New South Wales Government
Independent Planning Commission

GABBY KENT		**OBJECT**	Submission ID: 218305
Organisation:	*N/A*	Key issues:	*Social impacts,Visual impacts, design and landscaping,Land use compatibility (surrounding land uses),Traffic,Other issues*
Location:	*New South Wales 2577*		
Attachment:	*Attached overleaf*		

Submission date: 11/25/2024 2:40:41 PM

Please see attached file

Attention IPC Commissioners: Andrew Mills (Panel Chair), Clare Sykes & Janett Milligan

Re: Proposed Moss Vale Plastics Recycling Facility "Plaserefine" in Moss Vale NSW. Reference SSD-9409987

I am writing to **object** to this proposed development in Moss Vale for a number of reasons outlined in this submission.

We live at [redacted], 500 metres from the proposed facility and identified as a *residential sensitive receiver*. We are directly impacted by the proposed development from a visual, noise, traffic, odour and health risks of microplastics in the air and water. We will be directly impacted if the facility catches fire, our property value is being impacted today and will be significantly impacted should this go ahead.

Source: SSD - Recommended Development Consent Appendix A

When Plaserefine started we initially took a neutral stance and an open mindset to understand the proposal. Apart from its poor letter box drop timing right on Christmas 2020 (appendix a), we met with GHD and discussed elements of it with Nancy, we reviewed the documentation and engaged an independent planning consultant.

But over the course of the 4 years, what we've observed has provided cause for concern and alarm. The proponent has demonstrated a single minded dogged determination to get this approved, not listening, seemingly ticking boxes, engaging consultants to get this through, whatever the obstacles. GHD changed facts continuously updating information to what appeared, appease DHPI and the community. They lost credibility, there were errors & omissions and reasonable requests not addressed or just glossed over.

The submission is structured into the following sections;

Contents

We request the IPC consider and investigate this proposal development, not just read DHPI's SSD, conditions of consent and GHD's documents but ask for transcripts, source data and evidence in their communications between GHD and the DPHI, Agencies, Council and the Community. The way GHD has conducted this process has resulted in deep distrust. The experience many of us in the community have had is that the process is undermined, and documents have skewed information from GHD's perspective that's just not accurate.

This facility will have a significant impact not just on this area but potentially much wider. There is no confidence in the proponent or the process to ensure that this factory is safe. Essential information has not been provided but rather, kicked down the road to be done with conditions of consent. It's just not acceptable.

Zoning & Permissibility

Key Summary Points

- Plaserefine fails to meet the Permissible with consent conditions described under the E4 zoning
- The SEPPs that the proponent references as applicable for this SSD are not supported by the SEPP's definitions.
- The DPHI have not effectively tested Plaserefine's description against the Land use tables that it is not a hazardous and/or offensive industry and a hazardous and/or offensive storage establishment, therefore they have not tested it against the prohibited land uses for the E4 zone
- Due to the product Plaserefine is processes the facility requires physical segregation from its neighbouring land users. The proponent's application of a fully enclosed building is not adequate nor effective on many grounds
- The fact that Plaserefine has to operate under an EPL licence to manage the environmental issues and risks (air, noise, water, odour pollution etc etc) only further supports that this development is in the wrong zone
- It is not the right site.

When we bought [redacted] in December 2010, the real estate agent included in the sales material the details the Moss Vale enterprise corridor zoned light industrial to our north. Between us and that zone was 15 acre buffer of 15 acres (50a Bulwer Road). We investigated, weighed up the risks, how we would mitigate in the event the area was built out and proceeded ahead with the sale.

Since 2010, industry has built in the area along Douglas Rd and, apart from some overly bright lighting that development is consistent with our understanding. It's fairly light traffic that's not invasive, very low noise, no emissions, very occasional vibration (one off bang, we understand it's from Dux), it's all entirely acceptable and the effects can be effectively mitigated.

In December 2020 just before Xmas, we received a letter advising of a proposed plastics recycling facility nearby. Reading Plaserefine's various voluminous documentation over the last 4 years, one of the key issues I cannot reconcile is how it can be considered light industrial (now known as E4 general industrial)?

The facility is a heavy plastics industrial factory with stacks taking up 120,000 tonnes plastic, melting it to create new products. It's running 24 x 7 with 110 heavy truck movements per day (average 1 every 5.5 minutes) creating air and noise pollution with reversing truck (beep beep beep) and air brakes right close to residential neighbours. The facility will create microplastics and is sited between riparian creeks feeding into the local and Sydney water catchment. These plastic facilities are known for massive fires, a fire in a facility this size and location would have catastrophic consequences.

This site has limited to no buffers to adjacent residential housing (currently 250 metres) and future planned residential subdivision with more planned directly to its north. It borders the C4 Conservation zones described as *"used to define areas of land where protection of*

environmental significance is the main consideration. C Zones are an important part of LEPs and are standard in most local government areas that have bushland or other natural areas that need to be carefully managed[i]*"*

How can a development like this be allowed?

I am not a lawyer or town planner, I am a professional who can read, critically think and apply reasoned judgement. Following some analysis I question that this development is permissible under the SEPP and E4 land use tables as permissible with consent.

The applicable legislation discussed for the development is the EP&A Act 1979 and the Environment Planning Instruments (EPI), the State Environmental Planning Policy (State and Regional Development) 2011 (SRD SEPP), State Environmental Planning Policy (Infrastructure) 2007 and the Wingecarribee Local Environment Plan (WLEP) for where this is proposed to be sited. The SEPP & WLEP co-exist but SEPP's takes precedence over the WLEP. The WLEP has a standard instrument containing the zones and associated land use tables. The land use table sets out the objectives of each zone and the types of developments that are Permitted without consent, Permitted with consent or Prohibited.

Plaserefine is proposed into the E4 zone as permissible with consent. GHD in their EIS scoping report references the SEPP (State and Regional Development) 2011 as applicable for this development *"The schedule includes development for the purposes of waste or resource management facilities of any size"*[ii].

Under the EP&A act, Developments can be classified as a State Significant Development (SSD)[iii] which Plaserefine is classified. GHD's report **Page 22 EIS_12524108-REP-6_Scoping Report_Release 1** (appendix B)

The State Environmental Planning Policy (State and Regional Development) 2011 (SRD SEPP) is an environmental planning instrument under the Environmental Planning and Assessment Act 1979 , which identifies particular types of development as state significant infrastructure (SSI) or state significant development (SSD).

Under Clause 23 (waste and resource management facilities) of Schedule 1 of the policy, the proposal is considered to be: (3) Development for the purpose of resource recovery or recycling facilities that handle more than 100,000 tonnes per year of waste.

The proposal is applicable to the criteria listed in Clause 23(3) as it will have the capacity to receive up to 150,000 tonnes per year of mixed plastics and waste containing plastics. As the capacity of the proposed facility is greater than 100,000 tonnes per year, it is considered to be SSD.

To determine whether the SEPP applies to Plaserefine requires an understanding of what actually Plaserefine does.

