

Department of Planning, Housing and Infrastructure
 Synthetic Turf Study
 Reply to: DPHI Planning Portal

15 April 2024

Dear Sir/Madam

RE: Submission to the State Government on the Draft Guidelines for Synthetic Turf in Public Open Spaces

FOKE welcomes the **Independent review into the design, use and impacts of synthetic turf in public spaces** (*the Review*). Based on its findings a set of recommendations have been developed to meet the requirements of the Terms of Reference. Although FOKE supports the recommendations, it proposes additional recommendations and unconditionally rejects the Review's proposed '*accelerated learn and adopt*' approach.

Recommendation 1: Reject the '*accelerated learn and adopt*' approach

The Review acknowledges that increasing population is driving increase demand for green space including for sporting activities while constraining availability of open public space. The Review also states the rate of installation of synthetic fields is increasing significantly. Construction of synthetic fields in NSW has increased more than six-fold from 30 in 2018 to an estimated 181 in 2022.

With the NSW Population Projections (Population Projections-NSW Department of Planning <https://www.planning.nsw.gov.au/research-and-demography/population-projections> showing an expected increase of over 85,000 people per year in the state based on recent trends, the demand for open space and sporting fields is bound to continue increasing greatly. The Review identifies serious gaps in data and information and claims it cannot come to a satisfactory conclusion regarding the health effects and the environmental impacts of synthetic fields. It is unacceptable to stand by as synthetic fields continue to proliferate at an increased rate without, at minimum, strict chemical and technical standards on composition of each component of the fields, and installation being adopted and imposed. Under such a scenario, irreparable damage to the environment and potentially health and social impacts will only accumulate.

Recommendation 2: Calculating the best value of open space

The Public open space strategy for NSW 2023 considers that the value of open space goes beyond highest and best use and economics to consider public value. It states '*The long-term viability of public open space should be assessed with comprehensive analysis of all social, health, public and environmental benefits, for all parties, now and into the future. The value calculation also has to consider accessibility and inclusion of all community members.*'

<https://www.planning.nsw.gov.au/sites/default/files/2023-06/public-open-space-strategy-for-nsw.pdf>

FOKE believes that this statement also applies to sporting fields. Unfortunately, the Review fails to consider the risks to what might be lost long term under the '*accelerated learn and adopt*' approach by putting the interest of sporting bodies foremost. Note this includes failure to account for the loss

of accessibility and inclusion of the community to non-sporting activities on synthetic fields compared to natural turf.

Recommendation 3; Impose a moratorium on further installation of synthetic fields until mandatory standards have been determined for the chemical composition of the components of synthetic fields, and regulations implemented for synthetic turf and infill including mandatory installation specifications and maintenance procedures.

FOKE urges the adoption of the Precautionary Principle, preferably banning synthetic fields to prevent future release of microplastics, other toxins and pollutants. At the very least, a moratorium must be imposed until gaps in data and information are available to enable the establishment of mandatory standards to assure protection of the environment and health of the community.

The Review acknowledges a range of synthetic sporting surfaces exist and identifies insufficient information and a lack of standards about the materials and chemical composition of synthetic turf in addition to lack of data regarding the installation, volumes and composition of synthetic turf. This is consistent with findings of the Science Direct International findings. **Artificial turf and crumb rubber infill: An international policy review concerning the current state of regulations.** <https://www.sciencedirect.com/science/article/pii/S2667010022001767> There should be testing of materials in Australian conditions in accredited laboratories.

Of concern is the Review's conclusion that there is no proven link to health problems when other countries have concluded otherwise. The European Union have taken substantial steps to limit the fields' chemical components to which the public and environment are exposed. The EU has brought in restrictions on 8 identified carcinogenic PAHs (Polycyclic aromatic hydrocarbons), while the US EPA has designated 16 PAHs as chemicals of concern.

