

Greetings;

My name is Jeff, and we live behind Los Prados park, and have received notice that the park will be undergoing a turf conversion.

I have a couple questions.

Will the park layout change? (the location of baseball field and soccer fields).

We live behind the dog park, and would really like to keep it that way. We have young children and moving a sports field right next to us will generate a lot of noise and make quiet time difficult.

Thank you.

Jeff W, Playa St.

Thank you, Ron. I see the project uses crumb rubber, which is specifically cited as a hazard and SB 47 will:

"SB 47 would prohibit a public or private school or local government until Jan. 1, 2018, from installing, or contracting for the installation of a new field or playground surface made from synthetic turf containing crumb rubber from used tires in public or private schools or public parks."

So even for the Planning Commission's part it doesn't seem appropriate for us to move the item forward.

Thanks,
Josh

BILL NUMBER: SB 47 INTRODUCED
BILL TEXT

INTRODUCED BY Senator Hill

DECEMBER 17, 2014

An act to add Article 3 (commencing with Section 115810) to Chapter 4 of Part 10 of Division 104 of, and to repeal Section 115812 of, the Health and Safety Code, and to amend Section 42873 of the Public Resources Code, relating to environmental health.

LEGISLATIVE COUNSEL'S DIGEST

SB 47, as introduced, Hill. Environmental health: synthetic turf.

Existing law regulates certain behavior related to recreational activities and public safety, including, among other things, playgrounds and wooden playground equipment.

This bill would require the Office of Environmental Health Hazard Assessment, by July 1, 2017, in consultation with the Department of Resources Recycling and Recovery, the State Department of Public Health, and the Department of Toxic Substances Control, to prepare and provide to the Legislature and post on the office's Internet Web site a study analyzing synthetic turf, as defined, for potential adverse health impacts. The bill would require the study to include certain information, including a hazard analysis of individual, synergistic, and cumulative exposures to the chemicals that may be found in synthetic turf, as provided. The bill would prohibit a public or private school or local government, until January 1, 2018, from installing, or contracting for the installation of, a new field or playground surface made from synthetic turf within the boundaries of a public or private school or public recreational park, as provided.

The California Tire Recycling Act (act) requires a person who purchases a new tire to pay a California tire fee, for deposit in the California Tire Recycling Management Fund, for expenditure by the department, upon appropriation by the Legislature, for programs related to the disposal of waste tires. The act specifies that the activities eligible for funding include the manufacture of specified products made from used tires.

The bill would include the above study as one of the acceptable activities eligible for this funding.

Vote: majority. Appropriation: no. Fiscal committee: yes.
State-mandated local program: no.

THE PEOPLE OF THE STATE OF CALIFORNIA DO ENACT AS FOLLOWS:

SECTION 1. Article 3 (commencing with Section 115810) is added to Chapter 4 of Part 10 of Division 104 of the Health and Safety Code, to read:

Article 3. The Children's Safe Playground and Turf Field Act of 2015

115810. For purposes of this article, "synthetic turf" means any

composition material that contains recycled crumb rubber from waste tires and is used to cover or surface a field or playground.

115811. (a) By July 1, 2017, the Office of Environmental Health Hazard Assessment, in consultation with the Department of Resources Recycling and Recovery, the State Department of Public Health, and the Department of Toxic Substances Control, shall prepare and provide to the Legislature and post on the office's Internet Web site a study analyzing synthetic turf for potential adverse health impacts.

(b) The study shall include all of the following:

(1) A hazard analysis of individual, synergistic, and cumulative exposures to the chemicals that may be found in synthetic turf, such as 4-t-octylphenol, acetone, arsenic, barium, benzene, benzothiazole, butylated hydroxyanisole, cadmium, carbon black, chloroethane, chromium, lead, manganese, matex, mercury, methyl ethyl ketone, methyl isobutyl ketone, n-hexadecane, naphthalene, nickel, nylon, phenol, phthalates, polycyclic aromatic hydrocarbons, and zinc.

(2) A specific analysis evaluating varying exposure activities, environments, duration of play, ages of different populations who play on synthetic turf, and exposure pathways, including whether chemicals found in tires have negative impacts on human health when used in indoor and outdoor fields and parks with various weather exposures and potentially ingested by children or coming in contact with children's bodies.

(3) Biomonitoring or other exposure monitoring of children or adults exposed to synthetic turf to be used to assess their exposure to chemicals found in the synthetic turf, to the extent feasible, to determine potential health impacts on children and other age groups.

(4) An examination of the potential for fields and playgrounds containing synthetic turf to cause adverse health impacts, including, but not limited to, non-Hodgkin lymphoma, testicular cancer, prostate cancer, sarcoma cancer, and leukemia. This examination shall include people who have developed these health impacts and played on fields and playgrounds containing used tires, including, but not limited to, soccer goalies.