GHD's Amended Development report Appendix A_Updated Proposal Description (Sept 23).
Plaserefine describes itself as

Page 1 *"a plastics recycling and reprocessing facility"*... where *"The proposal would sort the mixed plastics into different types and convert the various plastics to flakes and pellets (in the first stage) and produce more advanced plastic products (in the second stage).*

Page 7 - *Building 1 would be the main processing building and used for receival of mixed plastics and sorting, cleaning, crushing and extrusion granulation.*

Page 7 - *Building 2 would be used for reprocessing of the flakes and pellets (produced in Building 1) into more advanced products as well as storage of finished products*.

Page 17 - ***Feedstock types, volumes and composition.*** *The proposal would have capacity to receive up to 120,000 tonnes per year of mixed plastic waste feedstock. At full scale operation, this is expected to comprise about 100,000 tonnes of mixed plastics and up to 20,000 tonnes of polyvinyl chloride (PVC) and plastic films. The facility would receive mixed plastics such as containers and bottles from recycling collections and mixed plastics from other sources such as recycling centres and commercial and industrial facilities*.

Page 17 - ***Plastics recycling and reprocessing process overview***

After unloading the incoming mixed plastic waste feedstock, it would undergo a series of mechanical, manual and optical screening and sorting processes to separate the plastics into different types and colours. The first process would be to separate the bales of plastic. Mixed plastics would first be sorted by colour. The sorted materials would then undergo crushing (flaking), washing and batch mixing. Depending on the plastic type and intended end use, some of the flakes would either be pelletised (via extrusion granulation) or milled into powder. The resulting flakes, pellets or powder would be either processed further on-site to produce advanced plastic products (deep processing) or transported off-site for direct sale

One Page 19, it goes into detail on the process covers sorting, cleaning, crushing, extrusion granulation (heating and turning plastic into pellets) and then deep processing directly into finished products (e.g. plastic chairs) or transported offsite.

Page 23; goes into the detail of "deep processing" of the different plastics and what they deliver at the end which involves "*reprocessing of the flakes, pellets or powder produced in Building 1 into more advanced products. The finished end products would be stored in Building 2 ready for sale. The flakes and pellets would be moulded using extrusion or injection moulding processes to produce more advanced plastic products such as PET sheets, PET packing belts, wood plastic composites, plastic pallets, furniture or turnover boxes etc.*

For injection moulding, "*Toys, chairs, baskets and casings are manufactured using this process"* with the *"The finished products would be sold to domestic or international markets."*

Page 26 states *"Table A.2 lists the expected product outputs from the plastics recycling and reprocessing operations. The output composition of this may change over time, however a maximum of 107,000 tonnes per year of plastic products, metals or mixed plastics solids would be recovered or produced at full scale operation".*

<u>State and Regional Development) 2011 (SRD SEPP and its application to Plaserefine</u>

Plaserefine describes itself as a plastics **recycling and reprocessing facility.** The SEPP definition[iv] Plaserefine references this SEPP as applicable for this development which is a **"Resource Recovery or Recycling Facility".**

A **resource recovery facility** is;

> ***resource recovery facility*** means a building or place used for the recovery of resources from waste, including works or activities such as separating and sorting, processing or treating the waste, composting, temporary storage, transfer or sale of recovered resources, energy generation from gases and water treatment, but not including re-manufacture or disposal of the material by landfill or incineration.
>
> **Note—**
>
> Resource recovery facilities are a type of ***waste or resource management facility***—see the definition of that term in this Dictionary.

The doesn't apply to Plaserefine because according to Plaserefine's description it's doing remanufacture (GHD called deep processing) which melts down the plastic and creates new products such as belts, crates, chairs etc. This description very clearly excludes this process.

None of the nominate 3 developments under waste or resource recovery facility definition apply either (see appendix c), its clearly not a transfer station and it's not a waste disposal facility because what it receives isn't waste but a resource. They're not a waste management facility either, I don't think they're claiming they are but for clarity its worth referencing this court case as its relevant to the Plaserefine proposal.

Land & Environment Court Case

Director-General, Department of Planning and Infrastructure v **Glass Recovery** Services Pty Limited - Justice Pain[v]

This criminal case was trialled in the Land & Environment court in December 2014. On Page 4 it outlines what is permissible and what is not.

(d) Under the LEP, ***the operation of a waste or resource management facility is prohibited*** *on land zoned IN1 General Industrial (LEP, Part 2, Land Use Table, Zone IN1 General Industrial, clause 4)* (note IN1 has been subsumed into E4 since then)

(e) State Environmental Planning Policy (Infrastructure) 2007 (the [Infrastructure] ***SEPP****) provides that development for the purpose of a waste or resource management facility* ***may be carried out by any person with consent in a prescribed zone*** *(SEPP, Part 3, Div 23, clause 121).*

(h) The defendant ***does not have consent*** *to operate the glass* ***beneficiation*** *plant, or any other waste or resource management facility, on the Site*

For clarity a beneficiation plant is a facility that improves raw materials through processes that eliminate waste and produce valuable outputs. The glass company, like Plaserefine, receives sorted products from suppliers such as MRFs.

The prosecutor in this case asserted that broken glass delivered to the Defendant at the glass beneficiation facility was **"waste"** as it had not finished being processed to recover a "resource" at that point. Therefore, the Defendant's use was within the definition of "resource recovery facility".

However the Defendant (the glass manufacturer) stated

Page 20 *"The glass beneficiation facility is not a facility the Prosecutor can establish is a "resource recovery facility". The glass beneficiation facility* ***receives used glass material at a point in time where the material is no longer waste****. In other words, the point in the cycle in*

which glass which was part of empty ***bottles ceases to be waste is reached before the used glass material comes in through the Defendant's gate****. It is the facilities earlier in the process, such as the MRFs that would fit the definition of a "resource recovery facility"*

MRFs are resource recovery facilities because MRFs separate plastic, metals, and other material from the bottles, and then process and break them up. Once the glass has gone through processing at a MRF it is in the form of crushed and cleaned glass, although it requires further processing and removal of the impurities at the Defendant's facility

The Defendant paid for the transport and/or supply of the glass material from a number of MRFs. This circumstance weighs against the proposition that the material was waste at the time the Defendant received it. Rather, it suggests that the Defendant received a resource that had been processed from waste by a MRF. The Defendant falls on the same side of the industrial process as OI. The Defendant and OI are factories that use resources and process the resources to bring them to the point where they become a finished product

Furthermore the excluding words "but not including re-manufacture of material or goods" in the definition of resource recovery facility prevent the definition from applying to the activities carried out by the Defendant at its glass beneficiation facility.

Justice Pain ruled in favour of the defendant supporting the position that the facility was not a resource recovery facility but an industry. I don't know whether Plaserefine pays the MRF's or not but that is not the material point here. The process description and supply chain has the same process and this was described by Mr Gamble on day 3 of the IPC hearing.

