Moss Vale Plastics Recycling Facility (SSD-9409987)

I write with 3 main headings of concern. Two of these, in my view, cannot be remedied by the Proponent and should argue that State Significant Development cannot be granted for this proposal.

These 3 issues are:

1. **Vehicle Access**
2. **Impact on medical research of national significance**
3. **Micro-plastics**

1. Vehicle Access

Community concerns on this front, rated as a 'HIGH' concern in Plasrefine's technical submissions, can be easily summarised. Access depends on a series of roads that do not currently exist, have unknown time-frames to completion and uncertainty as to if they will ever be completed. The current proposal projects access from the Hume highway and Berrima Road, having conceded that access for hundred of heavy vehicles per day through Moss Vale Town Centre is inappropriate. However, this access pathway relies on roads currently under construction, not yet commenced construction and not yet commenced in planning. Ultimately, access via this route is in no way assured. If the site were constructed and delays or impasses encountered in this proposed access, then there would be extreme pressure to allow road access through the Town Centre. The Application rests upon future road construction that is not within the Applicant's remit to guarantee will ever occur.

2. Potential destruction of Garvan Institute / Australian BioResources functionality.

As you are aware, this site directly adjoins Plasrefine's proposed site. The buildings of Garvan Institute's 'mouse house' are less than 200 metres from Plasrefine's site. This is an irreplaceable Australian medical research facility with a long-standing role in Australian research into (but not limited to) cancer, types 1 and 2 diabetes, Alzheimers, Parkinson's and asthma.

Garvan has gone to tremendous effort and cost to establish this operation as a 'bio-bubble' over the past 15 years. With Garvan having wound up a similar facility in Western Australia this is Australia's only such facility of scale. Garvan has spent many years building up it's 'bio-bubble's' necessary to run this site. The facility currently breeds over 400 different strains of mice - damage to the operations here would have an impact on medical research in Australia that would be immense.

It would only take 1 significant air-contamination issue to put long-standing medical studies at risk of not being able to continue for lack of appropriate lab-mice. Many medical institutes and long-term research programs rely on this site to house and breed highly specialised genetic strains of mice over many years and generation. If this facility is compromised, it and the subjects it provides cannot be replaced without massive delay and serious dislocation of life-saving medical research.

The proposed air-filtering systems will simply not prevent small-scale particles entering the local air supply - the Garvan Institute next door will have no ability to prevent this from entering their site and eradicating the bio-isolation they require.

Construction of the Plasrefine operation on the adjacent site, less than 200 metres away will, almost to a certainty, destroy this facility.

3. Micro-plastics pollution.

The full impact of micro-plastic pollution is yet to be understood, although we know they have significant impact and danger to human health and the general environment. In short, research now shows micro-plastics to be highly dangerous and pervasive. Enough detail exists that micro-plastics are now often described as 'the new asbestos'.

Plasrefine's technical submissions on air and water impacts do not deal in any detail with the issue of micro-plastics. Indeed the term 'micro-plastic' cannot be found in their reports which rely on air quality and particulate date from 2017-2018. This is totally outdated if considering micro-plastics. In fact, the subject is not separately dealt with and general issues of 'air quality' are listed as a 'MODERATE' concern - more lowly ranked than traffic issues.

I direct your attention to a recent article in The Guardian which discussed 2023 studies from the University of Strathclyde, Scotland. (https://www.theguardian.com/environment/2023/may/23/recycling-can-release-huge-quantities-of-microplastics-study-finds) Their studies, utilising a world's-best-practice recycling facility proved that ***any*** such facility will release micro-plastics totalling between 6% and 13% of the total plastic recycled. With Plasrefine expecting to process 120,000 tonnes per annum, this gives a range of 7,200 to 15,600 tonnes of micro-plastics per year. Given the site location, a large proportion of this will find its way into the Wingecarribee River and then into Sydney's primary water supply.

Strathclyde University's study is unambiguous - the filtering systems to contain micro plastics in the less-than-10-microns range do not presently exist. The guaranteed injection of several thousand tonnes of micro-plastic into Sydney's main water supply is not an outcome that should be supported.

GHD in its submissions on Plasrefine's behalf has always used the description of that site as "2km north-east to the Wingecarribee." However, something so simple as a Google Maps search will show it is only 1,500 metres to the river directly East and that the site sits on watercourses that feed directly into it. Undertakings that all water from the site will go to local treatment plants do nothing to address the micro-plastic issue: Wingecarribee Shire's waste-water filtering systems cannot deal with such small sizes as micro-plastics come in and no such technology currently exists.

I also note that the proposal will need to comply with State Environmental Planning Policy (Sydney Drinking Water Catchment) 2011. Under this SEPP, any development within the Sydney Drinking Water Catchment area is required to incorporate Water NSW's current recommended practices and standards or demonstrate a neutral or beneficial effect on water quality. Given all the above, it cannot comply.

The application as it currently stands relies on key promises of road access and air and water impacts that the Applicant simply cannot undertake to deliver.