New South Wales Government
Independent Planning Commission

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Organisation:	*N/A*	Key issues:	*Social impacts,Land use compatibility (surrounding land uses),Other issues*
Location:	*New South Wales 2576*		
Attachment:	*Attached overleaf*		

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I attach my submission

New South Wales Government
Independent Planning Commission Submission - REF: SSD-9409987

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Attachment to IPC Submission 25 November 2024

Background:
I have been a resident of the Southern Highlands since 2016. Our daughter and her family also live in Moss Vale. Both the small boys in that family have attended the preschool [redacted], the youngest graduating at the end of 2024. Proximity to a large-scale Plastics Recycling Facility some 600 metres away will potentially make that facility unviable for its operators. Since waiting lists for daycare and preschools are already significant in the Highlands, dozens of children and their families could be without such care, should the facility prove no longer viable or be deemed unsafe by prospective or existing parents.

After four decades in business as a Company Director, and a further ten in technical manufacturing and marketing, as a former committee member of the Australian Battery Recycling Initiative (ABRI) in 2006, and as a Member of the Australian Institute of Company Directors (MAICD) over two decades, I find the approval document from the NSW Department of Planning, Industry and Development, lacking in significant areas of due diligence and fiduciary duty on behalf of the people of NSW, as well as silence on some key risks.

Within this submission I will examine four issues, arguing that, in each area, either inadequate assessment has occurred by the Department in its recommendation, or the validity of the recommendation is wanting, given available global evidence of similar facilities:

a) The Site
The chosen site in Moss Vale is not the right site. It is significantly too close to existing homes, a preschool, and sensitive infrastructure (The Garvan Institute adjacent), based on all established global best practice recommendations, which suggest a minimum of a kilometre and a preference for more than five kilometres from residential housing for such a recycling facility

b) Manufacturing Classification
The project has been mis-classified as "Other Manufacturing" by the Department. Nowhere in the Manufacturing class (Sub-Division 29) does plastic recycling appear. It is instead listed in Sub-Division 25, specifically Class 253300016: Plastic Recycling, Reprocessing. This requires different insurance standards and premiums by iCare, and most likely different levels of surveillance by the NSW Environmental Protection Authority.

c) Fire Risk & Consequences
The fire risk of the venture is significant, given the track record of multiple facilities globally using multi-sourced feedstocks for reprocessing. There is NO Local 24/7 Fire Appliance capable of fighting a fire that would develop from such a largescale facility (should that fire exceed the factory's planned but unspecified suppression system). The potential for toxic fumes from the mixed conflagration of plastics requiring evacuations of potentially tens of thousands of residents of the Highlands is not considered in the Department's recommendation, despite its very real risk. Risk management is about modelling worst case and designing to prevent it and manage risk proactively. Compliance with existing standards is largely irrelevant when dealing with a site substantially larger than others in Australia and uniquely close to residential and services businesses outside of a full-scale Industrial Park.

d) Financial Viability
Nowhere in the Department's recommendation is there a public assessment of the financial viability of the project by the Investor, or for the State, (should financial incentives be offered,) nor is an opinion offered on the management suitability for such a project involving potentially volatile chemicals processing. Both factors would have to be considered by a commercial lending institution, recourse to which is required by the admission of the investor. The Investor admits

that he has insufficient funds to finance this fully himself. While such matters may be withheld as Commercial in Confidence, there is no indication in the recommendation that such an evaluation has been made, which would surely be a minimum standard for potential investment of public moneys. Why not?

In Detail -

A: The Site (Part Lot 11 DP1084421, 74-76 Beaconsfield Road, Moss Vale.)

The proposed site is, by most similar projects globally, too small for the facility proposed. It is immediately adjacent to a vibration-sensitive advanced scientific research laboratory, creating vital mouse resources for both the Garvan Institute and multiple university and other scientific bodies.

Access in the subject submission has been specified as via a single route in an out from the Hume Highway, over the New Berrima roundabout, along an extended 50km/hr and 40km /hr School zone existing country road, and what will amount to three railway crossings, one of which is proposed for re-location at the expense of the applicant. During the recent 2019-2022 flooding occurrences this road was subject to critical failure adjacent to the first rail crossing and road junction from New Berrima. It required constant patch repair, long traffic queues and ultimate re-establishment and temporary road closure. It is not rated as a modern industrial road for weight loading, despite it serving Boral's cement works, and is maintained by Wingecarribee Council at their cost. As a council road, potential upgrading to a proper industrial capability would require expenditure in the order of $15M, based on typical rebuilding costs of two-lane industrial roads in NSW. The current budget for Wingecarribee Council does not have provision for this, even in its more than $400M of unfunded identified projects.