(5) An examination of the health impacts associated with synthetic turf fields and playgrounds of varying age.

(6) An evaluation of the differences in the manufacturers of synthetic turf and different turf, field, and playground products, including those that do not use recycled tires, and how these differences may affect health impacts. The evaluation shall include, but not be limited to, the types and age of tires used, the tire processing, and the type of plasticizer, backing material, adhesives, and plastic blades of artificial grass used to make the final synthetic turf product.

(7) An evaluation of the differences, in terms of health impacts, between crumb rubber and alternative surface materials, including coconut fibers, rice husks, cork, and used shoes.

(8) A review of current research on the health impacts of synthetic turf done by authoritative bodies from around the country and the world.

(9) Research to fill any data gaps, such as those data gaps identified by the report prepared by the Office of Environmental Health Hazard Assessment on behalf of the Department of Resources Recycling and Recovery titled "Safety Study of Artificial Turf Containing Crumb Rubber Infill Made From Recycled Tires: Measurements of Chemicals and Particulates in the Air, Bacteria in the Turf, and Skin Abrasions Caused by Contact with the Surface."

(10) An examination of the health impacts of exposures to many low level volatile organic compounds and polycyclic aromatic hydrocarbons found in synthetic turf fields and playgrounds.

(c) At least 20 synthetic turf fields and playgrounds around the

state shall be analyzed for purposes of the study.

(d) (1) A study submitted to the Legislature pursuant to subdivision (a) shall be submitted in compliance with Section 9795 of the Government Code.

(2) The requirement for submitting a study to the Legislature imposed pursuant to subdivision (a) is inoperative on July 1, 2021, pursuant to Section 10231.5 of the Government Code.

115812. (a) (1) A public or private school or local government shall not install, or contract for the installation of, a new field or playground surface made from synthetic turf within the boundaries of a public or private school or public recreational park.

(2) Paragraph (1) shall not apply to any installation of a field or playground surface made from synthetic turf that commenced, or any contract for such installation entered into, prior to January 1, 2016.

(b) This section shall remain in effect only until January 1, 2018, and as of that date is repealed, unless a later enacted statute, that is enacted before January 1, 2018, deletes or extends that date.

SEC. 2. Section 42873 of the Public Resources Code is amended to read:

42873. (a) Activities eligible for funding under this article, that reduce, or that are designed to reduce or promote the reduction of, landfill disposal of used whole tires, may include the following:

(1) Polymer treatment.

(2) Rubber reclaiming and crumb rubber production.

(3) Retreading.

(4) Shredding.

(5) The manufacture of products made from used tires, including, but not limited to, all of the following:

(A) Rubberized asphalt, asphalt rubber, modified binders, and chip seals.

(B) Playground equipment.

(C) Crash barriers.

(D) Erosion control materials.

(E) Nonslip floor and track surfacing.

(F) Oilspill recovery equipment.

(G) Roofing adhesives.

(H) Tire-derived aggregate applications, including lightweight fill and vibration mitigation.

(I) Molded products.

(J) Products using recycling rubber and other materials, such as plastic.

(K) Paint and coatings.

(6) Other environmentally safe applications or treatments determined to be appropriate by the ~~board~~ department.

(7) A study to analyze synthetic turf for potential adverse health impacts, pursuant to Section 115811 of the Health and Safety Code.

(b) (1) The ~~board may~~ department shall not expend funds for an activity that provides support or research for the incineration of tires. For the purposes of this article, incineration of tires, includes, but is not limited to, fuel feed system development, fuel sizing analysis, and capacity and production optimization.

(2) Paragraph (1) does not affect the permitting or regulation of facilities that engage in the incineration of tires.

Dear Guido,

I am writing to oppose the plan to convert Los Prados Park from natural grass to synthetic turf for the following reasons:

First, I have great concern related to the effect this change will have on traffic in the area and would adversely alter the feel of the neighborhood. According to Callander Associate report from July 10, 2013, the conversion of Los Prados Park to synthetic turf “has the ability to accommodate the most games and user groups” which will only worsen the already congested traffic and parking in the area. At the present time, when sporting events take place, vehicles are often parked into driveways making it difficult if not impossible to get out of a driveway. Additionally, since there is only one road in **and** out of the area this will only add to the congestion making it unbearable for the neighborhood.

Secondly, the planned conversion of synthetic turf will create a sports complex and greatly impact the aesthetics of the community. Natural grass is invaluable to the neighborhood especially considering the number of apartments in the area that have very limited access to open space. Lastly, this report recommends “adding lights” to the park which is completely unacceptable given the proximity of housing adjacent to the park.