I find that Plaserefine fails on the definitions on two items;

a.) It's not a resource recovery facility because
    a. MRFs are resource recovery facilities, these are the contractors that David Gamble refers too that sort the packaging prior to it being received at the Plaserefine factory referred to in the IPC question and answer session on day 3.
    b. Plaserefine does remanufacturing which is not allowed.
    (P31) The re-manufacture of material or goods is excluded under the definition. The Defendant beneficiates glass delivered from three sources by separating, sorting and cleaning the glass, all of which is reconfigured as cullet and supplied to OI. The meaning of "beneficiate" according to the Macquarie Dictionary on-line is to dress or process (ores) as by reducing the size of pieces or removing unwanted constituents the overall quality is improved. According to the EIS purpose-built machinery is used.
b.) It's not processing 'waste'. Waste, as determined in the judgement is something "unwanted, surplus". It's not waste, it was deemed a resource because the glass was sorted, crushed, contaminants removed and packaged and sent to the Glass factory for processing. Once the glass leaves the MRF the material has undergone the transformation from waste to resource. Far from it being unwanted, there is demand for used, refined glass as a resource for making new glass products.

Sounds familiar? David Gamble's explanation on day 3 of the IPC hearing in response to IPC questioning concerns of lithium batteries contaminating the product coming into the facility is the process described above in the glass facility. The initial plastic products are received at the

MRF facilities where they are sorted, rubbish removed (e.g. lithium batteries) and packaged into bales for transportation.

State Environmental Planning Policy (Infrastructure) 2007 and its application to Plaserefine

GHD also applied this SEPP (appendix D) in context of traffic and advises "The schedule includes development for the purposes of waste or resource management facilities of any size. There are 3 nominates for **waste or resource management facilities** of any size. See appendix E for the definitions, Appendix F for SEPP table and Division 23. Division 23 of this instrument is quite clear and aligned with the previous referenced SEPP 2011 that a resource recovery facility does not include the *"remanufacture of material or goods"*. Plaserefine is not a resource or waste transfer station or a waste disposal facility. Its definition does not fall into any of the nominates.

I understand that where SEPP/s don't apply then it defaults to the WLEP.

Wingecarribee Local Environment Plan (WLEP) and its application to Plaserefine.

The target site for Plaserefine is in E4 General Industrial (see appendix F). The land use table states that *" the consent authority must have regard to the objectives for development in a zone when determining a development application in respect of land use in the zone"* with 2 permanent objectives being; *"to minimise any adverse impacts of industry on other land uses"* and *"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"*

The land use table for the zone specified, in item 2, that the development that may be carried out without consent (none of the 3 nominate developments are relevant to Plaserefine), item 3, permitted with consent (none of the nominate developments are relevant but the category of innominate development is potentially relevant, that is, "any other development not specified in 2 or 4) and item 4, prohibited (most of the nominates don't apply however, industries, and, heavy industrial storage establishment is about to be tested below).

In the land use tables (appendix h), Industries are categorised into light, general and heavy. Plaserefine clearly isn't light industry, general industry is not described, it just states a *building or place (other than heavy industry or light industry) that is used to carry out industrial activity*, I would say then that it's innominate use and you apply what Plaserefine does (as described earlier) to determine where it fits. I find that Plaserefine is a hazardous industry and offensive industry and, is a hazardous and offensive storage establishment under the Heavy Industrial storage establishment **which are prohibited under E4 zoning.**

The subsequent sections of this document on Microplastics escape, fire, noise, visual etc provide substantiation to support the Heavy Industry classification. Regarding hazardous and offensive storage establishment, this is covered below.

Hazardous and offensive storage establishment

The case of Terra AG vs Griffith city council 2017[vi] and its decision over whether a rural land supplies business is permissible provides some useful application to Plaserefine. It covers concepts of segregation and heavy industry storage.

The judgement found that regardless of whether the development application was classified as hazardous or offensive industry, the question of permissibility comes down to whether one of its uses is heavy industrial storage which is prohibited in its applied zoning.

The land use definitions referred here are in Appendix G. First (as what occurred in this legal case) is to apply the development against the definition of Industrial Storage Establishment.

heavy industrial storage establishment *means a building or place used for the storage of goods, materials, plant or machinery*

> **Assessment:** Plaserefine has clearly demonstrated that it will be storing large quantities of unrefined and refined plastics as part of its processing. The bales storage in building 1 and the stockpiling of finished product in building 2 for sale.

for commercial purposes

> **Assessment:** Yes, Plaserefine is operating for business purposes

and that requires separation from other development because of the nature of the processes involved, or the goods, materials, plant or machinery stored

> **Assessment:** Plaserefine have identified the separation requirement to nearby sensitive receivers, it acknowledges the facility creates noise, vibration, odour etc and has addressed this separation requirement by have a "fully enclosed facility". This separation position of GHD and the DPHI's acceptance of that (SSD Assessment Report) is disputed on two grounds;
>
> a.) The facility is not fully enclosed with the facilities design of large roller doors, open cavernous design without internal segregation resulting in potential microplastic escape
> b.) Other hazards are not remediated by the enclosed building such as truck noise, odour, visual impact and lighting due to truck volumes and its close proximity to sensitive receivers (this is covered in later sections)

and includes any of the following—

hazardous storage establishment *means a building or place that is used for the storage of goods, materials or products*

> covered above

and that would, when in operation and when all measures proposed to reduce or minimise its impact on the locality have been employed (including, for example, measures to isolate the building or place from existing or likely future development on other land in the locality), pose a significant risk in the locality—

(a) to human health, life or property, or

(b) to the biophysical environment.

Plaserefine is processing dangerous chemicals. Some of these chemicals are itemised on EPA's Dangerous Goods Code table[vii]. One is ethylene glycol (EG), item 1153 on the line register and is in Polyethylene terephthalate (PET)

Page 17, Appendix A Updated Proposal Description it lists out the products they are receiving and processing in the facility. PET is one the most common plastics (bottles, packaging) coming into the Plaserefine facility.

In GHD's Scoping report, page 23 it states *"State and Environmental Planning Policy No 33 – Hazardous and Offensive Development (SEPP 33) requires the consent authority to consider particular matters in determining a development application for a project that is a potentially hazardous industry or potentially offensive industry"*

Did DPHI consider this application as a potentially hazardous industry or potentially offensive industry? Did they properly test this out? The SSD Assessment Report (page 53) states this;

Dangerous Goods (DG)

- The Applicant undertook a preliminary risk screening in accordance with State Environmental Planning Policy (Resilience and Hazards) which identified there would be no hazardous materials stored on the site,

I looked up the SEP 33 that GHD referenced for hazards, checked ethylene glycol (EG), and applied their methodology. This is what I found

1. It is registered as a class 3 and in SEPP 33 its included as a dangerous good
2. Whether its hazardous or not depends on quantity and storage, and provides instruction on how to determine that and what distance is required from the site boundary

SEPP 33 Page 15

- the distance of the stored material from the site boundary for any of the materials in dangerous goods classes 1.1, 2.1 and 3; and

Note: Where liquids are contained in a bunded area, the distance is measured from the bund wall rather than from the tank. For materials stored in underground tanks, the distance is measured from the above ground filling/dispensing point.

