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Bisphenols – BPA

All epoxy resins contain Bisphenol A (BPA) or similar bisphenol components. Epoxy resins are used in almost every part of our daily life (BPA *in a confined state*) such as paints, plastic drink bottles, flooring, water pipes, sewage pipes, etc. and in the manufacture of wind turbine blades.

BPA is a highly toxic synthetic compound recognised by the World Health Organisation (WHO) as an endocrine disrupter that has been linked to more than 80 diseases including cancer and reproductive disorders and can be lethal for young children. Vestas have confirmed that epoxy resins containing BPA are used in the manufacture of turbine blades. The blades, however, wear and then shed a fine dust of BPA throughout their life. This dust is spread wide and far by wind and if only one gram of it gets into dam or town storage waters, 10million litres of water is polluted and then rendered unusable. This dust (BPA *in an unconfined state*) from eroding blades has already covered large areas of our planet in proximity to wind farms and BPA is leaching into soils and waterways. Furthermore, the process is accelerated when the blades are cut up, dumped (on-site) and buried.

The wind industry openly admit that any turbine will emit at least 60kg of microplastics per year into the atmosphere which will find their way into soil profiles and waterways. That would be the equivalent of about 50 tonne of pure unadulterated BPA pollutants over 20 years finding its way into catchments from a typical 100 turbine wind farm. Now think about that number for a moment and the consequences for the environment and farm produce working its way up the food chain.

Contamination of waterways, soil profiles and waste management arising from wind turbine blades containing high levels of BPA is recognized worldwide as a '*ticking time-bomb'*. This toxic chemical group is slowly but surely working its way up the food chain and finishing up on our dinner tables.

Presently the DPE, EPA and presumably all LGA's consider that they are absolved from any responsibility regarding contamination caused or waste arising from wind turbine blades. And whilst these blades (unrecyclable) continue to be stockpiled in staggering quantities and leaching BPA, arbitrary discussion continues between government authorities as to what to do with them.

As an accredited LPA livestock producer selling beef into the Grass-Fed market, I am very aware of the strict compliance requirements of the rules and regulations set down by Meat Standards Australia in regard to hormonal growth promotant (HGP), grain or feed containing grain, feed containing animal fats, by-product stockfeed, feed containing chemical residues within a Withholding Period (WHP) when harvested, and any livestock still within a WHP or Export Slaughter Interval (ESI) as set by APVMA or SAFEMEAT following treatment with any veterinary drug or chemical, and their slaughter for export.

To meet these criteria a National Vendor Declaration (NVD) must accompany all movement of livestock and there is an obligation that I must be absolutely satisfied that I have correctly completed all parts of the NVD and that I understand that any misleading or unverified statements may result in prosecution, heavy fines or loss of my LPA accreditation thereby precluding me from trading.

Australia's reputation for clean green 'food and fibre' has been built over generations on the back of good practice and strict governance. A priceless reputation second to none and envied by our competitors. Export destinations like the US, Japan, China and Europe are already very aware of the dangers of BPA in foods and packaging. If they were to get a whiff that our beef or lamb could be contaminated with BPA or PFAS toxins, our brand built over generations would be destroyed overnight. Public health advocates are increasingly sounding the alarm over the need to find alternatives to the toxic chemicals and heavy metals in renewable energy components for the transition to progress cleanly. Accordingly, there needs to be a far greater focus on the toxic contamination risks arising from wind farms and BESS caused by erosion of BPA from the blades and the leaching of 'forever chemicals' and numerous heavy metals such as cadmium, cobalt, lead, lithium-copper, mercury, and nickel into our agricultural lands, water resources and atmosphere, and the associated Occupational Health & Safety (OHS) risks, Intergenerational Equity and potential elevated stock toxicity levels, to protect livestock producers.

There is no plan for where the hundreds of thousands of poisonous blades and millions of tons of dangerous batteries are going to end up or is there any guarantee that the development sites will be properly rehabilitated. Until such time as these issues have been resolved and environmental, property and food chain protection plans have been established and laws legislated, I call on government to adopt the '*precautionary principle*' and initiate a moratorium on all industrial wind farm applications.

Renewable energy is NOT clean, NOT green and NOT zero.

Ian McDonald, Walcha Grazier