Lastly, there are many possible environmental concerns related to synthetic turf, including increased surface heat created by synthetic materials, possible storm water contamination, toxins released by the turf and bacteria harbored in the turf. The Los Prados Park Turf Conversion Project PA14-105 used government publications rather than scientific, peer-reviewed studies to show there is no harm from synthetic turf. In my review of the literature, scientific studies are lacking in this area, thus inappropriate to use as background for the study. In my opinion, long-term, peer reviewed scientific studies are needed in order to fully ensure there are no health effects from synthetic turf.

Additionally, the construction costs presented by Callander Associates shows the conversion from natural grass to synthetic turf is the highest cost for Los Prados Park compared to the other four parks considered. Additionally, the 20 year cost analysis is also higher for converting to synthetic turf vs improving the natural grass by installing a new drainage, more durable grass and a water friendly grass option. Given the additional cost, traffic congestion, lack of parking, health concerns and the impact on the aesthetics of the neighborhood, converting Los Prados Park to synthetic turf from natural grass would not in any way benefit our neighborhood. But would be a considerable detriment to the community.

In closing, I vehemently oppose the conversion from natural to synthetic turf as it will have an overall adverse impact on the Los Prados neighborhood.

Sincerely,

Brenda Stengele
1865 Bahia St

San Mateo, CA 94403
650.575.1186 (mobile)

From: Yee, Ligi [mailto:yee1992@lawnet.ucla.edu]
Sent: Monday, October 27, 2014 2:14 PM
To: Paul Council
Subject: artificial turf

Hello Mr. Council,

I received a letter about artificial turf at Los Prados Park. I live in the neighborhood. The main turf problems we see at this park are:

- holes in the turf which can lead to twisted ankles for ball players
- dirt patches that get muddy when wet
- goose feces
- dog feces
- soggy fields after rains that cause us to cancel games

If artificial turf would solve these problems, I am in favor of it. I do hope, though, that if you install artificial turf, you add more foliage (e.g. trees and bushes in the area) to compensate for the negative greenhouse effect. Also, we could use more shade trees in this park, especially along the pathways.

Thank you for your consideration

--

Ligi Coleen Leong
(510) 517-5444

Mr. Persicone,

You do not know me, but a neighbor of mine has delivered the attached flyer to people living by the park in Los Prados and it provides this e-mail address and your name for contact and information. I am living on Bahia street cup-de-sac, which borders the east end of the park circle. My PRIMARY concern in all of this is the parking situation, as the park spaces are few and every time there is any organized activity in the park, this street, along with others surrounding the park, becomes a "zoo" and any more it pretty much lasts all day. I have witnessed shouting, near fights and attempts to block street parking spots because of this and it has become more intense and frequent in the last two years. There have been instances of "road rage" behavior and dangerous driving, which all relate to the parking situation here. *ANY approved plan that professes to increase usage and/or capacity of game fields should be responsible enough to include added parking rather than dump it on the local homeowners and renters to deal with.*

What would be most helpful for myself and all of us that are directly affected by this, would be for you (or whoever has the responsibility and knowledge) to respond to each of the concerns Brenda has mentioned below. This includes the health and lighting concerns, property value decreases and NON-turf alternatives and relative costs. If you do this in reply to my message, I will be happy to post it on our "Next Door Los Prados" site for members be better informed. Most of us are not likely to attend public meetings to voice in person for a number of reasons, which you should be familiar with.

Thanks so much,

Ron Winterlin

Dear Los Prados Neighbors,

My name is Brenda and I live on Bahia St and just learned the City of San Mateo is planning to convert most of Los Prados Park from natural grass to synthetic turf. I've read much of the study prepared by Callander Associates and the Los Prados Park Conversion Project Report and I have many concerns about the proposal. I am vehemently opposed to the conversion as I don't feel it would be a healthy alternative for our community. I have outlined key points of the study below.

Los Prados Park was chosen to be the first park converted to synthetic turf of the 10 parks considered for the project. The study revealed Los Prados Park to have the "greatest potential for expanded use to accommodate the most games and user groups." It could mean Los Prados Park would be used 365 days per year from dawn to dusk. Increased use will add to the already congested traffic and parking in the area, but the most concerning comment of the report is the possibility of adding lights. These changes would impact our neighborhood adversely and will decrease our property values. Additionally, there are health related concerns related to synthetic turf including toxins, bacteria, injuries, increased surface heat and storm water contamination.

The Callander report gives alternatives to synthetic turf that include a new drainage system, installing more durable grass, and installing a water friendly grass option. This option is a cheaper alternative than synthetic turf over a span of 20 years and would keep the current feel of the park. Why consider a more expensive alternative?

In short, I hope you will share my concern during the public comment period that ends on January 6, 2015. Please email Guido Persicone at gpersicone@cityofsanmateo.org. You may also call Guido at 650-522-7214 to comment on the proposal.