Page 23 explains how to quantify it.

Identify Hazardous Materials and the Type of Hazard

Determine the quantities of all classes of hazardous materials listed in the development application and, if the proposed development is part of an existing plant, any adjacent inventory. Ensure that both the main class and any subsidiary classes obtained from the Dangerous Goods Code or from information provided in the Material Safety Data Sheets are noted so that all relevant hazards are considered.

Group and Total by Class, Activity and Location

Where several hazardous materials of the same class are kept on site in the same general location, total the quantities by class and activity (that is, total all quantities of each class stored in bulk then separately total the quantities of each class stored in packages/containers).

Table 1 provides the basis for the grouping. Do not add underground and above ground storage together — these must always be treated separately. If the proposed development is an extension to an existing site, include those inventories on the existing site that are adjacent to the proposed development.

If dangerous goods of a given class but varying packing groups are stored in the same general area, assume the total of that class is present as the most hazardous packing group (for example, if 3PGI and 3PGII are present, add these together and assume the equivalent total is of 3PGI).

Measure the distance of the material group to the nearest boundary. The distance is to be measured from those materials in the group located closest to the boundary.

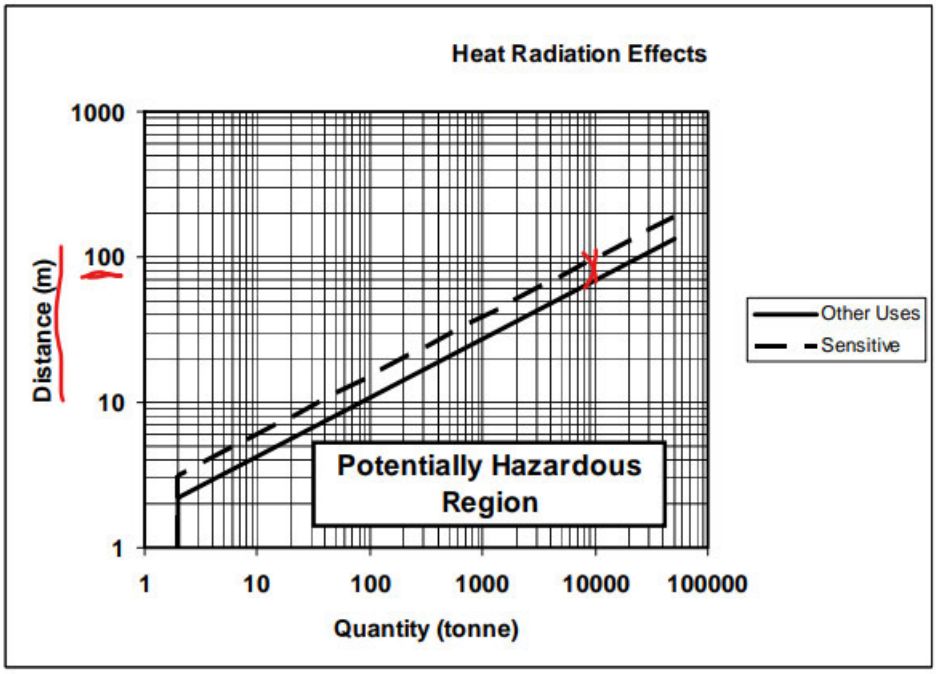
Based on the class of chemical and its storage quantity determines whether it is a.) hazardous and b.) if yes distance required to the site boundary. Plaserefine is storing up to 20,000 tonnes of mixed plastic, a large (GHD have not explicitly specified quantities by type but they have said that PET is one of the main products) quantity of the plastic is PET which is residual compound of Ethylene. A quick google search question "how much of our plastic is PET"? returns the following.

Polyethylene terephthalate (PET) is the most commonly used polymer in the world, accounting for a large portion of the plastic we use:

- ***Production**: About 56 million tons of PET are produced annually.*
- ***Packaging**: PET is used in 70% of carbonated soft drinks, fruit juices, dilutable drinks, and bottled water. In 2021, PET packaging accounted for 44.7% of single-serve beverage packaging in the US.*
- ***Recycling**: PET is the most recyclable plastic in the world. It's easy to recognize by its number 1 logo.*

If we are conservative with Plaserefine and say that half of their plastic content is PET, that's 10,000 tonnes this is what it looks like using the SEP methodology.

Figure 8: Class 3PGI Flammable Liquids



Therefore needs to be 100 metres from the boundary. The ABR is 65 metres from Plaserefine with a DA in for extension that takes it even closer to Plaserefine.

I'm not a scientist, that's just rudimentary research highlights this chemical as dangerous, flammable (which we know it is) and with storage requires separation from its site boundary. I question whether the DPHI really tested GHD assertions that this isn't a hazardous/offensive industry, and/or offensive storage establishment industry. Was this something that was covered off with the EPA and did DPHI really question it?

A simple google search advises "*Ethylene glycol has a sweet taste and is often ingested by accident or on purpose. Ethylene glycol breaks down into toxic compounds in the body. Ethylene glycol and its toxic byproducts first affect the central nervous system (CNS), then the heart, and finally the kidneys. Ingesting enough can cause death*"

Plaserefine advises in their production processes *(Page 19) The sorted PET, PP, HDPE and ABS material would be crushed, cleaned and sterilised using steam and a patented alkaline water disinfectant solution heated to 193 °C. The condensed steam would be treated at the onsite wastewater treatment plant and re-used back into the process. The crushing would produce flakes which would then be mixed in batches before being pelletised using extrusion granulation, transferred to Building 2 for deep processing directly into finished products or transported off-site for direct sale"* .

The latter process described here involves even higher heating temperatures, the significance of this is covered in the next section.

Plaserefine have not been able to competently demonstrate with their facility design (being open cavernous with doors opening without being compartmentalised sealed) that

contaminants cannot escape into the air and the waterways. These waterways feed into the Sydney water drinking catchment area.

Plaserefine has not done adequate risk assessment in regards to Fire. A fire at this facility would result in catastrophic impact to human health, life and the biophysical environment. The DPHI has not conducted adequate testing of GHD's positions

offensive storage establishment *means a building or place that is used for the storage of goods, materials or products*

covered above

and that would, when all measures proposed to reduce or minimise its impact on the locality have been employed (including, for example, measures to isolate the building or place from existing or likely future development on other land in the locality),

covered above

emit a polluting discharge (including, for example, noise) in a manner that would have a significant adverse impact in the locality or on existing or likely future development on other land in the locality.

Plaserefine fails this on a number of points. Firstly they have not been able to credibility demonstrate that noise mitigation measures are effective. They are proposing up to 110 truck movements per day, trucks are reversing into the facility (beep beep beep) on average every 5 minutes and leaving where they will use airbrakes. That is significant volume despite what GHD state and the DPHI accept and it is a significant impact to the residential sensitive receivers being closet 250 metres away. Our property is quiet. The noise receiver that was installed on our property (not 50a as GHD reported it) will show that. There is no way this can be effectively mitigated with this site location and access design. Conditions of consent have proposed "Driver education" as mitigation, this is not realistic. They do not control trucks or drivers. Plaserefine advised that they will own their own trucks and therefore that infers that there is control over that. This information is not credible, the cost would be prohibitive and where would they all park at night and on the weekend, that hasn't been covered in their plans.

