



WARREN AND JAYNE SOUTH

OBJECT

Submission ID: 216968

Organisation: N/A	Key issues: <i>Social impacts, Visual impacts, design and landscaping, Land use compatibility (surrounding land uses), Traffic, Other issues</i>
Location: New South Wales 2576	
Attachment: Attached overleaf	

Submission date: 11/22/2024 9:35:26 AM

We make the attached submission to urge the rejection of the proposal to construct a plastics recycling facility (known as "Plasrefine") at Moss Vale (Reference Number SSD-9409987). Our grounds for objection are set out in our submission and we ask Commissioners Mills, Sykes and Milligan to carefully consider the major adverse impacts in this proposal, and decline the application as incompatible with the proposed site.

Submission on Plasrefine Facility by Dr Warren and Jayne South

Date Submitted: 22 November 2024

We make this submission urging the rejection of the plastic recycling facility proposed to be built on land designated 74-76 Beaconsfield Road, Moss Vale (Lot 11, DP1084421¹).

This submission is made as we are long term residents of the Moss Vale area, currently resident in Bowral, and have a concern for the maintenance of the health and amenity of the Southern Highlands. We own a property in Moss Vale and our son lives and works in Moss Vale.

We are urging rejection of this proposal on many grounds, including the following:

- i. Incongruence of the proposed facility with the current zoning of subject land,
- ii. Incompatibility of the proposed facility with the surrounding residential area, and
- iii. Potential adverse environmental effects of the proposed facility.

Zoning of land

As it stands currently, and in line with the proposed Southern Highland Innovation Park (SHIP), the land is zoned E4 General Industrial. The proposed development of a plastics recycling facility does not fit with the described criteria of this zoning.

According to the description in the Wingecarribee LEP – 2010, a zoning of E4 is described as²:

Zone E4 General Industrial

1 Objectives of zone

- To provide a range of industrial, warehouse, logistics and related land uses.
- To ensure the efficient and viable use of land for industrial uses.
- To minimise any adverse effect of industry on other land uses.
- To encourage employment opportunities.
- To enable limited non-industrial land uses that provide facilities and services to meet the needs of businesses and workers.

¹ <https://www.planningportal.nsw.gov.au/spatialviewer/#/find-a-property/address>
accessed 18/11/24

² https://legislation.nsw.gov.au/view/html/inforce/current/epi-2010-0245#pt-cg1.Zone_E4
accessed 18 /11/24

- To allow non-industrial land uses, including certain commercial activities, that, because of the type, scale or nature of the use, are appropriately located in the zone and will not impact the viability of business and commercial centres in Wingecarribee.
- To ensure new development and land uses incorporate measures that take into account the spatial context and mitigate potential impacts on neighbourhood amenity and character and the efficient operation of the local and regional road system.

2 Permitted without consent

Environmental protection works; Home-based childcare; Home occupations

3 Permitted with consent

Depots; Freight transport facilities; Garden centres; General industries; Goods repair and reuse premises; Hardware and building supplies; Industrial retail outlets; Industrial training facilities; Landscaping material supplies; Light industries; Local distribution premises; Neighbourhood shops; Oyster aquaculture; Plant nurseries; Rural supplies; Specialised retail premises; Take away food and drink premises; Tank-based aquaculture; Timber yards; Vehicle sales or hire premises; Warehouse or distribution centres; Any other development not specified in item 2 or 4

4 Prohibited

Agriculture; Air transport facilities; Airstrips; Amusement centres; Business premises; Camping grounds; Cemeteries; Correctional centres; Crematoria; Eco-tourist facilities; Exhibition homes; Exhibition villages; Farm buildings; Forestry; Health services facilities; Heavy industrial storage establishments; Highway service centres; Home occupations (sex services); Industries; Open cut mining; Residential accommodation; Restricted premises; Retail premises; Schools; Sex services premises; Tourist and visitor accommodation; Water recreation structures; Wharf or boating facilities

In terms of the above criteria, the proposed facility fails to meet the following objectives:

- To minimise any adverse effect of industry on other land uses,
- To enable limited non-industrial land uses that provide facilities and services to meet the needs of businesses and workers.
- To allow non-industrial land uses, including certain commercial activities, that, because of the type, scale or nature of the use, are appropriately located in the zone and will not impact the viability of business and commercial centres in Wingecarribee.
- To ensure new development and land uses incorporate measures that take into account the spatial context and mitigate potential impacts on neighbourhood amenity and character and the efficient operation of the local and regional road system.

