

Dear Head of Parks and Gardens and The Mayor,

It has come to my attention that you use glyphosate containing herbicides on our streets, sportsgrounds, dog parks, playgrounds, beaches, roads and parklands. With two court cases in the US finished with US\$80 million payouts and another one in session and 11,400 pending, regarding Roundup and its link to Non-Hodgkin's lymphoma (NHL), I believe it would be prudent to reconsider what herbicide you are using.

I've sent this email to my solicitor as I feel that if the council gets this information, knows this information, then it is negligence on their part if they continue to spray Roundup and glyphosate on the Sunshine Coast. When I get fined by the council for parking in the wrong place or having a dog on the beach without a lead then I'm told that ignorance is not reason for cancelling the fine. It's with this in mind that I want our Mayor to know that ignorance will not be tolerated by the citizens of the Sunshine Coast and I'll be guided by the law as to what to do, if ignorance is the only reason glyphosate is still being sprayed.

Most councils will say the following; Please be aware that the Australian Pesticides and Veterinary Medicines Authority (APVMA) is the regulatory body in Australia for approving the use of pesticides like glyphosate. As part of approving the use of such chemicals, the APVMA is responsible for ensuring the protection of people, animals, crops, the environment and trade. I am advised the APVMA use independent scientific advice to inform and guide the decisions they make. APVMA have advised that all glyphosate products registered for use in Australia have been through a robust chemical risk assessment process and are declared safe to use, provided they are used in line with the label instructions. Should any decision be made by the APVMA on the use of Roundup, our Council will ensure it adheres to that decision.

Within 24 hours of the ruling in California for Monsanto/Bayer to pay US\$289 million in damages for Roundup causing NHL, APVMA came out with a statement saying Roundup and glyphosate were perfectly safe, but let's look at why they may make that statement.

Funding for APVMA is by registrants of pesticides meaning they are funded by companies whose product they register. The fact that 596 products in Australia have glyphosate and are registered by APVMA means that their budget would be severely affected if glyphosate was deemed to be cancer forming. As far as I can see they are guided by the US EPA that have been found to be colluding with Monsanto and have made disastrous mistakes since their conception in the 80's.

This is a statement directly from the APVMA website; Except for a minor budgetary appropriation, the APVMA's activities are funded through cost recovery. This is in accordance with the agreement which established the National Registration Scheme. Most of the APVMA's operational income is collected from registrants of pesticides and veterinary medicines. Registrants pay application fees to register products, and an annual fee to maintain product registrations. Registrants also pay levies based on the annual wholesale sales value of registered products.

If you continue to spray this chemical and any other one including chlorpyrifos and dicamba because you feel like you have no options then the following should be implemented in order to make sure the public and visitors to this region know there has been a chemical sprayed:

1. A food grade dye added to the chemical so that people have the option to stay away. Chemicals are invisible, we need to make the invisible, visible.
2. Cordon off the area you have sprayed with the included dye until it has dried.
3. Sign post clearly when the chemical was sprayed, what the chemical is, what the concentration was and why you are spraying.
4. It would also be prudent for the people who are spraying the chemicals to be in full protective clothing and face masks – litigations are rife in the US and no doubt employees who get NHL as a result of spraying glyphosate will have grounds for compensation.

Further reading

Info on California verdict of first two cases

<https://www.theguardian.com/business/2018/aug/10/monsanto-trial-cancer-dewayne-johnson-ruling>

<https://www.reuters.com/article/us-bayer-glyphosate-lawsuit/u-s-jury-says-bayer-mustpay-81-million-to-man-in-roundup-cancer-trial-idUSKCN1R82KY>

<https://www.theguardian.com/business/2018/may/22/monsanto-trial-cancer-weedkiller-roundup-dewayne-johnson>

<https://www.ecowatch.com/johnson-monsanto-trial-2579431928.html>

3rd case began in the US – 2nd April 2019

<https://usrtk.org/monsanto-roundup-trial-tacker/third-roundup-cancer-trial-starts-today/>

Here is an interesting piece:

<https://www.theguardian.com/us-news/2018/may/08/weedkiller-tests-monsanto-health-dangers-active-ingredient>

You can see a long list of Carey Gillam's work at her website on the topic. She is an investigative reporter and she understands Monsanto and their product Roundup better than most.