Council have advised that the development is at odds with the DCP, it is not in line with development they seek to attract.

Please refer to the ABR submission on the impact to them, it will have significant adverse impact on their facility

The use of Braddon road will have significant adverse impact on current residents and on 50a Bulwer Rd residential subdivision that uses that road. A lot of traffic will be using that road to get into the facility, mostly the worker vehicles and Plaserefine can't stop trucks taking that route either. Today Beaconsfield is a dead end, it will become a thoroughfare.

Wrap up

GHD in their initial scoping report, page 23 have stated that *"developments that require an EPL licence are considered to be potentially offensive"* and that an EPL licence would be required. As a result an EPL would be required for Plaserefine and *"it is considered to be a potentially offensive industry"*. I don't support GHD's interpretation of SEP33 that because it's to be issued an EPL *"under the guidelines of the SEPP 33, the proposal is unlikely to be considered to be an offensive industry"*.

I interpret the meaning to be the opposite.

State Environmental Planning Policy No. 33 – Hazardous and Offensive Development

State and Environmental Planning Policy No 33 – Hazardous and Offensive Development (SEPP 33) requires the consent authority to consider particular matters in determining a development application for a project that is a potentially hazardous industry or potentially offensive industry.

Under SEPP 33, a potentially hazardous industry means a development for the purposes of any industry which, if the development were to operate without employing any measures to reduce or minimise its impact, would pose a significant risk to human health, life or property, or to the biophysical environment. SEPP 33 requires developments that are potentially hazardous to have a preliminary hazard analysis (PHA) prepared to determine the risk to people, property and the biophysical environment at the proposed location and in the presence of controls.

A potentially offensive development means a development for the purposes of an industry which, if the development were to operate without employing any measures to reduce or minimise its impact, would emit a polluting discharge in a manner which would have a significant adverse impact. Development that requires an environment protection licence (EPL) are considered to be potentially offensive. However, by definition, if the level of offence is generally not considered to be significant if the relevant EPLs can be obtained.

An EPL would be required for the operation of the facility and as a result it is considered to be a 'potentially offensive industry'. If the proposal is issued with the required EPL from the EPA, under the guidelines that apply to SEPP 33, the proposal is not likely to be considered to be an 'offensive industry'.

Did the DPHI properly assess and test Plaserefine's operations against SEPP 33 and the definition to determine whether it's a hazardous and/or offensive industry, and a hazardous and/or offensive storage establishment?

The nature of this facility goes directly to the heart for need for separation. It presents an unacceptable risk to surrounding receptors and even when all measures proposed to reduce or minimise its impact, cannot mitigate its impact. This facility is heavy industry and heavy industrial storage facility and **therefore is prohibited in the E4 zone**.

Microplastic contamination with the facility design not being a fully enclosed building

Key Summary Points

- Microplastics contamination into our waterway is a very real and current issue
- The evidence of harmful microplastic contamination to human health and biodiversity is rapidly coming to light
- Plaserefine is taking various plastics and grounding them into refined microplastics as part of its processing (remanufacture)
- The risk mitigation (prevention of) for microplastic contamination is dependent on effective mitigation measures. Such mitigations include facility design, operations processes with regulation, transportation and site / location specific measures
- An issue of Plaserefine being categorised as E4 General Industry permissible with consent and not heavy industry (hazardous and/or offensive) means it's getting past the type of risk assessment such as the methodology in *NSW Planning Hazardous Industry Planning Advisory paper 4*[viii] would apply. This categorises risks appropriately and applies relevant mitigation commensurate with the risk for strategic land planning.
- A heavy industry (hazardous, offensive) requires segregation from neighbouring land uses and, dependent on what the industry is, would not be permitted in water catchment areas
- The risk impact of risks with heavy hazardous industry (e.g. fire & toxic waste escape) would be measured as Catastrophic[ix]. Plaserefine cannot effectively mitigate these risks. If the risk assessment was done, it wouldn't be permissible on the site proposed.
- Segregation has been proposed by GHD as having a contained facility/ GHD have not been credible in proving that the site is contained
- The DPHI have errored in accepting this proposal for E4 zoning without rigorous testing against what Plaserefine actually does. GHD are now in the situation of trying to make the facility "fit" the E4 zoning and categorisation of E4.
- The facility situated on the site and its location is <u>fundamentally flawed</u>.

<u>Microplastics contamination</u>

The awareness and impact of microplastics contamination is growing at a rapid rate and it isn't good news. The Environmental impact of microplastics is known to threaten the environment, food safety, and human health and is found in river systems, oceans, sediments, biota, and even in the air. They can also potentially enter the human body, this isn't 'out there' unproven theories, its widely reported in government and the media particularly recently over the PFAS contamination in the Blue Mountains water supply.

Plaserefine is accepting these products into its factory according to its Appendix A proposal description (Page 17) and acknowledges that there will be microplastics escaping the facility (appendix I)

A-5 Plastics recycling and reprocessing operations

A-5-1 Feedstock quantities and characteristics

Feedstock types, volumes and composition

The proposal would have capacity to receive up to 120,000 tonnes per year of mixed plastic waste feedstock. At full scale operation, this is expected to comprise about 100,000 tonnes of mixed plastics and up to 20,000 tonnes of polyvinyl chloride (PVC) and plastic films. The facility would receive mixed plastics such as containers and bottles from recycling collections and mixed plastics from other sources such as recycling centres and commercial and industrial facilities.

The facility would have the capability to process the following plastic types received as mixed plastic:

- Polyethylene terephthalate (PET)
- High-density polyethylene (HDPE)
- Polypropylene (PP)
- Acrylonitrile butadiene styrene (ABS)
- Low-density polyethylene (LDPE)
- Unplasticized polyvinyl chloride (UPVC).

The mixed plastic is expected to be received and stored in bales.

Excluded wastes

Putrescible waste, liquid waste, clinical waste, hazardous waste, asbestos and other chemical waste would not be accepted at the facility.

Of those products list above; polyethylene terephthalate (PET), Polypropylene (PP) can contain perfluoroalkylated substances (PFAS).

PFAS according to the USA EPA[x] which is ahead of Australia's EPA[xi] has highlighted the serious health concerns with its pervasive application found in many different consumer, commercial, and industrial products, its chemicals are long lasting chemicals, components of which break down very slowly over time. The EPA are acknowledge that their understanding is evolving

What We Don't Fully Understand Yet

- EPA's researchers and partners across the country are working hard to answer critical questions about PFAS:
  - How to better and more efficiently detect and measure PFAS in our air, water, soil, and fish and wildlife
  - How much people are exposed to PFAS
  - How harmful PFAS are to people and the environment
  - How to remove PFAS from drinking water
  - How to manage and dispose of PFAS
- This information will help EPA and state, local, and tribal partners make more informed decisions on how best to protect human health and the environment.

