



KIRSTINE MCKAY

OBJECT

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Location: <i>New South Wales 2576</i>	
Attachment: <i>Attached overleaf</i>	

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I strongly oppose a potentially hazardous heavy industrial plastics recycling facility in the Southern Highlands Innovation Precinct. Please see uploaded file for full details.

Submission Opposing PlasRefine Plastics Recycling Facility – Moss Vale

My name is Kirstine McKay. I have lived, worked and raised a family in the Southern Highlands for the past 12 and a half years. I teach sustainability and land management practices and I manage landscapes at a number of estates in our area. I am also a very active community member involved in many not for profit organisations including my role for the past 4 years as Chair of RegenAction Wingecarribee Inc., a community group dedicated to ecosystem restoration through landscape regeneration in Moss Vale and the broader Wingecarribee Shire. Our mission is to promote ecological balance, restore native habitats, and contribute to the reduction of CO2 emissions through responsible land use and community-driven initiatives.

This is my personal submission and **I strongly oppose** a potentially hazardous heavy industrial plastics recycling facility in the Southern Highlands Innovation Precinct.

The introduction of a large-scale plastics recycling facility is fundamentally incompatible with our community's vision for the establishment of a thriving environmentally conscious region. It stands to disturb natural habitats, disrupt water flows, and will increase traffic through narrow, rural roads as well as increased traffic within Moss Vale township and have the potential to release devastating microplastics into our environment and food chain.

The partnership between water, soil, plants and the sun underpins all life on Earth. This partnership is where our food comes from. We should be very careful not to disturb this relationship by damaging the natural water courses which spread water across our landscape, recharging the aquifer and supporting our local food production. Food growing initiatives are an important part of the Southern Highlands economy and livelihoods which are threatened by microplastics bonding to water and landing as dew on our pastures to be eaten by cattle and sheep. We then consume these microplastics in meat.

The scale and nature of this PlasRefine facility and the site chosen for its construction threatens the ecological balance and hydrological capacity of the surrounding area.

- Through disturbance to soils and natural water flows during extensive building earthworks
- Through continuing, unsustainable use of town water (estimated at 46,000+ kilolitres daily)
- and through the resulting pollution created in the process of washing dirty plastics prior to the recycling process which are then stored in ponds onsite.

Topographical maps demonstrate that this area has a network of springs and rivulets supporting a 'chain of ponds' above the site. Video evidence shows overflowing rivulets rushing down the proposed PlasRefine site. The proposed waste-holding dams could be easily breached in episodic flood events, such as happened as recently as 2016, which took the life of one local man and caused flooding of houses and retail stores in Moss Vale and around the shire. The breaching of the proposed sludge dams would likely overflow its polluted slurry of micro plastics & other unknown pollutants (PFAS?) across the rural landscape below. We know these waste streams will enter natural streams emptying into the Wingecarribee River and into Sydney water storages.

The major concerns I have with this proposal are:

WATER:

Wastewater Pollution : PlasRefine states in its EIS that it will be using 20,000ltrs DAILY of fresh, potable drinking water from the Southern Highlands catchment in processing its plastics washing process. Our Wingecarribee Water has just won a prestigious award for the best tasting drinking water in the region. But 20,000ltrs/day will be instantly contaminated and create up to 16,000ltrs polluted wastewater DAILY. PlasRefine wants to reprocess this and eventually send it offsite to Moss Vale's Sewerage Treatment Plant to be dispersed further into our water catchment area at the ratepayer's expense.

The wastewater containing micro-plastics will 'apparently' be put through a 'cleaning' process of some sort (chemicals?), the details of which are vague in the EIS. And once this wastewater is concentrated toxic water, it will be drained downhill to an open holding dam onsite, prone to overflowing in flooding events and spreading its toxic contents down slope to other businesses and farmland. If it doesn't overflow in a flood, the company plans to truck the contents of the toxic dam off-site to be processed in a special toxic dump somewhere else. Neither circular for the economy nor the environment.

Sydney's Drinking Water. *The S.H.Innovation Precinct* is sited on sloping land dotted with freshwater springs and chains of ponds. Currently during flooding events, water cascades down the grassy slope and fills natural ponds or runs off to lower creeks and rivers, the larger being the *Wingecarribee River* which is one of the sources of Sydney's water catchment at Warragamba Dam. By siting PlasRefine's proposed 24/7 processing facility on this slope, micro-plastics will be directly dispersed into the water supply of millions of city people. What far-sighted society ever imposes such health risks on its population?

Flood – Watershed of rain in an episodic rain event. PlasRefine says it is going to build a big holding tank under the buildings to catch all the storm water.

Looking at the massive footprint of the combined roof area and concreted/tarmac area surrounding the buildings and the slope of the land, I believe it would be impractical/impossible to catch all the rainwater from an episodic heavy rain event. We can experience over 150mls (6") of rain over two days, which is not uncommon lately. When you multiply this amount of water with the combined square meterage of roof and pavement catchment area, I doubt whether a big enough containment area to catch all storm water can be built into the sloping ground beneath the buildings. I also doubt it would be financially viable to build this holding bunker.