Clearly, the nature and scale of the proposed facility, as well as its proximity to residential and existing business facilities (e.g. ABR), will be detrimental to the locale and environment, precluding the establishment of other businesses “permitted with consent”.

It is our contention that the facility should be located at a site zoned E5 Heavy Industrial which would allow the construction of the described facility and ancillary storage of hazardous materials. This zoning is described in legislation as follows³:

Zone E5 Heavy Industrial

1 Objectives of zone

- To provide areas for industries that need to be separated from other land uses.
- To ensure the efficient and viable use of land for industrial uses.
- To minimise any adverse effect of industry on other land uses.
- To encourage employment opportunities.

2 Permitted without consent

Environmental protection works

3 Permitted with consent

Data centres; Depots; Freight transport facilities; General industries; Hazardous storage establishments; Heavy industries; Industrial training facilities; Offensive storage establishments; Oyster aquaculture; Tank-based aquaculture; Warehouse or distribution centres; Any other development not specified in item 2 or 4

4 Prohibited

Agriculture; Air transport facilities; Airstrips; Amusement centres; Animal boarding or training establishments; Camping grounds; Car parks; Caravan parks; Cemeteries; Centre-based child care facilities; Commercial premises; Community facilities; Correctional centres; Crematoria; Eco-tourist facilities; Educational establishments; Entertainment facilities; Exhibition homes; Exhibition villages; Farm buildings; Forestry; Function centres; Health services facilities; Highway service centres; Home-based child care; Home businesses; Home industries; Home occupations; Home occupations (sex services); Industrial retail outlets; Information and education facilities; Local distribution premises; Mortuaries; Open cut mining; Passenger transport facilities; Places of public worship; Recreation areas; Recreation facilities (indoor); Recreation facilities (major); Recreation facilities (outdoor); Registered clubs; Residential accommodation; Respite day care centres; Restricted premises; Self-storage units; Service stations; Sex services premises; Tourist and visitor accommodation; Vehicle body repair workshops; Vehicle repair stations; Veterinary hospitals; Water recreation structures; Wharf or boating facilities

In terms of the above criteria, the proposed facility fails to meet the following objectives:

- To minimise any adverse effect of industry on other land uses,
- To enable limited non-industrial land uses that provide facilities and services to meet the needs of businesses and workers.
- To allow non-industrial land uses, including certain commercial activities, that, because of the type, scale or nature of the use, are appropriately located in the

³ https://legislation.nsw.gov.au/view/html/inforce/current/epi-2010-0245#pt-cg1.Zone_E5, accessed 18/11/24

zone and will not impact the viability of business and commercial centres in Wingecarribee.

- To ensure new development and land uses incorporate measures that take into account the spatial context and mitigate potential impacts on neighbourhood amenity and character and the efficient operation of the local and regional road system.

It is evident that the proposed plastic recycling facility is more suited to land with the E5 Heavy industrial zoning as it will, in terms of the objectives:

- To provide areas for industries that need to be separated from other land uses.
- To minimise any adverse effect of industry on other land uses.

Further, this land use zoning permits the construction and operation of industries that can be deemed *hazardous* storage establishment and *offensive* storage establishments. This proposed facility will provide a large volume of storage for potentially hazardous materials (especially in the case of fire and release of microplastic to the surrounding environment). It will also emit offensive odours from both the cleaning of input materials and the processing of these materials.