Following recent publicity, the Australia EPA on its website in its research now notes that *"Australia's guidelines are under review after the US EPA's dramatic policy shift in April deemed the chemicals were probable carcinogens and found there was no safe level of exposure".*

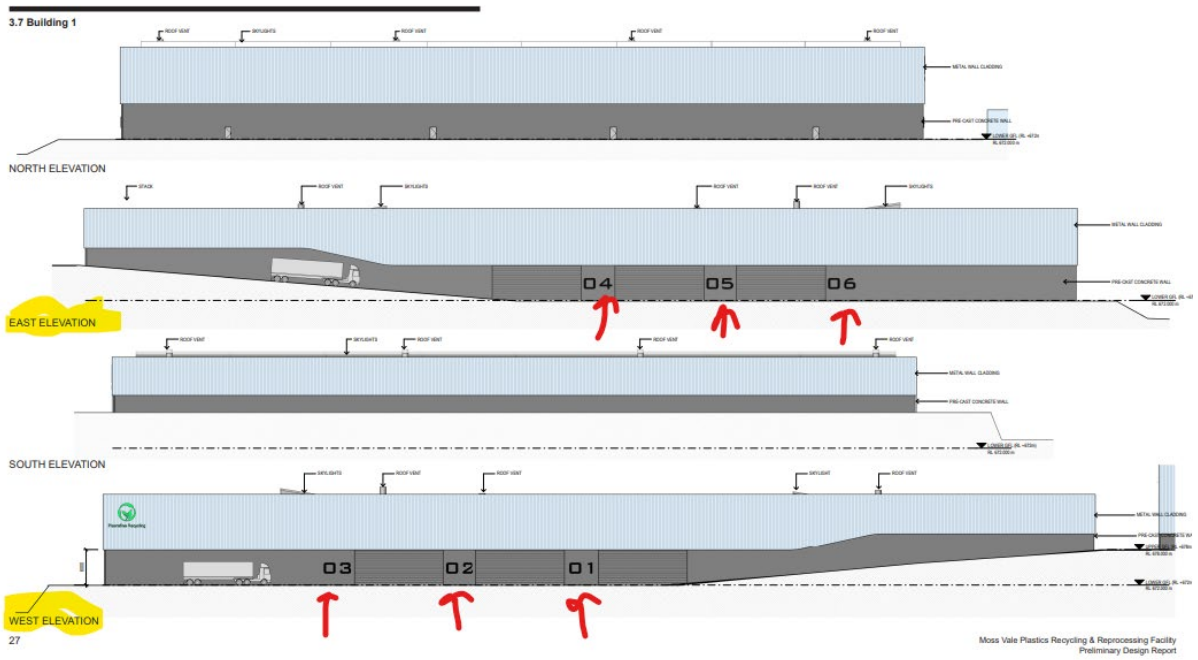
A few items to note here;

1. Plaserefine is taking 120,000 tonnes of plastic products grinding them into microplastics and some products will likely be contaminated with PFAS.
2. The understanding of health and bio diversity impacts of microplastics is still evolving and the prognosis is deteriorating
3. Plaserefine is in close proximity to expanding residential, the ABR, schools, tourism, agriculture and sited between two riparian creeks feeding into the local and Sydney water catchment area.

<u>Plaserefine Facility Design</u>

Plaserefine is divided into two buildings (Appendix C Preliminary Design_Final report). On page 56, Building 1 shows on the west facing perspective the 3 large roller doors where the trucks enter (doors 1,2,3) and on the east, 3 more roller doors (doors 4,5,6).

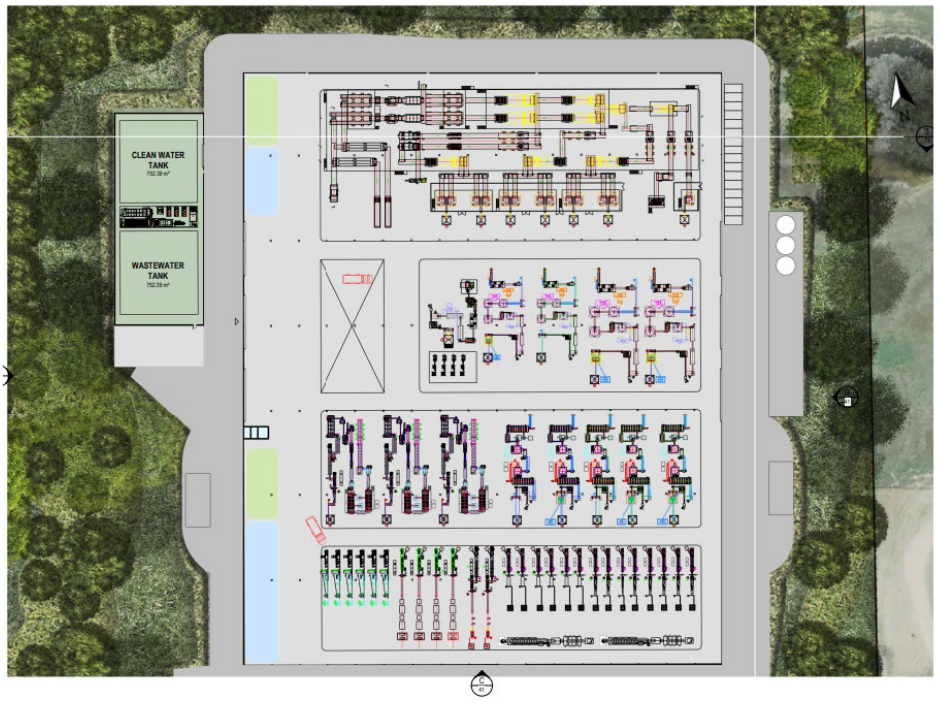
Building 1 & 2 doors and orientation



Building 1 is a very large open design floor plan, it does not have segregation. The building approximately 4 stories tall where the main plastics processing is performed. Trucks will be reversing into the building through 3 roller doors and unloading product. There's also 3 large doors for truck entry/exit on the east.

3.7 Building 1

FLOOR PLAN - GROUND FLOOR



Building 1 is the main plastics processing where it produces the flakes, pellets or powder which are then transferred to Building 2 for the deep processing (remanufacture) into more advanced products and stored for sale.

Points of microplastic escape

David Gamble stated at the Day 3 IPC hearing that trucks reversing in would take 2-3 minutes per delivery resulting in doors being open up to 5 hours per day. He then provided updated information changing his figures to 42 minutes per day. I question GHD's expert advice in that letter and that microplastics don't escape on these grounds;

1. Trucks reversing isn't quick
2. Wind behaviour and lack of landscaping buffer to slow it down
3. The facility is one large area (no compartmentalised sealed areas)

Point 1 - Trucks don't reverse quickly, that's a fallacy and Plaserefine has no control over the skill of a truck driver. The access into this facility also makes fast reversing not practicable. The figure below they've included in this analysis shows the truck reversing in on an angle. Additionally, it's difficult to see how trucks could manoeuvre into the facility anyway with the location of the water treatment plant.

