



NAME REDACTED	OBJECT	Submission ID: 217639
Organisation: N/A	Key issues: <i>Land use compatibility (surrounding land uses), Traffic, Other issues</i>	
Location: <i>New South Wales 2577</i>		
Attachment: N/A		

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*IPC submission*

*The proposed site for the Plasrefine recycling plant in Moss Vale is not the right site! I am a local Science & Chemistry teacher who has lived in Moss Vale and worked in a local high school for over 20 years. As part of my BSc (Hons) in Applied Chemistry, I studied both analytical and organic chemistry and I have spent years educating young people in both the advantages and disadvantages of the use chemicals in society.*

*Plastics & polymers have significant benefits and, whilst recycling is a better option in terms of energy than sending to landfill and producing more waste, the choice of the location of any industrial facility needs careful thought in terms of location, construction and operation.*

*It is blatantly obvious that any industry being built in a rural area 150m from residential housing needs more careful thought. One of my major concerns is that when faced with significant community disapproval backed by environmental concerns, GHD the company behind the plan is not interested at looking for another location. This seems to be related to the bargain price of the block that they bought in 2020. This does not bode well for how they will run their facility, for if they look to operate at maximum profit, they are likely to cut corners in relation to pollution control.*

*Microplastics (<5mm) are a significant global issue. Plastics are highly stable and as such they are broken down to smaller and smaller particle sizes. Microplastics are easily carried by winds which are plentiful in the Southern Highlands and once they enter waterways they can easily be absorbed by organisms. The site is only about 1500m from the Wingecarribee River, which leads directly into the Wollondilly River and then into Lake Burragarang, the major water supply for Sydney. The main wind direction in Moss Vale is from the Southwest. This will blow any pollutants emitted towards Burradoo, including Oxley & Chevalier Colleges, then onto Bowral where there are multiple other schools and a larger population centre.*

*There have been many cases of the full impact of Scientific development not being fully understood until many years later. These include the previously award-winning development of Tetraethyl Lead as an additive to petrol and the use of CFC's as refrigerants. We now know understand the impact of Lead as a cumulative toxin in the atmosphere and the impact of CFC's on the destruction of the Ozone layer. There is a very real possibility that the full impact of microplastics will not be understood for many decades and we currently have a proposal which, if not managed under the strictest of guidelines, will be releasing them among our population and allowing them to enter our major water supplies.*

*HSC Chemistry exams from 2001 " 2018 had questions in the Industrial Chemistry option on the location of Chemical Industry. This focused on raw materials, production, uses & waste. Any of my students could have analysed the current site and would determine that it does not meet these criteria. The access in relation to importing the raw materials and transport of the products by trucks that have to pass through residential areas, including narrow, and steep country lanes is not appropriate. As previously discussed, the waste issue and proximity to the Wingecarribee river is also a major concern.*

*There will no doubt be other people who express their concerns, and it seems logical to compare the location of this industry to similar industrial sites in Australia and it seems they are in excess of 1.9km from residential areas, not 150m.*



*My final comment in relation to the release of data and statistics in relation to this case and how they can be used to deceive people, whether in tabulated or graphical form.*

*The mass of these microplastic particles is very low, so measuring emissions by mass is misleading. A total number of particles is hard to determine but would give a better estimate of the size of the problem. For example, 100kg of plastic waste is likely to be at least 1 million individual particles between 1nm – 5mm in size.*

*Care must also be taken once the language increases beyond 1 million. Words like billion and trillion appear to many to be just a much larger number but to put into perspective:*

- *1 million seconds is about 11.5 days*
- *1 billion seconds is about 31.7 years*
- *1 trillion seconds is about 317 centuries!*

*Data & statistics can be used to conceal as much as they reveal. Graphs can have limited axes to inflate/deflate the data, and an excess of data can be deliberately confusing.*

*In conclusion, the site in question in Moss Vale is not suitable for a plastics recycling plant or any other form of heavy industry.*

*Please reconsider this application and encourage the owners to seek an alternative site for their facility.*

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