The proposed facility would be constructed within land proposed for the Southern Highland Innovation Park (SHIP)⁴. This initiative, supported with funding from the NSW State government, will see the development of innovative industry delivering employment to the local area. It should further be noted that under the proposed SHIP the majority of the precinct, including the subject land of the proposed facility, will retain an E4 zoning.

For similar facilities in NSW, Brightmark facility⁵ at Parkes has a zoning of REZ – Regional Enterprise Zone and the Circular Plastics Australia facility at Albury (Table Top) has a zoning of SP4 – Special Enterprise. Both these zonings are NOT E4 General Industrial as for the Plasrefine proposed facility.

It is our contention, therefore, that the proposed facility be rejected on the grounds that it is not congruent with the present zoning of the site.

Proximity to Residential Areas

It is noted that the proposed facility would be constructed within 50 to 100 metres of existing residential dwellings on Beaconsfield Road. This clearly fails to provide a sufficient buffer to protect the residents of these dwellings from the adverse impacts of a development of this nature. The noise and pollutants provided by the proposed facility cannot be remediated by landscaping or other proposed methods.

⁴ https://participatewingecarribee.wsc.nsw.gov.au/download_file/3297/1298, accessed 18/11/24

⁵ <https://www.brightmark.com/plastics-renewal/projects/australia-circularity-center>, accessed 19/11/24

In other similar facilities within NSW, a buffer zone of greater than 1000 metres has been established to ensure a safer environment for residents. The Brightmark facility at Parkes is located within the Parkes Special Activation Precinct, remote from existing residential areas and provides similar recycling processes to the Plasrefine proposal. It is also noted that the local Council supported the establishment of the facility, whereas the proposed Plasrefine facility is not supported by the Wingecarribee Shire Council, or the relevant State and Federal government representatives.

In the case of the Circular Plastics PET recycling facility⁶ at Table Top, north of Albury, again substantial buffer zones of 2000 metres are established between residential dwellings and the facility. It is noted that this facility was established with support of the local authorities.

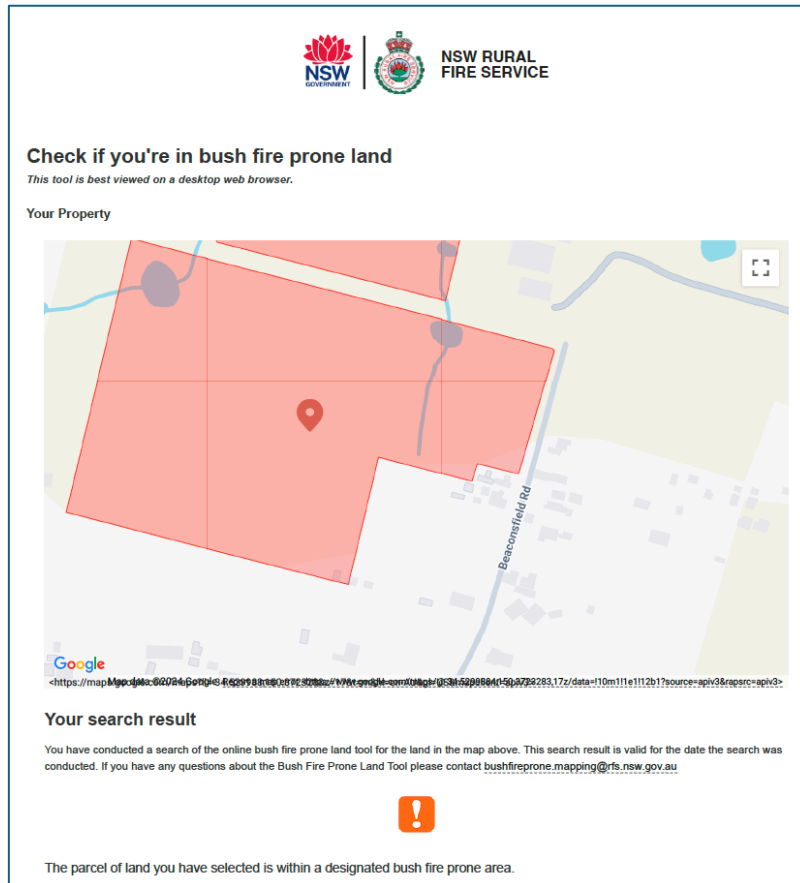
With the recognition of the hazardous nature of plastics recycling, and the potential adverse impacts, and using these two facilities as best-practice precedents, **it is our contention, that the proposed facility be rejected on the grounds that it does not provide sufficient separation from local residential dwellings.**