Page 2, GHD's response Nov 15th David Gamble's "Fast reversing trucks" (30 seconds)

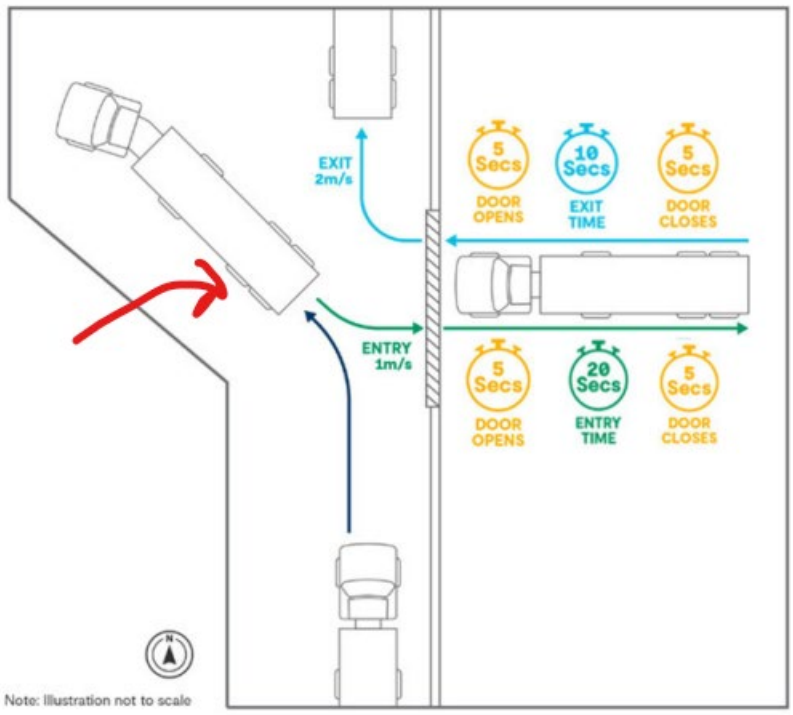
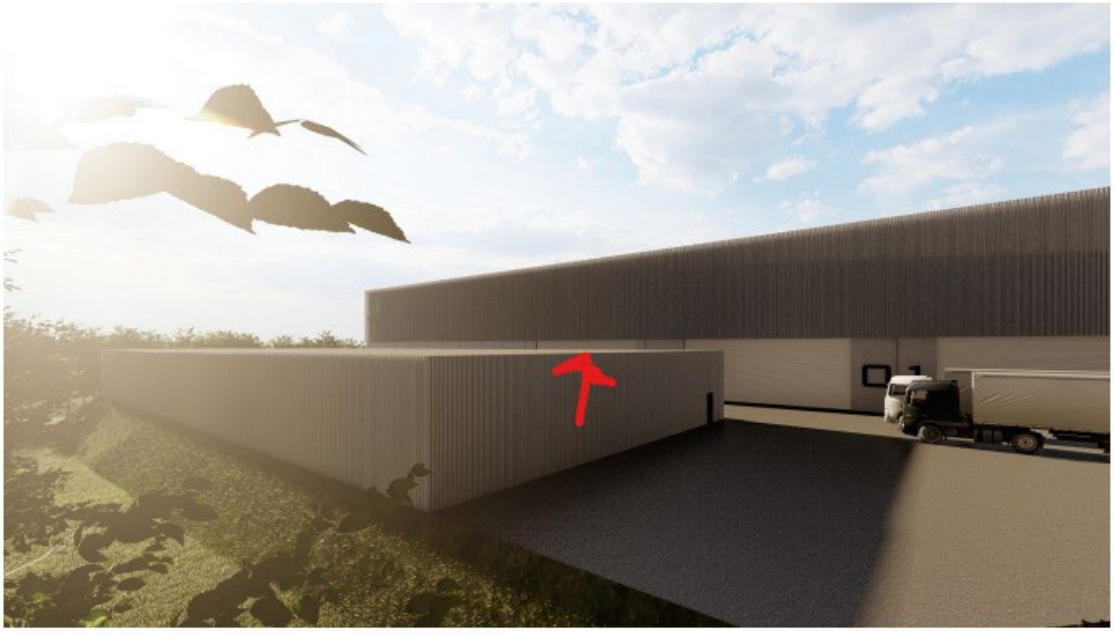


Figure 1 *Time required for trucks entering and leaving Building 1*

An exterior view of Plaserefine, look at the doors location in relation to the waste water plant



Western facade and waste water treatment building

Here's another view. Its completely impractical to have trucks with this space to reverse in at all let alone quickly. It appears that doors 2 & 3 are not even accessible.

Western facade and waste water treatment building

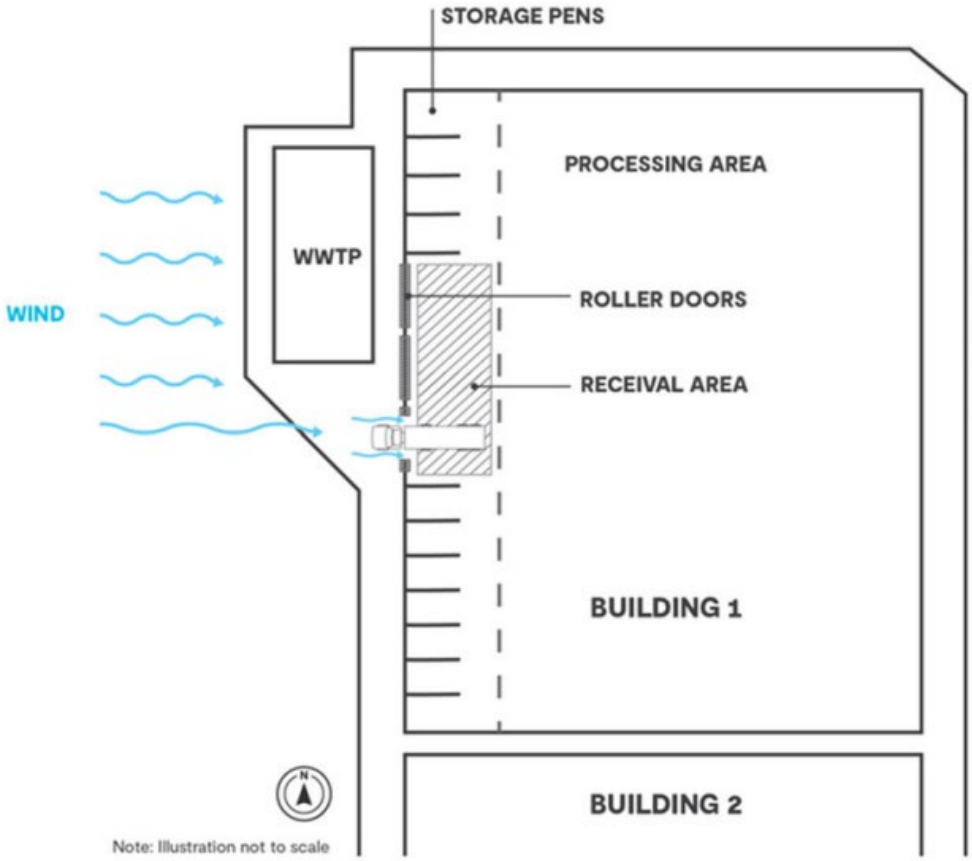
I haven't seen how Plaserefine proposes to get the product from Building 1 into Building 2. There appears to be some doors on the wall between the building but when one checks the levels, the buildings are not on the same level, there's about a 6 metre difference. There's no allowance for swing space for a truck to get in and out. I can't work out how they've moving the product and that it is moved safely. Isn't this fundamental to not allowing microplastics to escape? They are clearly stating in their processing description that large volumes of the product will be moving from building 1 to building 2.