According to the publication **The Ministry of Sport** October 26, 2021. The Netherlands is set to ban synthetic grass for real grass from 2030. <https://ministryofsport.com/the-netherlands-to-phase-out-artificial-turf-over-health-and-environmental-concerns/> The article also states, "Amy Griffin, Associate Head Coach at the University of Washington women's soccer team, conducted a study that compiled a list of 237 soccer players who predominantly played on artificial fields and later developed cancer. Interestingly, a majority of the affected players were goalkeepers, who had spent more time in contact with the artificial grass.

Tempering the findings to a certain extent, cancer specialist Bob Lowenberg pointed out, "There is absolutely no evidence that artificial grass pitches are bad for you, but we can't definitively say they are safe. I think there is every reason to be concerned about artificial grass pitches." (Emphasis added).

Cancer specialist Bob Lowenberg's comment is consistent with the Precautionary Principle and relevant to the situation in NSW regarding health risks associated with synthetic turf.

Recommendation 4: Legislation

- (a) **Mandate an Environmental Impact Study (EIS):** The Review acknowledges that evidence exists of environmental impacts resulting from the installation of synthetic fields. An EIS should be mandated.
- (b) **Amend the Review of Environmental Factors (REF):** The *Protection of the Environment Operations Act 1997 (POEO Act)* includes micro and nano plastics, yet micro plastics and nano plastics are not generally included in the Review of Environmental Factors (REF) and an Environmental Protection Licence (EPL) or mitigation measures are not required. These

must be included. The REF should also be the responsibility of the council. In addition, REF's must also address the end-of-life plans for synthetic turf and associated products.

- (c) **Mandate approval from NSW National Parks when synthetic fields (or other development) adjacent or in the vicinity to National Parks are under assessment.** According to the NSW National Parks & Wildlife Service *Developments adjacent to National Parks and Wildlife Service lands Guidelines for consent and planning authorities* <https://www.environment.nsw.gov.au/-/media/OEH/Corporate-Site/Documents/Parks-reserves-and-protected-areas/Development-guidelines/developments-adjacent-npws-lands-200362.pdf> Councils and consent authorities need to give consideration to key issues and the risk to NPW lands and consider the measures proposed by the guidelines.

Regrettably, guidelines are not enforceable. A case study: In the controversial case of Norman Griffiths Oval in Pymble, despite a resolution of council to refer to the National Parks, Ku-ring-gai council ignored the National Parks reservations and advice, approving construction on a site designated as detention basin for heavy rain events. Since the beginning of construction, despite the measures to avoid run off, there have been multiple reports to the EPA of silt pollution events into Quarry Creek which runs from the oval into the Lane Cove National Park.

- (d) **Independent assessment:** Ensure planning regulations are amended to prevent conflict of interest. Currently the proponent in case of councils or other government bodies can be the proponent and assessor for development of sporting fields and infrastructure.

Recommendation 5: Grant Funding. Government sport grant funding favours synthetic turf but does not include in its criteria consideration of the impacts on environment, impact of climate change. There does not exist any government incentive for the development of natural turf fields relying on increasing capacity by adopting updated information in soil science, turf cultivars and best practice drainage. Grants or funding incentives are required to encourage alternatives to synthetics.

CONCLUSION

The final Review is disappointing. Despite findings overseas and the Review acknowledging gaps in information and data, the report fails to apply the Precautionary Principle or to include standards to meet to ensure effective regulation of synthetic turf in sporting fields.

FOKE hopes that its recommendations will be carefully considered and that appropriate changes will be made to the Guidelines.

Yours faithfully

Kathy Cowley

Kathy Cowley
PRESIDENT

cc Matt Cross MP, Member for Davidson
cc The Hon Alister Henskens SC MP, Member for Wahroonga
cc The Hon Paul Fletcher MP, Member for Bradfield
cc Mayor and councillors – Ku-ring-gai Council
cc Mr David Marshall – Acting General Manager Ku-ring-gai Council