The Planning Commission Meeting for this project is scheduled on Tuesday, Jan 27th at 7:30pm at the San Mateo City Hall located at 330 West 20th Ave. I hope to see you there.

Your Neighbor,

Brenda

Hi Guido,

I live at 1835 Bahia St, right next to Los Prados park. We met briefly at the informational meeting at Beresford Park in November. I apologize for not writing sooner, but since the comment period closes tomorrow, I want to be sure to voice my concerns:

I strongly oppose the plan to replace the natural playing field in Los Prados Park with artificial turf.

Artificial turf will have a negative impact on the livability of the neighborhood and as a result, drive down home values. As someone who lives next door to the park, I'm concerned just as much with the off-peak, non-athletic use of the park as I am with the peak athletic use by the larger community.

First, natural vegetation is simply a much more pleasant environment to be in and around. Although this aesthetic is harder to directly quantify, studies have been done showing increased happiness of people surrounded by natural landscaping. Since buying a house is, in part, an emotional decision, artificial turf could have an impact on property values. In fact, had I know of such plans for this park in June, I would not have purchased this house.

Second, artificial turf gets very hot. The literature distributed at the informational meeting stated temperatures could be 10 or more degrees warmer than natural turf on a hot day. There was little information about health impacts to young athletes of such temperatures. Additionally, no research was presented about the effects on the local microclimate when such a large fraction of the neighborhood is, in effect, paved over. How does such a surface cool off on hot summer evenings? Homeowners may feel the need install additional air conditioning causing additional negative environmental impact.

Finally, the rules required for proper maintenance of such a surface are contrary to free, casual family & community environment that is part of a healthy childhood: Kids sitting on the sideline waiting to play, picking grass & clover. Orange slices at halftime. Soda after the game. Parents & grandparents sitting in lawn chairs watching the game. Families bringing their dogs. All of these things will be prohibited on artificial turf. In summer sun, the turf will be too hot for kids to sit on. It must be protected from food & soda spills. Lawn chairs damage it. Given the apparent fragility of this turf, it's hard to see how artificial turf provides a long term savings.

Respectfully,

Tom Whipple
1835 Bahia St.

A study of Los Prados Park shows that the park has the greatest potential for expanded use to accommodate the most games and user groups. I don't want more games added to the agenda. There is way too much traffic here when there is a ball game. Way too many balls have come into my backyard and I have had two broken windows. The players come asking for their balls back which is another added inconvenience. Also, alot of noise. When a game is being played, I am afraid to go into my backyard, worried I might get hit by a ball. Parking is another problem. Sometimes driveways are partially blocked. Please don't expand the use of this park. Less use would be better.

Sincerely,

Vera Loskutoff
1869 Bahia St.
San Mateo, Ca. 94403

Guido,

Can you please print and add the following article into the public record for PA 14-105? I know that I missed the deadline for public comments on the Neg Dec, but please add it as soon as is practical.

Also, when the item comes to Council, I will be asking Council to take a field trip out to the synthetic turf fields at Hillsdale H.S. or Aragon H.S. Not sure if the rest of the Council will agree to it, but I wanted to give you a heads up so that you won't be surprised by the request.

Thanks!

<http://www.nbcnews.com/news/investigations/soccer-goalie-wonders-if-synthetic-turf-poses-health-risks-n222151>