<http://careygillam.com/articles>

This piece might also be helpful: <https://sustainablepulse.com/2018/06/26/sustainable-pulse-interview-carey-gillam-on-whitewash-her-stunning-book-on-the-story-of-a-weed-killer-cancer-and-the-corruption-of-science/>

The history of glyphosate

1964 patent as descaling and chelating agent to pull minerals out of solution. It also pulls vital minerals out of the human body.

1969 patent as a herbicide stopping shikimate pathway (which requires the mineral Manganese), in bacteria fungi and plants stopping tyrosine, tryptophan, phenylalanine coenzyme Q10 and folic acid being produced. Therefore we don't get these important minerals and our gut bacteria stops making it for us.

1996 Patent for Roundup ready crops allowing this chemical to be sprayed on our foods, so we are not only ingesting it but being exposed to it in the environment. 0.7ppm in ingested water causes kidney damage.

2000 Used as a desiccant just before harvest on wheat, grain, legumes, seeds, as well as sprayed through fruit and nut groves. More foods with glyphosate in it, that are ingested at every meal.

2010 patent as an antibiotic – this is very disturbing, considering our need for soil bacteria and gut bacteria to have healthy food and a healthy body.

I asked Dr Stephanie Seneff to write me a summary of the effects of glyphosate – Dr. Seneff is one of the pioneers in discovering what was initiated the huge spike in chronic disease across all sectors of the population.

Some toxic effects of glyphosate to humans and other animal species By Dr Stephanie Seneff

Monsanto, its manufacturer, has claimed that glyphosate is non-toxic to humans because our cells do not possess the shikimate biological pathway, which it disrupts. However, this viewpoint ignores the fact that our gut microbes do have this pathway, and they use it to produce essential biological molecules that our own cells, lacking this pathway, are unable to produce. The products of this pathway are the three essential aromatic amino acids, tryptophan, tyrosine, and phenylalanine. These are three of the 20 or so coding amino acids that are incorporated into proteins using the DNA code as instructions. Proteins are the workhorses of the body, acting as enzymes, ion transporters, receptors for regulatory signals, and many other things. Furthermore, these amino acids are precursors for other very important biological molecules, including the neurotransmitters serotonin, melatonin and dopamine, thyroid hormone, melatonin and the skin-tanning agent melanin, as well as the B vitamin, folate and vitamin K. To give just one example, deficiencies in serotonin are linked to both obesity and violent behavior, among other things.

Studies on the microbes present in the digestive system of chickens have revealed that glyphosate disrupts the balance of the gut microbes, causing a deficiency in the commensal bacteria and an overgrowth of pathogens. It may be the case that the commensals are more dependent on the shikimate pathway, but it may also be that they are more severely disrupted by glyphosate's chelation of essential minerals. Glyphosate binds tightly to many minerals, particularly manganese, cobalt, iron, copper and zinc, making these minerals unavailable to the gut microbes. Studies on serum mineral levels in cows exposed to glyphosate in their GMO feed have shown a severe deficiency in both cobalt and manganese. Manganese deficiency has also been found through multiple studies, measuring it in different ways such as from hair and teeth, in association with autism. And the pathologies expected from manganese deficiency match well with the comorbidities of autism.

Glyphosate has also been shown in rat studies to severely suppress the liver cytochrome P450 (CYP) enzymes. This has multiple negative consequences, including impaired bile flow, impaired activation of vitamin D, impaired clearance of retinoic acid (leading to congenital developmental disorders such as spina bifida) and, most importantly, impaired ability to detoxify many other toxic chemicals in the environment. So glyphosate is synergistic with the other chemicals we are exposed to. Impaired bile flow would interfere with the ability to digest fats, among other issues. We have an epidemic today in vitamin D deficiency that may well be due to glyphosate's disruption of the liver's ability to activate it.

