

Address to Council meeting- 10.10.19.

Chair and Councillors.

I want to highlight a hidden but alarming source of pollution that is a threat to the Environment and Public Health and Wellbeing. Evidence is emerging daily and is overwhelming existing policy and regulation. It is the presence of toxic Microplastics that are to be found from mountain top to ocean floor and every environmental niche in between.

These invisible particles are found in our bodies, in the hearts of city children, in the placentas of unborn babies and affect our immune systems.

A recent study found that breathing air polluted with particulates can reduce young people's exam results on that day.

The particulates get ground down into ever smaller sizes and remain almost permanently in the environment. Land, River and Ocean.

A significant source is known to be Artificial plastic sports pitches.

Let me just give you some bare numbers:

A small 3G pitch, such as planned at Bath University,
will contain the following-

6 tonnes of Polyethylene

9 Tonnes of plastic stitching

3 tonnes of synthetic latex

47 tonnes of rubber crumb, which is either thousands of shredded car and lorry tyres or a virgin product made from oil of course.

The planned 3G pitch at Twerton will be larger and so contain more of each. About 120 tonnes of rubber crumb here.

A recent Swedish study estimates that each pitch will produce through erosion and drainage 70 kgs of microplastic for each year of life. That is 293 million particles.

The normal lifetime of a 3G pitch is about 10 years.

A 1/2 litre plastic water bottle weighs 11 grams,

In ten years a 3G pitch will eject into the environment the equivalent of 63,000 plastic bottles.

The rubber crumb is known to leach toxic heavy metals into the local environment and water drainage system.

In particular Zinc, which is toxic to aquatic organisms.

In Holland concentrations up to 20 times that allowed for a construction site were found.

A Hybrid pitch is no better.

A leading manufacturer states that in a hybrid pitch there are 20 million polypropylene fibres which amounts to 48,000 kilometres.

More than the circumference of the earth.

There is of course an alternative. Grass.

Not so convenient for the accountants but maybe a little better for the rest of us.

To rip out natural grass with all of its biodiversity and carbon sink potential and replace it with these artificial products must be wrong.

The microplastics are now thought to decay in sunlight and in the sea to produce methane and other climate change gasses as well as disturb the oceanic carbon cycle.

A conclusion from a study from August of this year. "If we stop all plastic entering the sea by 2020, the amount in the deeper oceans will still have doubled by 2050."

Last Wednesday, in a letter to the Times, a leading paediatrician called for the banning of such pitches, calling it "irresponsible" to continue.

I am asking council to halt all such installations whilst further international research is done.