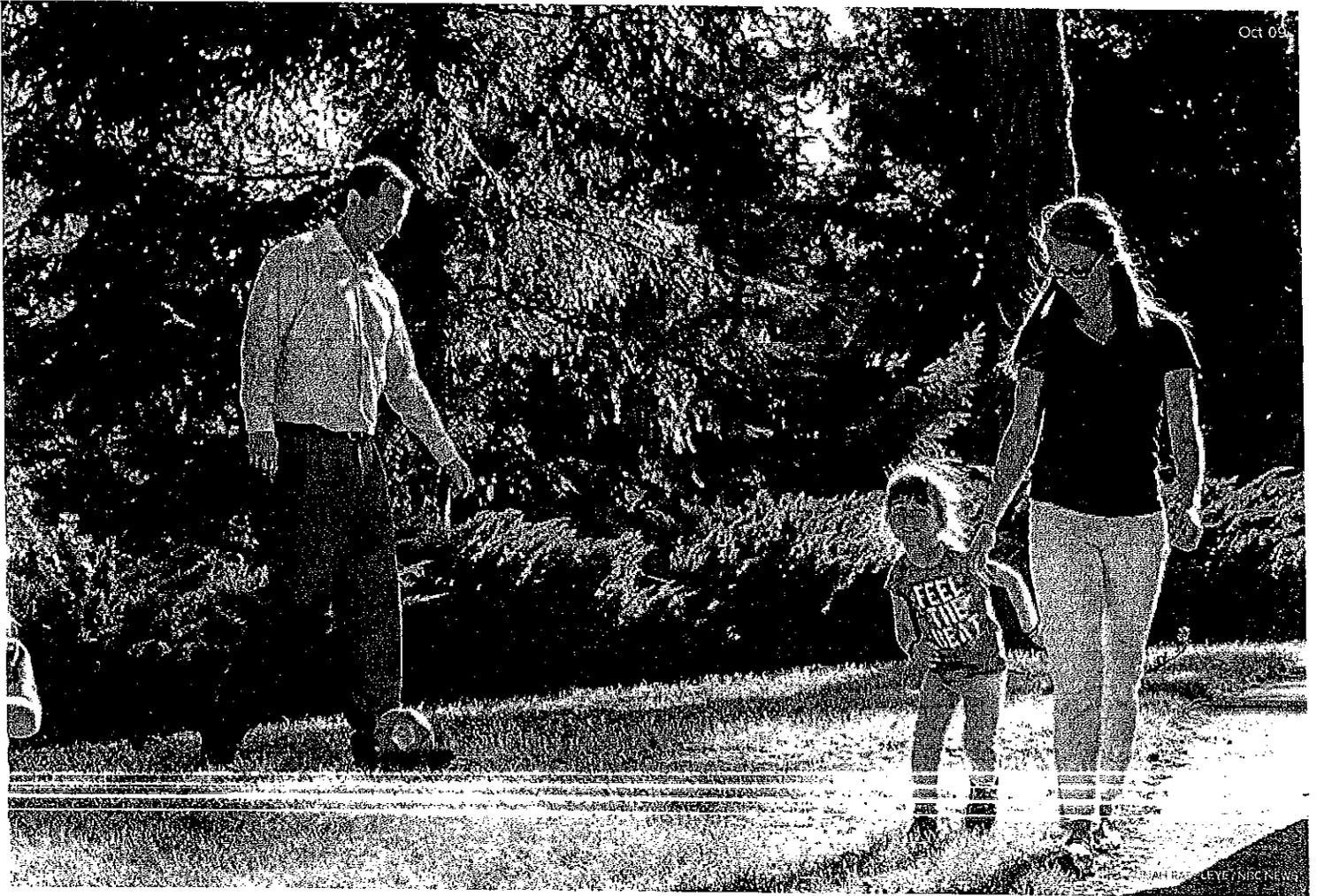
David Lim

San Mateo City Council

dlim@cityofsanmateo.org



NEWS / INVESTIGATIONS



Soccer Goalie Wonders If Synthetic Turf Poses Health Risks

COLLAPSE STORY

BY HANNAH RAPPEL

The doctor told the young soccer goalie that his chest x-rays were the worst he'd ever seen.



stage 4 Hodgkin lymphoma. The x-rays showed he had a tumor in his chest, he says now, "the size of a soccer ball."

A dozen years later, Sullivan is grateful that he's still alive. Now a married father of two little girls in Gig Harbor, Washington, he's passed on his love of the game he played from childhood through college to his kids. But he says he won't let them play goalkeeper, and is wary of letting them play on the surface that he thinks might have helped make him sick.

Starting at age 16, Sullivan had played most of his games on crumb rubber turf, a synthetic surface made of recycled tires. As a goalie, he spent hours on drills that required him to plunge into the turf again and again, and

the little black specks of rubber kicked up by each impact had gotten into his mouth, his clothes and any abrasions on his skin.

Like some other ex-soccer players, Sullivan is now wondering whether those little black granules may carry a health risk. After he saw a local TV news report about a Seattle soccer coach who had compiled a list of former players – most of them goalies – who'd played on crumb rubber turf and later contracted cancer, he says he had an "a-ha moment."

"On my mind, my family's mind, was what caused the cancer. The doctors never had a good answer," he said.



Debate grows: Is artificial turf bad for kids' health?



Artificial turf fields are now everywhere in the United States, from high schools to multi-million-dollar athletic complexes. Most of the 11,000 fields are made of crumb rubber, which became popular a dozen years ago. Called styrene butadiene rubber, or "crumb rubber," the turf contains tiny black crumbs made from pulverized car tires, poured in between the fake grass blades. The rubber infill gave the field more bounce than previous synthetic surfaces, cushioned the impact for athletes, and helped prevent serious injuries like concussions.

Do You or Your Kids Play on Synthetic Fields? Share Your Story

Schools and local governments liked the benefits of the fields. They don't require pesticides or herbicides to maintain, they don't need water to live, and they can withstand heavy use year-round. They also provide a means to recycle millions of discarded tires.

