



SUSTAINABLE PURCHASING QUICK GUIDE: SAFER TURF

Ecology Center and Safer States' Sustainable Purchasing Quick Guides are a series of fact sheets highlighting sustainable purchasing options for high volume, high impact products. They are designed to help cities, counties, and states create safer communities through the purchase of more environmentally and socially conscious products.

Why Turf?

Artificial turf fields are synthetic fields used for athletic arenas and landscaping that are meant to look like natural grass. Crumb rubber, the infill material in turf, is commonly made from recycled tires and can contain VOCs, heavy metals, and carcinogenic polycyclic aromatic hydrocarbons (PAHs). Toxic chemicals like lead can be found in the artificial grass fibers in turf. Recent tests have found PFAS—toxic chemicals that don't break down in the environment and are linked with many negative health effects—in artificial turf. In addition to being harmful to human health, the toxic chemicals and synthetic particles in turf contaminate stormwater runoff and migrate into the environment. Research shows that turf gets hotter than natural grass, increasing heat stress and heat-related illness, and there are increased rates of skin abrasions associated with turf versus natural grass. Used turf produces massive amounts of plastic waste as recycling is difficult and sometimes impossible. Studies have also shown that natural grass fields have lower life cycle costs than artificial turf.

Solutions: Municipalities Taking Action

The mayor of Boston has [directed](#) that no new artificial turf fields be installed in the city. California lawmakers have [approved a ban](#) on the manufacturing and sale of artificial turf containing PFAS that will go into effect in 2026. The City of Millbrae, CA has put a temporary [moratorium](#) on the installation of artificial turf in the city as the City Council awaits a study of toxicity and water runoff.

Benefits

Using natural grass instead of synthetic turf is better for the environment and human health. Natural grass doesn't create tons of plastic waste or contain toxic materials that threaten the health of humans and the environment. It also doesn't get as hot or cause as many skin abrasions as turf. Natural grass can also reduce the overall carbon footprint by capturing carbon dioxide. There are many benefits of ditching artificial turf for natural grass—it's healthier, safer, and cheaper!

Tools and Resources

- [Ecology Center Directory of Sustainable Purchasing: Sports Fields](#); Directory of resources for safer and sustainable sports fields
- [TURI Athletic Playing Fields](#); The Toxics Use Reduction Institute's website about artificial turf and safer alternatives
- [HomeFree's Turf Product Guidance](#); Identifies hazards and ranks alternatives to artificial turf
- [Artificial Turf and Safer Alternatives](#); Slide deck from TURI, the webinar can be found [here](#)