There has been an explosion in the number of people who have developed a sensitivity to wheat (gluten intolerance) in the past decade. While it has been proposed that genetic modifications away from the ancient heritage seeds plays a role, it is likely that the increasingly common practice of spraying wheat with glyphosate right before harvest as a ripener is a major factor. Prolyl aminopeptidase is a crucial enzyme for the metabolism of gluten in the gut, and it depends on manganese as a catalyst. Glyphosate would cause a depletion in the supply of manganese, causing the gluten to remain undigested and therefore leading to an immune reaction to the gluten and subsequent autoimmune disease.

Glyphosate is a patented antimicrobial agent, and so it acts as an antibiotic, and this is likely a major contributor to the multiple antibiotic resistant pathogens that are causing severe disease among infected individuals today. *Pseudomonas aeruginosa* is one of the very few microbes that can actually metabolize glyphosate, using its phosphorus atom as a source of phosphorus. This may be the reason why we have an epidemic today in multiple antibiotic resistant *Pseudomonas aeruginosa* infection in hospitals. Chronic exposure to glyphosate allows pathogens to develop an ability to rapidly export multiple antibiotics through the development of efflux pumps, protecting themselves from harm (becoming resistant to the antibiotic), and therefore making treatment options very difficult.

Last year the World Health Organization issued a statement that glyphosate should be reclassified as a “probable carcinogen.” This was based on a careful evaluation of the prior literature on this subject. Most compelling was an increased risk to Non-Hodgkin’s lymphoma and leukemia. There are also very strong correlations between the rise in the rate of thyroid cancer and pancreatic cancer in the United States and the rise in glyphosate usage on core crops.

Besides these cancers, many other debilitating diseases and conditions have incidence rates that are rising dramatically in the US in step with the dramatic rise in glyphosate usage on core crops. These include autism, Alzheimer’s disease, inflammatory bowel disease, Celiac disease, diabetes, obesity, kidney failure, liver disease, failure to thrive among infants, congenital facial and musculoskeletal anomalies, newborn blood and skin disorders, enlarged heart, etc.

Further reading:

1. Shikimate pathway, mineral chelation, CYP enzyme suppression:

Samsel A, Seneff S. Glyphosate'S suppression of cytochrome P450 enzymes and amino acid biosynthesis by the gut microbiome: Pathways to modern diseases. *Entropy*. 2013;15:1416– 63.

2. Consequences of manganese deficiency due to glyphosate:

Samsel A, Seneff S. Glyphosate, pathways to modern diseases III: Manganese neurological diseases, and associated pathologies. *Surgical Neurology International* 2015;6:45.

3. Suppression of CYP enzymes in rat liver:

Larsen K, Najle R, Lifschitz A, Maté ML, Lanusse C, Virkel GL. Effects of sublethal exposure to a glyphosate-based herbicide formulation on metabolic activities of different xenobioticmetabolizing enzymes in rats. *Int J Toxicol*. 2014;33:307–18.

4. Disruptions of gut microbes in poultry:

Shehata AA, Schrödl W, Aldin AA, Hafez HM, Krüger M. The Effect of Glyphosate on Potential Pathogens and Beneficial Members of Poultry Microbiota In Vitro. *Curr Microbiol* (2013) 66:350-358.

5. Depletion of manganese and cobalt in cows:

Krüger M, Schrödl W, Neuhaus J, Shehata AA. Field investigations of glyphosate in urine of Danish dairy cows. *J Environ Anal Toxicol*. 2013;3:1–7.