Fire Risk

The proposed facility constructs a hazardous fire risk within a designated bush fire prone area. Despite the contention contained in the application, the designation of the land on which the facility would be constructed is reported on the NSW Rural Fire Service website as follows⁷:

⁶ <https://www.cleanaway.com.au/sustainable-future/cpa-opens-in-albury-wodonga/> accessed 19/11/24

⁷ <https://www.rfs.nsw.gov.au/plan-and-prepare/building-in-a-bush-fire-area/planning-for-bush-fire-protection/bush-fire-prone-land/check-bfpl> accessed 19/11/24



It is noted that the plastic precursor materials, and the processed products are highly flammable. As such, they constitute a high risk of ignition. This ignition may be internal to the facility, or external from a fast-running bushfire, perhaps assisted by the prevailing westerly winds. Fires in facilities for storing the precursor materials are relatively frequent with over 390 reported at facilities in the US and Canada in 2022⁸. It also appears the frequency of these fires are increasing with climate change.

In an Australian context, a relatively similar incidence of major fires could be expected. Local experience is well documented in the report of a fire at the Hume recycling facility in the ACT in 2022⁹. Of particular note is the size, speed and spread of the fire, the fuel type, the emissions and their potential health impacts, and the number of fire appliances required to extinguish the fire over several days. Given the projected volumes of recycled plastics being held on the proposed site, a larger fire would be the outcome. As noted by others, the local district fire services are inadequate to fight a similar fire, requiring assistance from other locations a minimum of 1 hour travelling time distant.

⁸ <https://time.com/6271576/recycling-plant-fire-indiana/> accessed 18/11/24

⁹ https://www.cityservices.act.gov.au/_data/assets/pdf_file/0007/2202892/Fire-Investigation-Report-Hume-Recycling-Facility-INC-018769-26122022_Redacted.pdf, accessed 18/11/24

The emissions of such fires pose serious health risks to humans. A combination of organic and inorganic chemicals is created in the heat of the fire which will be taken by prevailing winds over adjacent land. This land, in the immediate area, has residential buildings, early childhood centres and schools. A consideration of the wind-rose for the site shows the winds are predominately from the west, however, it may also come from other directions. A toxic plume could, conceivably find landfall within the town boundaries of Moss Vale, New Berrima, Berrima, Burradoo and Bowral, subjecting a population of over 25,000 people to a severe respiratory hazard and long-term health effects. There can be no mitigatory effects which would remove this threat.

It is our contention that the proposed facility be rejected on the grounds that it does not provide sufficient protection from fire, sited in a bush fire prone zone and storing large volumes of highly flammable material.

Access to the site

It is recognised that transport infrastructure to the site remains sub-optimal. The Plasrefine facility proposes more than 100 truck movements daily using the limited road infrastructure. The proposal also says that these truck movements will not be using residential streets but limited to Berrima Road/Douglas Road access, with a new road to the site requiring an extension to Bowman Street and the relocation of the existing rail level crossing .

The proposal remains silent on how this restriction will be enforced, as well as the transport of material from the South Coast will be managed. Access for this South Coast supply stream will be through the already congested Argyle Street in Moss Vale, introducing not only further congestion, but also potential increase in escapee waste from the transport of the precursor plastic material along rural and residential streets.

There is also little consideration of the increase in worker transport through residential streets. It is assumed that most workers will be located locally and will use existing streets, mainly residential, to travel to and from the proposed facility. This can only be done with a reduction in both the safety and amenity of these streets from residents.