The site will employ, according to Plasrefine, up to some 120 workers and their vehicles and involve 100 large truck vehicle movements a day. This will add to the already increasing traffic from local population expansion in Moss Vale resulting from the expansion of Caber Street/Railway Street in southern Moss Vale and Ashbourne, also in southern Moss Vale, encompassing a total of some 1,700 new homes and an added population of between 3,000 and 3,800, with a likely 2,800 new vehicles further adding stress to this roadway. While access may via Beaconsfield Road may be avoided in the plan, should infrastructure work be required (sewer/water/gas/electricity/NBN) on the planned access road, it is inevitable Beaconsfield Road will periodically have to handle diverted traffic, creating hazard for residents, schoolchildren and other road users, not apparently taken into account in the Department's recommendation

Access for fire appliances is extremely limited, to adequately respond to a fire greater than the capacity of the internal suppression system (which is time-limited, like most fire suppression systems, in its capability as described by GHD consultants). The operating temperature of the highest temperature plastics reprocessing process is believed to be about 230 degrees C, but a conflagration in one of the storage areas might well exceed 800 to 1000 degrees C, limiting access to a distance no closer than 150-200 metres, to protect the safety of fire workers. In turn this would require an appliance or appliances of a scale not less than one hour by road as a minimum.

Moss Vale already has a traffic problem involving two peak periods of congestion. The added population alone will make this progressively worse. Plasrefine's workers located at this site will further add to the congestion, lasting over two hours each day.

B: Manufacturing Classification Confusion & Resulting Fire Risk Classification

The Recommendation document from the Department of Planning, Housing and Infrastructure makes no indication of the Manufacturing Class under which the Recommendation to proceed.

The initial documents from The Department refer to "Other Manufacturing." Other Manufacturing (Sub-Division 29) does not include any Plastics Recycling sub-classes. Plastics Recycling is only listed in Sub-Division 25 - Petroleum, Coal, Chemical and Associated Product Manufacturing. The obligations of compliance and surveillance by the EPA for the two sub-divisions, by the very nature of the relative scale and risk involved in each sub-division would surely be very different and more onerous in Sub-Division 25. Similarly, this is emphasised in the iCare insurance obligations for workers in the different sub-divisions.

The IPC, in their hearings header on their website, simply state this project to be "Manufacturing", but without specific classification.

Most reasonable people would deem the process of mixed chemical inputs, stored to a maximum permitted volume of 20,000 tonnes as substantial manufacturing transformation. This risk currently is not described. The Recommendation simply states it will be determined after the plant proceeds. Since the classification appears confused, what Fire & Rescue standard has been applied? Is the local Fire department equipped with the expertise in fire control for potentially 20,000 tonnes of mixed stored plastics of varying combinations of chemical content.

Received materials will inevitably vary in quality of pre-sorting, depending on source. A proportion will be contaminated by unsuitable plastics, which ultimately will leave the facility unprocessed and destined for landfill. Some facilities globally experience 40% contamination. I believe I read that Plasrefine expect only 7% contamination, an unusually low level. What is the basis of accepting this claim by The Department? If it were 10% contamination, then the actual peak output would be 108,000 tonnes.

Miscellaneous other wastes, also potentially higher risk combustible wastes, such as lithium batteries contained in plastic housings, are a present danger. Work in progress volume, when running at 120,000 tonnes throughput p.a. might be expected to be only around one to two tonnes, depending on which mix of materials is being reprocessed. This is itself relatively low combustible risk. It is the unpredictable volatility of the wrong combination of plastics in storage that affords the most likely major ignitor risk in the plant. While the 'Recommendation' and Plasrefine's supplementary responses indicate distinct separation from storage to processing, nonetheless it is vital that all fire controls and regulations applicable to this facility assume volatile combinations of plastic which, in a progressive heat build-up, become essentially uncontrollable. Such a fire will only subside when combustible material has been consumed, despite multiple fire appliances arriving over time to control combustion temperature.

C: Fire Risk

The internal size of the storage facilities for the maximum allowed 20,000 tonnes can be estimated as being around 22,000 to 25,000 cubic metres. The location of the storage facility does not afford ease of access for multiple fire appliances, should a fire occur, which cannot be contained by the time-limited fire suppression system. What is that time limitation and capacity of suppressant? A statement of "compliance" is insufficient to determine the absolute risk of various fire scenarios. GHD in their response on Fire Risk, and the Recommendation from the Department, both state that once the plant is approved, final arrangements will be worked out with Fire & Rescue, following the preliminary consultation already held. Afterwards? Surely this is required before approval?

1. No detail of what the planned fire suppression system involves. Is it a water-based system or solid powder system? What are the chemicals employed, if a powder system? There are relatively non-toxic materials now available replacing earlier PFAS-based systems used in chemical fires. Should the Recommendation not specifically require definition of the proposed state of the art fire-suppression system? Should the amount of time this can operate before its contents are used up not be described in detail, given that it will take over an hour for the first-large scale industrial fire appliance to arrive from the nearest 24-7 manned fire department capable of fighting or controlling industrial fires?

