EU Microplastics Ban – Irish FA Statement

The EU has adopted a comprehensive ban on the sale of 'intentionally added microplastics' including rubber granular infill in synthetic football pitches.

Artificial grass pitches (AGPs) provide a high-quality surface that are an integral part of modern community sport. AGPs are recognised as durable, safe, year-round playing surfaces, able to withstand intensive use in all kinds of weather. AGPs are widely used in football and are considered a good alternative to natural grass pitches in certain situations. According to FIFA a properly maintained AGP can sustain up to 60 hours of use a week. This compares favourably to a good quality grass pitch, which according to FIFA, can only sustain 6 hours per week. The benefit of AGPs is that they afford people to engage in sport and physical activity regardless of the weather when otherwise matches would be unplayable. 3G AGPs enable more people to experience the benefits of being active, such as improved physical health and mental wellbeing.

AGPs are used for playing many different sports, including football, hockey and rugby and provide spaces for people to come together, helping communities connect. It is critical that our sports facilities are flexible, durable and sustainable to reflect the real everyday requirements of all users and meet societal demands responsibly.

When considering the design and installation of a new AGP carpet, applicants should engage with a recognised synthetic turf consultant/ specialist for advice and may wish to access best practice synthetic turf sports pitch/ Multi Use Games Area (MUGA) design guidance available on FIFA's website; https://digitalhub.fifa.com/m/235e3d6a9a502840/original/Code-of-Practice-for-the-Design-and-Construction-of-Football-Turf-Fields-2023-edition.pdf and the Sports and Play Construction Association's (SAPCA) website; https://sapca.org.uk/guide/codes-of-practice/. Sport NI has published

an Information and Position Paper on their website in respect of the microplastics ban; http://www.sportni.net/wp-content/uploads/2023/11/Microplastics-Information-Paper-November-2023.pdf.

The challenge faced is trying to balance the health and well-being benefits that come from the use of AGPs with environmental sustainability factors. In recent times, concerns have been raised about the environmental impact of these pitches. These have mostly related to the fibre-loss of microplastics and, in the case of third generation (3G) pitches, the presence of rubber infill, which is also a microplastic.

In September 2023 the EU adopted a comprehensive ban on the sale of 'intentionally added microplastics' onto the European market, including the use of granular infill material used on artificial sport surfaces. The ban refers to intentionally added microplastic infill and will have an eight-year transition period. According to the Information and Position Paper on the Microplastics Ban published by Sport NI, although part of the United Kingdom and under the Windsor Framework, NI will continue to follow rules added to the EU Chemical REACH legislation. REACH is the EU regulation governing the manufacture and import of chemical substances. REACH is an acronym for the 'registration, evaluation and authorisation of chemicals' and has been in force in all EU Member States since 2007. This means owners/operators of 3rd Generation surfaces in Northern Ireland will have to comply with EU rules relating to intentionally added microplastics. Northern Ireland, along with all EU Member States, has now entered the 8-year transition period (ending September 2031).

It should be noted that the ban is only for the sale of polymeric infill materials. The ruling does not prevent the continued use of this material for AGPs, nor does it prevent the construction of new pitches with rubber crumb infill before 2031, but it may make the maintenance of these pitches after this time difficult. The eight-year transition period is important because it allows the 3G AGPs that are in widespread use by communities across Europe, to continue to be used and maintained until they reach their end-of-life. Replacement 3G surfaces are very expensive, and many pitch owners and operators would simply be unable to afford to do so before the end of the transition.

Pitch systems have already been developed using organic infill materials, including granulated cork, coconut fibre, olive stone husks, bark, sand and corn kernels. However, it is important to note that there are currently no widely available alternative infill products with proven durability on the market, that are as effective as rubber crumb and are suitable for all UK weather conditions and deliver the required football performance standards. Many of the alternatives to rubber crumb are new to the UK market, and little is known about their performance, durability, availability, lifecycle cost and importantly the impact on player experience.

Early research has shown that the organic infill products are not as durable as the polymeric infill. AGP owners may need to top up with more organic infill compared with the amount of polymeric infill they current use (approximately 15% more infill required) and may need to invest in more advanced AGP maintenance equipment which is significantly more expensive than current AGP maintenance equipment. Therefore, further research is required to ascertain the durability of organic infill products in the UK climate and suitability and performance capabilities on AGPs that are used for the elite game. Organic infills generally provide less energy absorption to players falling onto the surface than rubber infills, meaning the pitch systems in which they are used must include a shockpad underlayer.

Until there is a clearer understanding of alternative infill products, the adoption of containment measures is an important and responsible approach to prevent the migration of microplastics. Studies from around Europe show good design can reduce infill loss by 98%. This includes introducing measures and practices that minimise the risk of microplastic migration into drainage systems and local water courses. This can include practices such as not overfilling the pitch to prevent excessive levels of microplastic infill, ensuring that infill products are stored in secure locations, ensuring that infill installation equipment and carpet brushes are thoroughly cleaned before leaving the pitch, installing low-level containment barriers around the spectator perimeter fencing and boot cleaning stations for boots post-match. Full details of best practice can be found in the British Standards publication BS PD CEN/TR 17519: Surfaces for sports areas - Synthetic turf sports facilities - Guidance on how to minimize infill dispersion into the environment and on the website of the European Synthetic Turf Council (Knowledge Centre - Infill - ESTC - EMEA Synthetic Turf Council).

We are entering a period where there will be choices for pitch owners and operators to make and it's important that data exists to help future 3G AGP owners/ operators make the right choice of pitch. There are no accurate figures available at present to confirm the total number of NI football AGPs that will be impacted by the ban.

In addition to the concerns about rubber infill, the potential for fibre debris to also become an environmental pollutant are also now being investigated. As synthetic turf surfaces age and weaken through use, the yarns marking up the playing surface will split and breakaway. If this fibre debris is not collected, they will be carried off the AGP and become another form of microplastic pollution. Specialist maintenance equipment is available that vacuum cleans the surface to collect the fibre debris. As this process is only effective when the surface is dry it is recommended that AGPs are deep cleaned biannually in the Spring and early autumn.

The Irish FA remains committed to supporting its member clubs through the transition period and to opening dialogue with 3G AGP key stakeholders including central and local Government to understand what the EU ban will mean for the existing stock of 3G football AGPs in NI and the timings for any legislative decisions.

More information will be published when more research data is made available to the Irish FA.

Information detailed above accurate as of 8 February 2024.