But as any parent or player who has been on the fields can testify, those tiny black rubber crumbs get everywhere. In uniforms, hair, cleats and socks. For goalkeepers, whose bodies are in constant contact with the turf, the issue is multiplied.

Said Sullivan, "You're consistently hitting the ground. Your face is essentially in the field turf, in the rubber for all intents and purposes. ... Every time, you're getting a couple pellets in your mouth."

Critics have asked whether those little black specks are linked to any health risks. Amy Griffin, a coach at the University of Washington, compiled a list of 38 U.S. soccer players – 34 of them goalies – known to have contracted cancer. It was her tally that first got Sullivan asking questions about crumb rubber turf.

"I've coached for 26, 27 years," Griffin said. "My first 15 years, I never heard anything about this. All of a sudden it seems to be a stream of kids."

No research has linked cancer to artificial turf. Griffin collected names through personal experience with sick players, and acknowledges that her list is not a scientific data set. But it's enough to make her ask whether crumb rubber artificial turf, a product that has been rolled out in tens of thousands of parks, playgrounds, schools and stadiums in the U.S., is safe for the athletes and kids who play on it. Others across the country are raising similar questions, arguing that the now-ubiquitous material, made out of synthetic fibers and scrap tire -- which can contain benzene, carbon black and lead, among other substances -- has not been adequately tested. Few studies have measured the risk of ingesting crumb rubber orally, for example.

NBC's own extensive investigation, which included a review of the relevant studies and interviews with scientists and industry professionals, was unable to find any agreement over whether crumb turf had ill effects on young athletes, or even whether the product had been sufficiently tested.

The Synthetic Turf Council, an industry group, says that the evidence collected so far by scientists and state and federal agencies proves that artificial turf is safe.

"We've got 14 studies on our website that says we can find no negative health effects," said Dr. Davis Lee, a Turf Council board member. While those studies aren't "absolutely conclusive," he added, "There's certainly a preponderance of evidence to this point that says, in fact, it is safe."

Crumb rubber is an "environmental success story," said Dan Zielinski, spokesperson for the Rubber Manufacturers Association.

"There are benefits here," Zielinski said. "The potential risk, as we know it today, is extremely low."

Environmental advocates want the Environmental Protection Agency and the Consumer Product Safety Commission to take a closer look. While both the CPSC and the EPA performed studies over five years ago, both agencies recently backtracked on their assurances the material was safe, calling their studies "limited." But while the EPA told NBC News in a statement that "more testing needs to be done," the agency also said it considered artificial turf to be a "state and local decision," and would not be commissioning further research.



Casey Sullivan holds a photograph taken before he was diagnosed with stage 4 Hodgkin lymphoma. Sullivan, a former goalkeeper, wonders whether his time spent on crumb rubber artificial turf exposed him to harmful chemicals.

"There's a host of concerns that are being raised," said Jeff Ruch, executive director of PEER, an environmental watchdog group. PEER has lodged complaints against both agencies. "None have risen to the level of regulatory interest."

The EPA refused multiple requests from NBC News for an interview, and declined to expand on their statement that "more testing needs to be done."

'Every tire is different'

One of the problems with researching the potential health hazards of crumb rubber fields is the sheer variety of materials used in the product.

Tens of thousands of different tires from different brands may be used in one field. According to the EPA, mercury, lead, benzene, polycyclic aromatic hydrocarbons, and arsenic, among several other chemicals, heavy metals, and carcinogens, have been found in tires.

Darren Gill, vice president of marketing for FieldTurf, a prominent turf company, said that those ingredients might worry consumers, but the manufacturing process ensures that their product is safe.

"If you look at the ingredients that go into a car tire, some people take those ingredients and turn them into health concerns," Gill said. "But after the vulcanization process, those ingredients are inert."

Industry leaders say while they encourage additional research, studies have shown that the substances found in

crumb rubber are not at levels high enough to be at risk to children or athletes.

“There are certainly chemicals in small amounts [in turf] as in many other things,” said Lee, of the Synthetic Turf Council. “You could evaluate most any material out there and you’re going to find at some level, some chemical that might cause concern.”



Annika Dybevik, 18, in her hospital bed being visited by coach Amy Griffin.

“The levels as they exist in tires, ground up tires, are very, very low,” he added. “The EPA has not found adverse health effect. Several state organizations have investigated it quite thoroughly.”

Existing research has attempted to measure the risk of exposure to harmful chemicals through the inhalation of gasses and particulate matter, as well as skin contact.

Studies have found that crumb rubber fields emit gases that can be inhaled. Turf fields can become very hot -- 10 to 15 degrees hotter than the ambient temperature -- increasing the chances that volatile organic compounds (VOCs) and chemicals can “off-gas,” or leach into the air.