6. Gluten intolerance and Celiac disease:

Samsel A and Seneff S. Glyphosate, pathways to modern diseases II: Celiac sprue and gluten intolerance. *Interdiscip Toxicol* 2013; 6(4):159-184.

7. Glyphosate as antibiotic:

Kurenbach B, Marjoshi D, Amábile-Cuevas CF, Ferguson GC, Godso W, Gibson P, Heinemann JA. Sublethal Exposure to Commercial Formulations of the Herbicides Dicamba, 2,4- Dichlorophenoxyacetic Acid, and Glyphosate Cause Changes in Antibiotic Susceptibility in *Escherichia coli* and *Salmonella enterica* serovar Typhimurium. *nBio* 2015;6(2):e00009-15.

8. Glyphosate as a “Probable Carcinogen”:

World Health Organization. IARC Monographs Volume 112: Evaluation of five organophosphate insecticides and herbicides. 20 March, 2015.

Guyton, K.Z., Loomis, D., Grosse, Y., El Ghissassi F., Benbrahim-Tallaa, L., Guha, N., Scoccianti, C., Mattock, H. & Straif, K., on behalf of the International Agency for Research on Cancer Monograph Working Group, IARC, Lyon, France. Carcinogenicity of tetrachlorvinphos, parathion, malathion, diazinon, and glyphosate. *The Lancet* 16(5) (2015) 490-491.

9. Correlations between rise in glyphosate usage on core crops and rise in a large number of debilitating diseases in the US:

Swanson NL, Leu A, Abrahamson J, Wallet B. Genetically engineered crops, glyphosate and the deterioration of health in the United States of America. *Journal of Organic Systems* 2014;9(2):6-37.

Hoy J, Swanson N, Seneff S. The High Cost of Pesticides: Human and Animal Diseases. *Poult Fish Wildl Sci* 2015;3:1.

You might also like to read the following paper:

Critical Review of the Effects of Glyphosate Exposure to the Environment and Humans through the Food Supply Chain Vincenzo Torretta et al. Plug this into your google search engine you will easily find this paper published in Sustainability.

The following link shows the destruction glyphosate is having on the human microbiome, and its association with Autism by Dr Stephanie Seneff: <http://www.greenmedinfo.com/blog/how-glyphosate-poisoning-explains-peculiaritiesautism-gut>

Here is a brilliant 39-minute talk about the history of glyphosate and its effect on humans and animals and plants: <https://www.youtube.com/watch?v=bN3LXjigjlg>

Here is an interview regarding glyphosate; when Dr Don Huber, is asked which would he prefer DDT or glyphosate? - he says hands down DDT (this is a banned chemical). Dr Don Huber has been a plant pathologist for 55 years, he has worked with the USDA and department of defense and warned them about a novel protein and a microbe in Roundup ready crop in 2011, they ignored him and then discredited him: <https://www.youtube.com/watch?v=ENmc9kHnvbo>

If you want to learn more about agriculture and the use of lignite and peat in solving our eroding soils as well as using a contact herbicide go to <https://contactorganics.com.au> Another alternative that councils have trialed is Slasher (pine oil); it works at the seed level rather than the biochemical level. Think about a pine forest there is very little vegetation due to the pine oil. As well as steam weeding, which is efficient without any chemicals needed: <https://www.steamweedaustralia.com.au>

And finally, the following is a food testing report for glyphosate. It is not pretty, remember that this is an American publication, but it will be similar in Australia as products with glyphosate are used extensively in agriculture and council and people's back yards. The sad thing is the FSANZ – Food Standards Australia and New Zealand believes glyphosate is safe and does no food safety testing for this chemical. NMI test for 144 chemicals in our food supply but not one of the 596 registered in this country containing glyphosate is tested on the supermarket screening analysis. Considering 70 foods in Australia have been approved for application before, around or on, using glyphosate I would say we have a huge contamination in our food supply of glyphosate metabolites:

https://nutritionalbalancing.org/center/htma/food/_p/_file_dwnld.php?index=31