2. Moss Vale has one fire engine, not manned 24/7, but on-call. Any fire that the factory suppression system is unable to control may well require 20-40 appliances from across the Sydney basin, which might take up to two hours before all are on site. (That quantity is based on the experience of large plastics reprocessing facilities worldwide which have had major fires.) How would these be deployed in the site? How would they access the site, given the location of the storage area? What will be their effectiveness at the ACTUAL locations they are able to deploy? Would they involve other chemicals for suppression and oxygen starvation, or will they be water based? None of this is addressed in Plasrefine's responses, GHD's comments or the Department's Recommendation. Failure to adequately address this real risk, despite the protestations/justifications of adequacy by the Consultants and the company, is a dereliction of the Department's obligation to the people who live and work in the Highlands.

D: Financial Due Diligence and Modelling

In the State's *NSW Waste and Sustainable Materials Strategy 2041* document of 2021, targets were set for plastics recycling and projections of capacity are listed. On Page 4 of the Ministerial document (https://www.epa.nsw.gov.au/-/media/epa/corporate-site/resources/recycling/nsw-waste-and-sustainable-materials-strategy-2041.pdf) a sum of $356M in incentives was promoted by the then government, seemingly maintained in place by the current government.

A partner document, *The Guide to Future Infrastructure Needs* identifies specific plastic recycling capacity requirements (pages 5-7). Given the predominantly imported nature of plastics and plastic packaging in Australia the local market in 2021 was supplied by a single resin supplier. The local market for recycled plastic pellets is small. Adding freight costs would likely make recycle pellets uncompetitive internationally. In early 2024 market prices for recycled PET and Virgin Pet Pellets were very similar, $1,050-1,150 per metric tonne), with Virgin PET generally more attractive as a purer product. Since 25 November 2022 oil has dropped in price by 10% and Virgin PET is cheaper than recycled PET much of the time, but not always. It is likely similar disparity in new vs. recycled materials has emerged in other plastic products, all of which use oil as their primary feedstock.

The Corporate Structure of Plasrefine Recycling Pty Limited is, to this point, from all research this writer has been able to determine, a "$2.00 shelf company". The company and its main shareholder have no recorded experience in the recycling industry, certainly not in plastics recycling of the scale defined in their proposal. By their own admission, in the opening day of hearings in November in Bowral, the director presenting indicated that only with the government assistance and bank loans would the company have the capital to proceed. Within the Recommendation document there is no evidence of a provided Business Case for the venture or multiple volume and price scenarios, a basic ingredient of all business cases of this type. There is no identified lender, nor any indication what the covenants of any loan would need to be or what value of support is promised by government.

As a member of the AICD, (Australian Institute of Company Directors) this writer, when taking the Company Directors' Course, recalls clearly the number one attribute of good directors and good governance. "Be curious! Ask questions." The absence of any reference to a review of a disclosed business case by the company makes it imperative that the IPC insist on the financial case being adequate to proceed. Failure to do so would potentially invalidate much of the basis for recommending this venture.

After forty years of business, since banking deregulation in 1983, lending on cash flow rather than fixed assets has always also been accompanied by a lender's assessment of the quality and depth of management and the experience of the overarching governance structure. Based on all the submitted documents coming from GHD, a global consulting entity and not from

management, in almost all cases, there would be insufficient confidence by most lenders to proceed with a loan without matching equity guarantees. What is the level of expertise within the corporate entity of Plasrefine. Has that question been asked? If guarantees are not forthcoming from the company within Australia, have such guarantees potentially been promised by NSW Treasury, given the project's status as a State Significant Development? If that were so, presumably somewhere, prior to commitment, that should appear on the government's liability register and be disclosed to the public? At what level of variation from the initial business case does the venture become a financial liability?

If we were to construct a very simplified pro-forma financial venture, the business working capital of the venture might initially look like the following.

Assets	
Equity	A$20M
Bank Loans	A$60M
Total Working capital	A$80M

The facility will take time to build, say 15 months, and a further 3-6 months to verify all technical assumptions, complete changes to the rail crossing, start pilot production processes, develop logistics movements, undertake marketing to sell output etc... All of that will be significantly cash negative, possibly depleting the equivalent of 50% or more of the initial equity. (We also have no idea what fees GHD Consultants will cumulatively have drawn from initial funds.) The debt to equity ratio might well be 6:1 at that point. The ATO might have some concern about 'thin capitalisation' at that point.

The bank loan might attract a lending rate, as a new foreign-owned business, of 3 to 4% points over prime lending rate, say 8.5%, an interest bill of $5.1M, even without any debt paydown. If say first year production was 20,000 tonnes, an optimistic scenario, revenue might be between $22M for pellet output, or $30M+ if finished goods with value-add were made and sold. Assuming expenses are kept to the minimum, losses would likely be in the order of $3M to $5M. At that point, 27 months into the project, most of the $20M in equity would be gone.