One study performed by the state of Connecticut measured the concentrations of VOCs and chemicals in the air over fields. In addition to VOCs such as benzene and methylene chloride, researchers identified various polycyclic aromatic hydrocarbons (PAHs).

The report concluded that “the use of outdoor and indoor artificial turf fields is not associated with elevated health

risks," but that more research was needed to better understand chemical exposures on outdoor fields during hot weekends and in indoor facilities, which showed higher levels of chemicals in the air.

Other studies have looked at whether run-off from crumb rubber turf is harmful to aquatic life, or whether the rate of injury on turf is lower than on natural grass.

Few studies have looked at the issues unique to goalkeepers – whether ingesting the particles by mouth or absorbing them into the body through cuts and scrapes is dangerous.

While many studies conclude that the fields studied do not present acute health risks, they often add the caveat that more research should be conducted.

- One, published in 2013 in the scientific journal *Chemospheres*, which analyzed rubber mulch and rubber mats, concluded that, "Uses of recycled rubber tires, especially those targeting play areas and other facilities for children, should be a matter of regulatory concern."

- A 2006 Norwegian study evaluated inhalation, ingestion and skin exposure to crumb rubber in indoor fields. Researchers identified VOCs such as xylene, acetone and styrene, in the air above the fields. The study determined that inhalation of such compounds would not cause "acute harmful effects" to health, but that it was "not possible...to carry out a complete health risk assessment." Researchers also concluded that oral exposure to artificial turf would not cause increased health risk.

- Another 2013 study attempted to measure ingestion, inhalation and dermal exposure risk to users, and determined that the fields presented little risk. But researchers identified lead in the turf tested, including a "large concentration" of lead and chromium in one sample. "As the turf material degrades from weathering the lead could be released, potentially exposing young children," the report states.

According to Dr. Joel Forman, associate professor of pediatrics and preventive medicine at New York's Mt. Sinai Hospital, in all these studies, data gaps make it difficult to draw firm conclusions.

"None of [the studies] are long term, they rarely involve very young children and they only look for concentrations of chemicals and compare it to some sort of standard for what's considered acceptable," said Dr. Forman. "That doesn't really take into account subclinical effects, long-term effects, the developing brain and developing kids."

Forman said that it is known that some of the compounds found in tires, "even in chronic lower exposures" can be associated with subtle neurodevelopmental issues in children. "Those are always suspect," he said.

"If you never study anything," said Dr. Forman, "you can always say, 'Well there's no evidence that's a problem,' but that's because you haven't looked. To look is hard."

"I would like to see some more research," he concluded.



How Safe is the Artificial Turf on Your Child's Sports Field?



'Not an Issue'

It is unlikely, however, that further research will be conducted by federal agencies.

In 2008, tests performed by New Jersey found lead on three artificial turf fields. The results spurred media coverage and concern across the country.

The Consumer Product Safety Commission, the federal agency in charge of regulating consumer products, tested turf samples. While the tests detected lead in the synthetic grass blades, the agency announced that turf was safe to play on.

That same year, an official from a regional EPA office wrote to three agency offices in D.C., including the Office of Children's Health Protection, and recommended that the EPA undertake extensive testing, according to documents obtained by the watchdog group PEER. "My staff has reviewed the published research on the safety of tire crumb," wrote the official, "and has found information suggesting that children's chronic, repeated exposure to tire crumb could present health hazards. However, sufficient data to quantify toxicological risks from tire crumb exposure are not available."

Shortly after, the EPA tested samples from two artificial turf fields and one playground. The concentrations of VOCs and other chemicals researchers found presented a "low level of concern," the agency reported, but it declared that due to the "very limited nature" of the study and the diversity of crumb material, it was "not possible to reach any more comprehensive conclusions without the consideration of additional data."

While the industry cites both studies as evidence that rubber crumb is safe, in response to complaints filed by PEER, both the CPSC and the EPA declared last year that their studies were limited in scope. In its press release, the CPSC wrote, "The exposure assessment did not include chemicals or other toxic metals, beyond lead."

Since its initial tests, according to the CPSC, the agency has worked with the industry to develop voluntary standards for lead content.

The EPA refused repeated requests from NBC News for an interview. It said in a statement that the agency “does not believe that the field monitoring data collected provides evidence of an elevated health risk resulting from the use of recycled tire crumb in playgrounds or in synthetic turf athletic fields.”

“The agency believes that more testing needs to be done,” said the agency in a separate statement, “but, currently, the decision to use tire crumb remains a state and local decision.”

When NBC News first contacted the EPA in 2013, Enesta Jones, an agency spokesperson said that in 2010, after a meeting with state and federal officials, “EPA determined that this is not an issue.”

