



DANUTA HULAJKO

OBJECT

Submission ID: 216720

Organisation: <i>DH Natural Medicine Clinic</i>	Key issues: <i>Social impacts, Visual impacts, design and landscaping, Land use compatibility (surrounding land uses), Traffic, Other issues</i>
Location: <i>New South Wales 2577</i>	
Attachment: <i>N/A</i>	

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I Danuta Hulajko, Naturopath, DH Natural Medicine Clinic strongly object to the proposed Plastic Recycling Facility in Moss Vale.

The proposed location is situated in the middle of the small community of the Southern Highlands residential, and it will have a detrimental impact on my health, my patients and the whole community, Greater Sydney and it will devastate the local economy.

Health impact of plastic recycling facilities

1. Plastic recycling facilities are the largest generators of micro, neoplastic and PFAS. Those chemicals suppress immunity

References:

2024 | Microplastics created during recycling harming our environment - University of Wollongong “Recycling process produces microplastics | ScienceUOW

Evaluating the generation of microplastics from an unlikely source: The unintentional consequence of the current plastic recycling process - ScienceDirect

How nanoplastics cause antibiotic resistance and the rise of superbugs

2. Respiratory symptoms such as nasal congestion, eczema conditions are present in residents living 500m-900, away from plastic recycling facilities.

Reference:

Evaluating the Effects of Air Pollution from a Plastic Recycling Facility on the Health of Nearby Residents - OKAYAMA UNIVERSITY SCIENTIFIC ACHIEVEMENT REPOSITORY

3. Impacts of plastic chemicals on human health

There are great concerns in the scientific world over health impact of plastic on food chain and the human health

-Endocrine disrupting chemicals (EDCs) in plastics represent a major concern for human health.

-The plastic chemicals nonylphenol and bisphenol A were among the earliest identified

compounds that interfere with the normal functioning of hormone systems.

These findings marked the beginning of a broader recognition of the role of plastic chemicals in

endocrine disruption and dozens have since been identified as EDCs.

-This includes several other bisphenols, phthalates (used as plasticizers), benzophenones (UV filters), and certain phenolic antioxidants, such as 2,4-ditertbutylphenol. For example, strong scientific evidence links bisphenols to cardiovascular diseases, diabetes, and obesity. Accordingly, there is a strong interconnection between plastic chemicals and endocrine disruption.



-PFAS are strongly associated with an increased risk of cancer, thyroid disease, and immune system effects, including reduced vaccine efficacy in children.

-Additional concerns pertain to their persistence and their tendency to bioaccumulate in humans. In addition, brominated and organophosphate flame retardants have been linked to neurodevelopmental effects and endocrine disruption, adversely affecting cognitive function and behaviour in children, as well as thyroid and reproductive health. Several other plastic chemicals are known to cause harm to human health, for example because they are mutagens (e.g., formaldehyde) or carcinogens with other modes of action, like melamine.^{74,7'}

'Two thirds of plastic chemicals lack hazard information. Around 66% (10 726) of all plastic chemicals have no hazard information available in the consulted sources and thus have not been evaluated in this study (Figure 11). Accordingly, it remains unknown whether two thirds of plastic chemicals are of concern or not, highlighting the remarkable lack of (accessible) information on the hazards of many plastic chemicals and the order of magnitude of efforts that remain to understand and manage plastic chemicals. Combining multiple sources reveals more chemicals of concern in plastic. Combining, harmonizing, and updating the different hazard classifications results in >1100 additional chemicals being considered as 'of concern', compared to the latest UNEP assessment on chemicals in plastics.² PlastChem, thus, significantly expands the knowledge on the presence of hazardous chemicals in plastics. When comparing the results of this report with previous work (Table 5), the following aspects need to be noted. First, while 4554 chemicals are present in various hazard lists, the sources do not provide actual hazard data for these chemicals. Thus, previous studies overestimated the number of chemicals with actual hazard information, whereas the present report captures this aspect. Second, in accordance with UNEP's Technical Report² and previous literature,^{103,105} PlastChem also differentiates between recognized (harmonized regulatory sources) and identified (self-classified by the industry under REACH) chemicals of concern.

340 chemicals of concern fulfil at least three hazard criteria. Out of these chemicals of concern, one is persistent, bioaccumulative, mobile and toxic (1,2,3-trichlorobenzene, CASRN 87-61-6), 224 are persistent bioaccumulative and toxic (PBT), and 115 persistent, mobile and toxic (PMT). This means that 8% of the chemicals of concern in plastics fulfil at least three hazard criteria.'

