

URSULA O'DWYER		OBJECT	Submission ID: 216725
Organisation:	N/A	Key issues:	Social impacts, Visual impacts, design and landscaping,Land use compatibility (surrounding land uses),Traffic,Other issues
Location:	New South Wales 2577		
Attachment:	N/A		

Submission date: 11/21/2024 2:49:04 PM

Speaker Notes from Day 1 of Public Meetings - Formal and more substantial written submission is to follow in a subsequent submission.

Thank you Commissioners,

My name is Ursula O'Dwyer and I am here to speak as a concerned, afraid resident of Moss Vale and a new mum who has put down roots in our beautiful southern highlands town to raise our young family. We live less than 2km due east of the proposed Plasrefine site, and I, like so many in this community for the last 4 years have been gripped with worry, stress and fear that we would be in the position we are now - on the verge of this proposal being approved. This community's outrage and objection is not a case of casual or generic NIMBYism (Not In My Back Yard). Our objections are multifaceted, factual and holistically amount to the fact that the proposed site is totally inappropriate for this type of facility.

An appropriate location for a proposal such as Plasrefine should have at least a 2km buffer zone between the site and the nearest residential home. The lack of buffer zone in this proposal is extremely concerning - with the nearest residence 200m from this proposed site. The site is 30m from a medical research facility, Garvan Institute, that breeds mice for medical research purposes - these mice cannot and should not be exposed to the 24/7 vibrations, emissions, light, noise, air and other pollutants that will come from this facility. It is also within 500m of a daycare center, where the individuals most vulnerable to toxins, chemicals and microplastic exposure spend all day - our children.

Microplastics:

In a 2023 study published in the Journal of Hazardous Material Advances - An international team of scientists sampled wastewater from a state-of-the-art recycling plant at an undisclosed location in the UK. The study found that the microplastics released into the wastewater from the plant amounted to 13% of the total plastic it had processed. The researchers estimated that the facility could be releasing up to 75bn plastic particles in each cubic metre of wastewater. The study suggests the recycling plant discharged up to 2,933 metric tonnes of microplastics a year before the filtration system was introduced, and up to 1,366 metric tonnes afterwards -



although a reduction, that is still astronomical. A majority of these particles were smaller than 10 microns, about the diameter of a human red blood cell, with more than 80% smaller than five microns - making these environmentally relevant.

This demonstrates that even with state of the art technology and filtration, Plastic recycling plants globally are releasing significant amounts of microplastics (and the PFAS that has bonded to them), into the environment around them, via their wastewater and air emissions as they are not capable of capturing all microplastics of this size and scale.

In Appendix 1 of Plasrefines Social Impact Assessment Section 5.6.

The language used in the proposal "it is understood that Plasrefine aims to treat it's own wastewater" makes evident there is no clear accountability or ownership end-to-end by Plasrefine to treat the wastewater and assure zero contamination, they merely aim to try to filter the water, after its been contaminated by the washing, treating and heating of the plastics in the recycling process. This then allows the proponent to push accountability onto council in the hopes that the council's water treatment plant will capture the rest (spoiler alert it can't and council has made this clear). This is unacceptable to the council as they have objected stating clear water infrastructure gaps, and it is totally unacceptable to the community. Recycling facilities like Plasrefine should not be anywhere near water catchment areas, agricultural and viticultural lands, residential areas or schools - all of which this site is with no buffer zone. It will have a huge detrimental impact on our communities health, our children's and future generations health, on our economy (if the agricultural lands are affected, tourism, real estate will also be impacted), and on our environment and wildlife.

Riparian Zones:

Amplifying the effect of microplastic emissions on the site via wastewater - is that there are 2 riparian zone on this site, that feed into the Wingecarribee river (a known platypus habitat) and then which feeds into the Warragamba dam - which is Sydney's and the wingecarribee's

## drinking water.

There is already huge public outrage about the existing PFAS and microplastics in Warragamba dam, costing \$ multibillions in associated remediation costs - remediation science and effort that is emerging and experimental at best. So how could the NSW government/ DPHI think it is appropriate to create an even bigger PFAS/Microplastic problem by recommending the approval of this facility, in this site?

I am urging you to focus on PREVENTION, instead of further and uncertain remediation of an issue that is already causing health effects & public outrage. This is not the right site.

For the future of our resident's health - this is not the right site.

For the the children of the southern highlands - this is not the right site



For the platypus and other native wildlife - this is not the right site

For the economy of the southern highlands - agriculture, viticulture, & tourism - this is not the

right site.

For the livestock, equestrian, pets and animals of the southern highlands - this is not the right

site

For the water and air quality of the Wingecarribee Shire & Sydney - this is not the right site.

Thank you.

Source: 'The potential for a plastic recycling facility to release microplastic pollution and possible filtration remediation effectiveness',

Authors: Erina Brown, Anna MacDonald , Steve Allen, Deonie Allen; May 2023

https://www.sciencedirect.com/science/article/pii/S2772416623000803