

NAME REDACTED		OBJECT	Submission ID:	216516
Organisation:	N/A			
Location:	Redacted	Key issues:	Other issues	
Attachment:	N/A			

Submission date: 11/21/2024 7:16:31 AM

I have previously made submissions to the Department of Planning regarding Plasrefine's proposal, arguing that it should be formally assessed as Hazardous or Offensive Development (in addition to the usual requirements for Waste Management Facilities) and that the facility should be located much further away from any residential areas.

In addition to the scientific papers I cited earlier, a more recent paper also supports that position. Almroth et al (2023) states: The zero draft of the Global Plastics 'Treaty affirms that the presence of hazardous chemicals poses a substantial barrier to the safe and environmentally sound management of plastics. Additives, non intentionally added substances (NIASes), and contaminants in plastics complicate their reuse and disposal and hinder plastic recycling, which has been touted as a key solution to the plastics pollution crisis. Studies show evidence of accumulation of hazardous substances even in relatively close-loop plastic recycling systems, such as those for food-grade polyethylene terephthalate, but recyclers lack the tools and information needed to identify these and remove them from plastic products. Hazardous chemicals present risks to recycling workers and consumers as well as to the wider society and environment. However, current regulations do not require plastics producers to track or make available information on the levels of harmful chemicals. Because upstream producers lack the incentives to disclose this information, recyclers are unable to control hazardous substances.

The recent SSD Assessment report has not addressed several important issues that were previously raised. Plasrefine's original EIS only assessed 3 individual VOCs (benzene, toluene and styrene), but there are many more noxious compounds that can be released when plastic is melted, some of which are carcinogenic or neurotoxic (Yamashita et al. 2009). Plasrefine stated that acrolein (a substance used in chemical weapons) and acrylonitrile (which is highly flammable) will be among their by-products/ emissions. Both of these are extremely dangerous substances, and not enough detail has been provided about how they will be dealt with. Plasrefine/ GHD stated that a preliminary risk screening was carried out in accordance with SEPP 33, but it is not clear whether all relevant substances were included in that process.

It remains unclear how effective Plasrefine's air filtration systems will be. Claims that they will capture 99% of airborne emissions have been made, but no evidence has been presented to back this up. It is not even clear if Plasrefine yet know what type of equipment they will be using. This is a critical detail; the health of the surrounding community depends upon it. Even if the 99% capture claim is true, this still presumably leaves 1% of emissions released untreated to the atmosphere. When the facility is operating at full capacity, this would be equivalent to melting down 3 tonnes of plastic per day in the open air, which would surely be considered unacceptable if an ordinary citizen did this near any residential area.

In addition to emissions from flues etc, the latest information is that the roller doors' opening time will add up to about 5 hours per day. Have VOC and particulate emissions from this additional source even been quantified? The resulting air pollution will impact on all people in surrounding areas, including those at nearby schools and sporting facilities. Parts of the Bong Bong footpath, which the council has recently refurbished with great success, and which so many locals use for exercise, are within 1 km of the proposed Plasrefine site.

The risk of a fire at the facility is still very alarming despite the assurances of the latest SSD Assessment report. It's all very well to say the ABR staff and other neighbours can retreat indoors or be protected by their sprinkler systems, but many of the surrounding properties have livestock; where are they supposed to go? What about neighbours whose houses are not well sealed? The dispersal of any smoke or toxic emissions will depend



entirely on wind conditions at the time; it seems ridiculously optimistic to predict they would all go straight upwards. The prevailing North/Northeast in spring and summer would be likely to direct smoke/ emissions straight towards the centre of Moss Vale. It is not only the nearest neighbours or sensitive receivers who would be affected. The noxious emissions from such a fire could affect a much wider area, necessitating the evacuation of livestock and people, creating an awful and chaotic scenario.

Furthermore, Plasrefine/GHD have glossed over the large carbon footprint of the project that will result of transporting the plastics from considerable distances away. This problem could be mitigated by having smaller-scale recycling facilities closer to Sydney, Canberra and Wollongong (but not in such close proximity to suburbia as the proposed Moss Vale site).

On a more personal note, having previously moved to Moss Vale from the city because my asthma was exacerbated by urban air pollution, the advent of this factory would mean having to move elsewhere. Only households may be similarly affected. Real estate prices in the area would probably plummet, so people would be financially disadvantaged as well as subjected to emotional and mental stress.

Please can the IPC insist that this development be relocated to a more suitable site away from residential areas, and also that the proposal be properly assessed as Hazardous or Offensive Development before it is allowed to proceed.

Please do not dismiss the people of the Southern Highlands as NIMBYs. Most people would agree that plastic recycling is important, but this kind of factory should not be this close to anyone's backyard! Surely there must be more suitable sites to be found?

## References

Almroth et al (2023) Chemical simplification and tracking in plastics. Science 2 Nov 2023 Vol 382, Issue 6670 p 525

Kyoko Yamashita , Naomichi Yamamoto , Atsushi Mizukoshi , Miyuki Noguchi , Yueyong Ni & Yukio Yanagisawa (2009) Compositions of Volatile Organic Compounds Emitted from Melted Virgin and Waste Plastic Pellets, Journal of the Air & Waste Management Association, 59(3): 273-278.