Reference: https://plastchem-project.org/?fbclid=IwY2xjawGqVUdleHRuA2FlbQlxMAABHZbjloW7zHsi6LPkDRrOCxBcJSNuSaCIQK_AQEoAqmo cbMG7Dg5ElvdumA_aem_Td22zJ42mEpEp5b-DSuGdw

4. Example of PVC plastic health risks

PVC plastics cause:

Liver cancer, lymphoma, leukemia, brain and lung cancer

Miscarriages and birth defects

Exposure to PVC cause headaches, dizziness, difficulty breathing and severe exposure can be fatal

Reference:

Get the facts about vinyl chloride - a toxic chemical that threatens human health Beyond Plastics - Working To End Single-Use Plastic Pollution

5. There is a high risk of fire of any plastic recycling facility.

There are high fire risk involved especially because the 'cost' of a fire is not purely loss or damage to property and interruption in business process. The long-lasting effect and cost to the environment is substantial.¹¹ Costs from an incident include the contaminations of water supplies and damage to plant life due to run-off water, and the noxious fumes causing an array of respiratory complications to the population



in the surrounding areas. While effort should certainly be directed towards sustainability, the effects of this on fire safety should not be neglected. Although well intentioned, limited research has been done to assess the fire safety associated with the products produced from recycled plastics especially when used in an unconventional application such as roads or bricks to build a house.

Reference:

Literature review and hazard identification relating to fire safety in commercial plastic recycling facilities - Courtney Devine, Natalia Flores, Richard Walls, 2023

6 Plastic recycling generates PFAS (forever chemicals)

Bioaccumulation of PFAS by several gut bacterial species over a wide range of concentrations from nanomolar up to 500 μ M. This means that gut bacteria is getting bigger' trying to neutralise PFAS.

Reference:

Extensive PFAS accumulation by human gut bacteria | bioRxiv

There is no technology to filter micro and nanoplastic in plastic recycling facilities. The EIS by the GDH does not discuss it in a single paragraph. Due to the size of micro and nanoplastic there will never be a technologies to remove them from air, water, soil, food and our bodies. When plastic degrades, it releases microplastics (particles smaller than 5mm) and nanoplastics (even tinier particles, often less than 1,000 nanometers) into the environment. These particles permeate nearly every corner of our planet, including our bodies.

7 PFAS cause colon cancer and impair kidney function, fertility

https://www.msn.com/en-au/health/other/water-chemicals-may-partly-explain-disease-explosion-in-young-people/ar-AA1tz61G?ocid=socialshare&fbclid=IwY2xjawGqd-xleHRuA2F1bQlxMQABHfAv38RjguzBomKIDj3ilBwxEBZfkk3LwL85rCALs1ti7CC_FxIPmoJycQ_aem_yuitTL7ydtx50cpBfcPVcg

8. Plastic recycling made 1,000 times more plastic than they cleaned up

Plastic recycling has no future ' Oil and chemical companies who created a high-profile alliance to end plastic pollution have produced 1,000 times more new plastic in five years than the waste they diverted from the environment, according to new data obtained by Greenpeace.'

The data reveals the five companies alone produced 132m tonnes of two types of plastic; polyethylene (PE) and PP (polypropylene) in five years - more than 1,000 times the weight of the 118,500 tonnes of waste plastic the alliance has removed from the environment in the same period. According to Will McCallum, a co-executive director at Greenpeace UK 'The current recycling schemes produce by oil companies can barely make a dent in all the plastic these companies are pumping out

Five firms in plastic pollution alliance - made 1,000 times more plastic than they cleaned up' | Recycling | The Guardian

Summary

There are 100th other reasons as to why DA (SSD -9409987 of Plasrefine in Moss Vale should be refused. As a health practitioner I ask the Commissioners of the IPC to consider its all implications. The health implications of this proposal will be felt for ever and the vibrant local community and economy may never recover. As demonstrated above we still do not know the full extent of implications of plastic recycling on health due to the lack or limited data. The current scientific data is horrifying already. So how the Department of Planning and the IPC can make an informed decision on the location of the proposed plant Moss Vale in the middle of the residential area of the SH?



New South Wales Government
Independent Planning Commission

There is a huge responsibilities laying on the shoulders on the Commissioners of the IPC. It is a decisions which may have huge implications.

regards Danuta Hulajko, Naturopath, SH