It is our contention that the proposed facility be rejected on the grounds that it greatly increases traffic volumes with no indication of how mitigation measures will be achieved.

Environmental Considerations

Water Pollution

The site is noted to be located in several riparian zones leading to the Wingecarribee River. The proposal has been amended several times over the consideration of the proposal, making it difficult to determine the actual design of the water capture and retention system. However, it appears that water will be released to the riparian zones in times of high rainfall largely untreated. This poses the danger of release of microplastics

and other chemical agents into the Sydney Water catchment. In spite of the advice given in the DPHI review, the site lies downstream of the Wingecarribee reservoir, but upstream of the Warragamba Dam. Thereby, this facilitates an increase in the level of microplastics and PFAS in the water supply to 5 million residents of Sydney when runoff water finds its way to the Wingecarribee River.

The Wingecarribee River is also a known habitat for platypus. We have had numerous personal experiences with the sighting of these animals a few kilometres downstream of the proposed site. Recent evidence shows increased levels of PFAS and other chemicals accumulating in the livers of the platypuses. The proposed plant will generate a number of intractable organic compounds, including PFAS, which represent a further danger to the long-term survival of this important species.

Further threats to the biodiversity of the area arise from the liberation of these chemicals. The immediate area is home to several native species, including microbats and dragonflies, as well as providing transitory habitat for birds including the yellow-tailed black cockatoo. The proposed landscape plan does not consider any remedial measures to ensure the maintenance of native vegetation to support the existing indigenous flora and fauna.

It is our contention that the proposed facility be rejected on the grounds that it greatly increases the risk of polluting local waterways with solid and chemical pollutants posing a danger to human and animal health.

Air Pollution

It is recognised that the proposed process will generate a volume of emissions which must be released into the atmosphere. This will be achieved through either a number of 22 metre chimneys, or shorter 15.5 metre “vents” – again it is difficult to be definitive through the number of documents and changes made to the proposal through the submission period.

Given the prevailing winds, these emissions will track east over Moss Vale, Bowral and Burradoo exposing residents and visitors to potentially dangerous chemicals. For immediate residents, fugitive emissions (i.e. those not captured and treated) represent a greater threat to health. Advice to remain indoors to minimise exposure on windy days is both puerile and demeaning to these residents. Should a fire break out, the emissions will be a greater issue requiring evacuation and a period of re-housing until the threat has passed. An area of potential impact would be of the order of 100 km² with a population of 25,000 residents.

There are issues with the design of the proposed facility in regard to the prevailing winds and dispersion of plastics across the area. The proposal describes the delivery of plastics using trucks which will be required to reverse into the receipt buildings with the entry doors open for entry and egress. During this time, the wind will be able to enter the building and move any of the plastic materials including microplastics out of the

building, potentially dispersing the plastic material across the surrounding area. These may find their way beyond the perimeter fencing to the residential areas adjacent. Calculations have shown that these doors will be open for up to 5 hours per day, increasing the possibility of spillage.

Further, there will be the great potential for the raw plastic to fall from the trucks to the roadsides, again leaving a countryside strewn with these materials.

It is our contention that the proposed facility be rejected on the grounds that it greatly increases the risk of polluting the local airshed with solid and chemical pollutants posing a danger to human and animal health.

Summary

This submission to the commissioners of the Independent Planning Commission calls on the commissioners to **reject** the proposal to construct plastics recycling facility (known as “Plasrefine”) at Moss Vale.

This proposal should be rejected on the grounds that:

- The proposal does not comply with the current zoning of the proposed site.
- There is insufficient separation of the proposed facility and existing residential properties.
- The proposal does not provide sufficient protection from fire, either bushfire or from combustion of the large volumes of flammable material stored on site.
- The proposal will increase traffic volumes in the immediate area.
- The proposal greatly increases the risk to human and animal health through water and air pollution.

Warren and Jayne South
Bowral NSW.