Consequently, pollutant-laden stormwater overflow will be carrying microplastics and chemical emissions settling on the roof and surrounding land downhill to pollute the area below the site. GHD have stated that the huge roller doors would be open for an estimated five hours DAILY to allow the 50 trucks to load/unload. Can the company categorically state that while the roller doors are open for this amount of time there will be NO microplastics or other pollutants leaving the buildings to contaminate the site? Negative pressure or not?

Who is strictly policing that the doors are kept closed all day apart from for the minimal time (5hrs?!) required to unload the trucks?

AIR POLLUTION from Volatile Organic Compounds and micro-plastics.

The Southern Highlands experiences regular temperature inversions, especially in winter. Pollutants like micro-plastics and VOCs will remain and settle over the local area, condemning residents to the increased risk of cancers and age-related diseases and children to life-long endocrine malfunctions. Those people who spend much of their working life outside tending their crops – farmers, vigneron and market gardeners/farmers would likely be at a higher risk.

Why hasn't the NSW Health Dept submitted any concerns or Conditions of Consent to the NSW Dept of Planning, Infrastructure and Housing about problems associated with siting of this large, polluting factory hard up against a population of 50,000 Shire residents, mostly living in the large towns and various villages within a 15km radius of the site as the crow flies? Current medical evidence indicates several known health impacts like cancer and Alzheimers disease resulting from the release of micro-plastics via the chemical washing and burning of a myriad of waste plastics in the recycling process? Then there is the inter-generational impacts of endocrine dysfunction, infertility and ill health associated with ingested plastics via breathing the air, drinking the water and eating our polluted backyard-grown food.

Incorrect Zoning: Zone E4 (Environmental Protection) adjacent to an Industrial Zone (the proposed site of Plasrefine). Surely, these two zones are totally incompatible in the same location - *Southern Highlands Innovation Park?*

CATASTROPHIC FIRE HAZARD

Incorrect Zoning: Even though the current RFS Mapping shows that PlasRefine is sited in a zone designated as BUSH FIRE PRONE, GHD keeps insisting that the outdated 2020 RFS mapping shows it is not in a fire-prone zone. This may be because in 2020 we had massive bushfires approaching Moss Vale from the south, north and east where, not only did many people lose their homes but the *Moss Vale Resource Recovery Centre* just up the road from the proposed site had a spontaneous combustion occur in their woodchip stockpile which could not be doused. It smouldered for days.

Potential for catastrophic plastics fire and resulting chemical smoke plumes. There is plenty of available evidence in Australia and worldwide of disastrous plastics storage facilities or plastics recycling facilities, with their cache of stored chemicals, going up in smoke (one at *HUME* which burned for four days and couldn't be extinguished). We know firsthand about large fires making their own weather, pyroclastic clouds and catastrophic wind speeds which, teamed with the direction of the prevailing winds for much of the year, will send plumes of toxic smoke, plastic waste particles and VOCs across the three main towns of Mittagong, Bowral/Burradoo and Moss Vale. Possibly for days. It's a fact that our shire doesn't have sufficient fire-fighting capacity for the "new normal" bushfire let alone capacity or Hazmat equipment to fight a devastating plastics fire which fuels itself!

WHERE IN THE EIS IS THE COMPANY'S (OR THE DPIH'S) DISASTER

PREVENTION & MITIGATION STRATEGY when the inevitable finally happens?
Who is culpable?

ECONOMICS:

A true circular economy is an economy that is sustainable environmentally, financially etc forever. I understand why the Minns government would like some kudos for proposing a circular plastics economy. But what if it isn't truly circular, as with plastic recycling, where the product gets toxic after the first round of treatment/recycling and at end-of-life needs to be trucked to a toxic dump elsewhere because it can't be recycled a second time. That's not circular! The cycle is broken! And the resulting pollution is forever in the environment.

This suggests we have to STOP producing plastics if it can't be continuously recycled due to toxicity.

The Southern Highlands already has a thriving economy - tourism and agriculture - which provides lots of jobs to the area, not only for people who live here and don't want the 'commute to the city' lifestyle, but also for workers who come up from Wollongong. There are numerous local small businesses which employ locals and bring money into the shire, rather than send money offshore.

If this proposal is approved, this hazardous facility, sited so close to a pristine food-growing environment, could devastate the current local economy and a rural lifestyle for the benefit only of a few proponents. Local wine, beef and fresh food businesses will be impacted by resulting micro-plastic pollution in their product. Who's going to buy that for their family?

Despite amendments in the revised application, the facility's plans still fall well short of adequately addressing the true long-term environmental impact on the local landscape. The site selection remains flawed, with key ecological areas and habitats placed at risk with scant information about the actual processes of recycling.

I urge the Commission, with its duty of care to its citizens, to prioritize the long-term health and environmental sustainability of our region over short-term industrial gains. Please reject this proposal. This is not the right site and probably not the right process.

Kirstine McKay