The agency does not have plans to conduct further studies, but is currently working on a “summary” of available research.

Casey Sullivan wants more research, too. But he’s already made up his mind.

“I know that goalkeepers ingest large amounts of the crumb rubber accidentally through playing on the surface. It’s unavoidable,” he said.

He would love for his daughters to embrace soccer, but he wants to limit their exposure to crumb rubber. He’s already certain he wants to steer them away from playing goalie.

“I would hope that my kids played soccer, but that they were field players and that the exposure to the crumb rubber would be less,” he said.

First published October 9th 2014, 10:01 am

HANNAH RAPPLEYE   

Rappleye is a reporter with the investigative Unit at NBC News. Previously, her reporting has been supported... [Expand Bio](#)

Guido Persicone

From: Joshua Hugg <joshua.s.hugg@gmail.com>
Sent: Wednesday, January 14, 2015 2:04 PM
To: Paul Council
Cc: Ronald "Ron" Munekawa; Guido Persicone
Subject: Fwd: Los Prados Park Synthetic Turf Conversion

Hi Paul,

I spoke to Jerry Hill's Legislative Aide and he recommended some people to contact about identifying alternative materials to crumb rubber. Might be worth a call.

Thanks,
Josh

----- Forwarded message -----

From: Solov, Nate <Nate.Solov@sen.ca.gov>
Date: Mon, Jan 12, 2015 at 12:15 PM
Subject: RE: Los Prados Park Synthetic Turf Conversion
To: Joshua Hugg <joshua.s.hugg@gmail.com>

Josh - here are a couple of good contacts who install turf fields using alternatives to used tires:
Joe with DMA Sports Design Group [508-579-8015](tel:508-579-8015) and Domenic with Limonta Sport [212-904-1223](tel:212-904-1223)

Info from Joe:

I would be willing and interested in speaking as an expert in Turf designs and materials used. As the consultant for the City of LA parks and schools, we have taken a direction to redesign the systems to avoid the use of SBR. We have also accomplished the task of keeping the cost in line with the now conventional systems using SBR, disproving the myth that it "cost more to use the alternative infills".

The new designs incorporated by LA take in the entire cross section of construction which maintains a value engineered concept of cost. This will allow the Bill to support the need to remove the SBR from future projects without the rumored elevated cost. This rumor is the primary issue to retard or delete the more health system from being specified and installed.

By the way.....I designed and had installed an econ-friendly system around the White House pool two years ago. So we have been head of the curve. Some of that trivia does catch peoples attention.

I hope I can help in any way to move the Bill forward. If you or the Senator Hill would like to meet, let me know.

Joe D.

Joe DiGeronimo

DMA Sports Design Group

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Domenic Carapella

Managing Director

-----Original Message-----

From: Joshua Hugg [<mailto:joshua.s.hugg@gmail.com>]

Sent: Tuesday, December 23, 2014 10:13 AM

To: Solov, Nate

Subject: Los Prados Park Synthetic Turf Conversion

Hi Nate,

My name is Josh Hugg and I am on the San Mateo Planning Commission.

We currently have a project in our pipeline for consideration by San Mateo Parks to convert the field their to synthetic turf.

Los Prados Park Synthetic Turf Conversion:

<http://www.cityofsanmateo.org/DocumentCenter/View/43876>

It seems like there is an overlap with Senator Hill's bill:

<http://patch.com/california/fostercity/senator-hill-wants-ban-certain-artificial-turf-schools-parks>

Has Jerry's office been in contact with the City about this? My feeling is that the project should wait until this bill has been considered by the legislature.

Thanks,

Josh

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Ad Astra per Aspera

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Ad Astra per Aspera

From: Jou Baur [<mailto:joubaur@yahoo.com>]
Sent: Monday, January 19, 2015 9:27 AM
To: Planning Commission
Cc: letters@smdailyjournal.com
Subject: Re: Synthetic turf

I see in today's Daily Journal the city council is thinking of installing synthetic turf for a park. I think before you install synthetic turf you should check into the link with cancer, MSRA, and Staph infections, among other things and are we sure we want to expose the children to this? Here are a couple links to check out.

[Synthetic Turf Could Cause Cancer in Athletes - Cancer Therapy Advisor](#)

Synthetic Turf Could Cause Cancer in Athletes - Cancer Therapy Advisor

The increase in use of artificial turf may be an underlying cause of cancer.

View on www.cancertherapyadvisor.com

Preview by Yahoo

[MRSA and Staph Infections on Synthetic Turf](#)

MRSA and Staph Infections on Synthetic Turf

The CDC in Atlanta (Center for Disease Control) outlines the 5 C's needed for Staph or MRSA infections. Synthetic Turf shares all 5, you only need 1

View on www.sportsturfhw.com

Preview by Yahoo