Breakeven might be achieved in Year 2 of operation, if capacity grew to 40,000 tonnes, and profitability might be achieved in Year 3 with between 50,000 and 80,000 tonnes processed. At 108,000 tonnes of saleable output a return on total assets of 15% would produce a pre-tax return of $12M a year, taking a total of 7-9 years for the loan to be discharged.

This pro-forma is a theoretical business case. We have nothing factual to posit otherwise. Maybe the initial equity will be higher. Banks would almost certainly insist it is. It is however based on all going to plan and production volumes following the growth pattern of the majority of plastic recycling plants brought onstream in Australia and in Asia in recent years. Plastics have varied in price by up to 50% in the past five years. Over coming years global recycling volumes are due to more than triple, making the competitive environment in Australia and overseas highly volatile. In most cases plastics recycling start-up is protracted. Production volumes elsewhere have failed to meet plans, with rejected materials in some cases being as much as 40% of goods received for processing, though Plasrefine forecasts rejected lots at under 10%.

The scale of the planned facility in processing is 4 to 5X the size of ANY of the facilities foreshadowed in the *NSW Waste and Sustainable Materials Strategy 2041* document of 2021. For success, not only does the plant have to be operating at best practice levels, but significant government subsidy for the initial years, as well as providing guarantees to support borrowing will be required. If things did not proceed to plan, or an accident occurred, remaining equity would fast disappear, potentially within the first five years. Gearing, even after Year One, would exceed most required typical covenant bank ratios.

This writer, from the data available, cannot find a justification for a recommendation of this venture financially - a volatile marketplace driven ultimately by Crude Oil variability, a small local market for output, increasing competition, lack of management depth and experience, a high level of financial gearing, and an unspecified dependence on government support for survival or until financial profitability. None of these factors are addressed in the Department's Recommendation. The IPC has a limited remit for rejection. If the NSW Government is determined to resolve the gap in production capacity for recycling due to a lack of available landfill and the need to achieve the goals of the 2041 Strategy, (a totally valid policy goal) then an obligation for transparency to the NSW community, especially that of the Southern Highlands, is required. The enterprise might not succeed in reaching critical mass (probably somewhere between 50,000 and 70,000 tonnes a year). The Department's Recommendation should also include a fully costed site make-good analysis, with indemnity to the State, from the Investor, even requiring a bond to that value. Australia has seen the costs to the community of dumped asbestos, the clean-up of battery manufacture in the Parramatta River, decades after the liability was created and the manufacturer had departed, fully born by the taxpayer. Plasrefine should not be a repeat of this in coming decades.

I emphasise that the numbers above have no basis in fact, simply because there is a lack of available information. If a person can prepare such a model without any data and find few redeeming elements financially, then I submit that such a financial review be carried out by Treasury, independent of The Department, and/or The IPC be required to call for such an evaluation before approval be granted, notwithstanding the other risk elements of the project.

A private company with adequate financial backing, good governance and proven management of similar enterprises is a perfectly valid structure for such a project. Thus far the community, the banks and government have no idea who will operate this, their skill set, their experience in risk management, their ability to sell the output of the factory in a changing marketplace. Instead, there is a 2021 State Government Strategy and transformation gap analysis that has been used to steamroller through a plan that is found wanting in basic commercial governance, fiduciary accountability and technical experience. On the available evidence all the technical responses to government have come from the consulting firm GHD. Are they or members of their global consultancy to be co-opted as management? Who will be the independent directors accountable to the shareholder and the Community? The responses to government solely by GHD on behalf of the company would appear to be deeply conflicted and largely invalidated as independent advice as to suitability. Nothing short of a true independent evaluation and rejection of the recommendation on this site are surely the correct view on this matter, given the evidence provided by the company.

The continued acceptance by government that this site is suitable, despite multiple technical indicators and global evidence to suggest it is unsuited to the site, continue to be dismissed by the Consultants. The Investor, the Consultant (GHD) and the Department are seemingly all afflicted with "get-home-itis", a common human behaviour of stressed pilots just prior to an accident. The IPC is required to take account of the affected Community, a group of thousands of local people who are dehumanised in the Consultants' responses as 'Receivers'. Nowhere in any of the Department's analysis is there a review of alternate locations that meet the safety and risk management needs of the project, requiring greater distance from commercial, scientific and light industrial facilities, which make this project a conflict with the required State edict for councils to prepare a local government strategic plan, which is being over-ruled in this case.

The Recommendation by the Department, based on responses from a seemingly conflicted Consultant, placed in a site fraught with complex risk, should be overruled and rejected.

John Swainston