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RE: Proposed Plasrefine Plastics Recycling Facility 74-76 Beaconsfield Rd Moss Vale NSW 2577 SSD
Application No – 9409987

I am writing to express my deep concern regarding the proposed construction of a plastic recycling facility within the boundaries of the Sydney Drinking Water Catchment.

I would like my objection to the proposal by Plasrefine Recycling Pty Ltd, to be located at 74-76 Beaconsfield Road, Moss Vale NSW 2577 to be recorded.

Specifically, I am concerned about the discharge of microplastics into the Wingecarribee River system, which could impact the Sydney drinking water catchment, through both air emissions and the overburden of the Moss Vale Sewage Treatment Plant if the above proposal proceeds.

The Sydney drinking water catchment area covers 16,000 square kilometres and services more than five million people in NSW. The integrity of this catchment is critically important to the residents and economy of greater Sydney and NSW, and it must be protected from microplastic pollution.

While plastic recycling aims to reduce waste and promote sustainability, it is not a perfect process and can still contribute to environmental issues. Plastic recycling facilities generate waste and by-products that need to be appropriately managed by skilled and competent operators to prevent further pollution.

Plastic pollution has become one of the most pressing environmental challenges of our time. It is increasingly clear that plastic waste, including micro and nano plastics, poses a severe threat to our ecosystems, wildlife, and human health. Rivers play a crucial role in carrying these pollutants downstream, making them a major contributor to the contamination of our oceans and the degradation of aquatic habitats.

While recycling is undoubtedly an essential component of waste management, we must exercise caution in the placement of recycling facilities. Constructing a plastic recycling facility in a drinking water catchment area is a grave mistake with potentially disastrous consequences.

The EPA, in its response to the Environmental Impact Statement prepared by GHD, raised concerns about several waste issues related to the proposed facility, including the presence of microplastics in liquid waste. Noted in the Response to Submissions Report by GHD on behalf of Plasrefine Recycling Pty Ltd, the EPA noted the need for additional information regarding the potential for microplastics to enter the Council wastewater treatment system. While the applicant has committed to providing additional details during the detailed design phase of the treatment process, the risk to the environment and human health is too great to be left unresolved until after approval is given. Detailed design must address the issue of microplastics as requested well before consent is granted.

A recently published peer-reviewed research article in the Journal of Hazardous Materials Advances (vol. 10, May 2023, Erina Brown, et al) examined the potential for a plastic recycling facility to release microplastic pollution and the effectiveness of filtration remediation. The study, conducted in the UK in a state-of-the-art facility with filtration, found that between 6% and 13% of the processed plastic was discharging as microplastics into the environment. The discharge occurred via wastewater into the city waste treatment plants and through air emissions in and around the facility. After filtration, over 1,300 tonnes of microplastics were recorded per year. Based on the same formula, the potential discharge from the Plasrefine Recycling proposal (at 120,000 tonnes), using the same or similar process to recycle the plastic, would be a minimum of 7,200 tonnes of microplastics discharged to the Moss Vale Sewer Treatment Plant yearly (after filtration) and into the air in and around the facility. This is a major concern as the proposed facility, after treatment and sanitization, discharges to Whites Creek, a tributary of the Wingecarribee River.

I have outlined some key reasons why this project should be refused in its current location:

Water Contamination: Plastic recycling processes, especially those involving mechanical recycling (as in the case of Plasrefine), have the potential to release micro and nano plastics into the surrounding environment. These particles can easily find their way into rivers and ultimately contaminate drinking water supplies. Introducing such a factory within the catchment area poses an unnecessary risk to the health and well-being of our community.

Ecosystem Disruption: River systems are incredibly dynamic and delicate ecosystems that support a wide array of plant and animal species. Micro and nano plastics have been found to disrupt the natural balance of these ecosystems, leading to adverse effects on aquatic organisms, including fish, amphibians, and invertebrates. By jeopardising the integrity of our rivers, we would be endangering the long-term survival of numerous species and compromising the overall biodiversity of our region, including the "at-threat" Platypus.

Public Health Concerns: Our drinking water is a vital resource that must be protected at all costs. The presence of micro and nano plastics in drinking water has raised concerns regarding potential health risks to humans. While the full extent of these risks is still being investigated, it is widely recognised that plastic particles can absorb and release harmful chemicals, which may be ingested by people. Introducing a plastic recycling facility into a catchment area directly threatens the safety and well-being of the community.

Given these factors, I kindly ask that you consider the issues above and take appropriate action to refuse the proposal for the construction of the plastic recycling facility in the Sydney drinking water catchment. It is crucial that we prioritise the preservation and protection of our rivers, ecosystems, and public health. I urge the proponent to explore alternative locations for the factory that do not jeopardise our precious water resources, as Premier Chris Minns recently stated, ***a reliable supply of clean water should be a constitutionally protected right.***

Regards