, Item #11, LF 24-5361)
Date: Tuesday, April 16, 2024 9:02:14 AM
Attachments: [Address to the Board of Supervisors 2024.04.16.docx](#)

Thank you, County Board members, for this opportunity. My name is John Kehoe, a Sunnyvale resident for over 25 years. I hope to inspire our county to ban installing artificial turf on County properties.

Often overlooked until it's too late, heat is harmful, causes illness and can kill (C.Y. Jim, 2017). Installing synthetic turf athletic fields creates a heat island effect. This is tangible. We have to do better. Climate Action planning acknowledges the challenges faced with urban heat island effects. Adding synthetic turf products adds heat and contradicts our efforts to reduce these effects. This does not lead us to a climate-resilient landscape.

Please avoid adding more heat sinks. We need to maintain what vegetative cover we have and even add more. Repurposing public properties to synthetic athletic turf fields exposes players, athletes, and all participants to higher heat and chemicals. Playing sports under exposures like this is unwise, at the least, and not recommended at best. Please avoid having taxpayers to continue to fund plastic carpeted fields that will likely become unusable in our hotter seasons. And let's be honest: these products are not recycled.

Please explore options for the County Board to ban the installation of synthetic turf on our properties.

Thank you for your consideration,

John Kehoe

Sunnyvale (District 3)

From: [Maristella Huerta](#)
To: [Arenas, Sylvia](#); [Chavez, Cindy](#); [Lee, Otto](#); [Ellenberg, Supervisor](#); [Supervisor Simitian](#); [BoardOperations](#)
Subject: [EXTERNAL] Support for a ban on artificial turf: 4/16/2024, Item #11, LF 24-5361
Date: Tuesday, April 16, 2024 9:43:44 AM

Dear Supervisors Arenas, Chavez, Lee, Ellenberg, and Simitian:

As a resident of Santa Clara County Supervisorial District 4 and a member of Mothers Out Front Silicon Valley, I urge you to support Supervisor Lee's referral to create options for a ban on the installation of new artificial turf on County property.

Plastic grass poses a significant health risk due to the use of artificial chemicals including PFAS, a known carcinogen. Its use also contributes to water pollution and increases the urban heat island effect, as it can reach much higher surface temperatures than natural grass. In addition, it damages the climate due to the use of fossil fuels in its production and its displacement of natural grass, which naturally draws down carbon pollution.

This is important to me because as my neighbors substitute organic substrate and grass for artificial turf, our neighborhoods are getting hotter and more polluted. Artificial turf leaches PFAS into the ground and groundwater. A recent study revealed dangerously high levels of PFAS in our drinking water in San Jose. This creates a domino effect where residents purchase bottled water to avoid the PFAS in the city's drinking water, contributing even more to the carbon cost of water and plastic pollution. The county needs to support sustainable and healthy options for landscaping on its own properties.

Therefore, I ask that you support Supervisor Lee's referral to direct County administration to create options for an ordinance to prohibit new installation of artificial turf on County property.

Thank you,