Wind behaviour & facility design

David Gamble's letter provides some commentary on wind behaviour and screening from the waste water treatment plant.

Figure 2, shows that the northern roller doors would largely be shielded from westerly winds by the proposed wastewater treatment plant (WWTP) building. The WWTP is 5 m in height. The southernmost roller door would be protected from north west winds. There is potential for westerly winds to blow inwards through the doors, when open, noting that the time for which the door is open is at the most, 30 seconds, when a semi- trailer is reversing, and 20 second when a semi-trailer is leaving.

The doors would only be open when in use. Therefore, at all times when the door is open, there would be a truck moving through the opening. This would create resistance to wind in addition to the static pressure of the building. A westerly wind direction (blowing towards the building), would not cause material to be carried through the door opening in the opposite direction.



He goes on to say

"It is proposed that this part of the building would have a negative air pressure system, which will draw air in through the open doors, preventing escape of any plastic particles when there is no westerly wind blowing. This would be operated at 0.5 air changes per hour (typical operations). This could be increased by 100% to 1 air change per hour, to provide additional protection against escape of particles. Should any fragments (not microplastics) fall onto the floor during unloading (whilst the doors in closed), they would be cleaned up using an industrial vacuum cleaner or floor washing equipment before the door is opened again for the truck to leave"

The above measures will enable the plant to operate continuously whether the doors are open or not"

Moss Vale weather

Moss Vale is a windy place, I researched wind behaviour when designing the landscaping for my property in 2014. It's a well understood science for Agriculture to protect crops. I've included the analysis I conducted over 14 months of BOM data in 2013/14

<1% of days are calm (no wind). Most winds comes from the West, then SW then NW. Wind isn't just wind speed but wind gusts, wind gusts are more challenge because it swirls and produce turbulence, they're more damaging as they're unpredictable.

Wind speed

Where does the fastest winds come from?

MEASURE: Max speed of wind by direction measured each day in kilometres per hour, averaged over the month

Row Labels	E	ENE	NE	NNE	N	NNW	WNW	NW	W	WSW	SW	SSW	S	SSE	SE	ESE
1/10/2013	33		37	50	39		46	98	83	83			41	74		35
1/11/2013			37	69				54	94	83		48	56	59	35	39
1/12/2013		39	37	44	59	54		50	74	81			44	56	31	39
1/01/2014	33	39	39	52	46	52			54	72				43	48	37
1/02/2014	35	39	46	46	56		48		56			57	59	37	30	30
1/03/2014	31	43	43	72	48		37		70	48	37		50	76	33	
1/04/2014		24		46			56	50	50	57	31	57	48	48	35	
1/05/2014			28	44			44	70	78	50			31	33		
1/06/2014			39		35	22	83		93	57		20	39	39		31
1/07/2014				43	43	48	78	56	80	80		31	63		22	
1/08/2014		30	28	33		28			76	69		39	67	70	44	35
1/09/2014		31		50		54		78	72	76	61	54	63	52	28	
1/10/2014	24	33	54	46	46			59	91	70	35		91	50	39	
1/11/2014		35	31	46	44			70	87	44	54	106		43	65	31
Average	**31**	**35**	**38**	**49**	**46**	**43**	**56**	**65**	**76**	**67**	**44**	**52**	**54**	**52**	**37**	**35**

Generally, what direction does most of the max speed winds (high/extreme) come from?

	0	**0**	**0**	**0**	**0**	**0**	**2**	**2**	**8**	**5**	**0**	**1**	**1**	**1**	**0**	**0**

White	NIL	That direction never registered as a maximum speed wind.
Green	NEG	40km and below
Yellow	LOW	40-60
Orange	MED	60-75
Red	HIGH	75-87
Black	EXTREME	88+

Wind gusts

Wind gust

% wise, where does the majority of our wind gusts come from? (max speed)

	E	ENE	NE	NNE	N	NNW	NW	WNW	W	WSW	SW	SSW	S	SSE	SE	ESE	Grand Total
1/10/2013	3%	0%	3%	13%	3%	0%	13%	10%	27%	13%	0%	0%	7%	3%	0%	3%	30
1/11/2013	0%	0%	7%	7%	0%	0%	3%	0%	27%	7%	0%	3%	7%	23%	10%	10%	31
1/12/2013	0%	10%	10%	17%	7%	7%	3%	0%	10%	10%	0%	0%	7%	7%	3%	10%	30
1/01/2014	3%	3%	13%	27%	10%	3%	0%	0%	7%	7%	0%	0%	0%	13%	10%	7%	31
1/02/2014	10%	7%	20%	13%	13%	0%	0%	3%	3%	0%	0%	3%	10%	3%	3%	3%	28
1/03/2014	3%	7%	10%	20%	10%	0%	0%	3%	10%	7%	3%	0%	7%	20%	3%	0%	31
1/04/2014	0%	3%	0%	17%	0%	0%	3%	10%	10%	10%	7%	10%	10%	17%	3%	0%	30
1/05/2014	0%	0%	3%	13%	0%	0%	3%	27%	23%	20%	0%	0%	3%	10%	0%	0%	31
1/06/2014	0%	0%	3%	0%	10%	3%	0%	7%	47%	10%	0%	3%	7%	7%	0%	3%	30
1/07/2014	0%	0%	0%	7%	7%	3%	7%	7%	20%	37%	0%	3%	7%	0%	7%	0%	31
1/08/2014	0%	3%	10%	7%	0%	3%	0%	0%	7%	23%	0%	7%	13%	7%	20%	3%	31
1/09/2014	0%	7%	0%	13%	0%	3%	10%	0%	10%	17%	10%	3%	10%	13%	3%	0%	30
1/10/2014	3%	3%	3%	7%	13%	0%	7%	0%	33%	10%	7%	0%	7%	3%	7%	0%	31
1/11/2014	0%	7%	3%	10%	7%	0%	3%	0%	3%	3%	3%	7%	0%	10%	3%	3%	19
Grand Total	**2%**	**4%**	**6%**	**12%**	**6%**	**2%**	**4%**	**5%**	**17%**	**13%**	**2%**	**3%**	**7%**	**10%**	**5%**	**3%**	**414**

Direction	% average highest wind gust comes from
WSW	13%
NNE	12%
SSE	10%
S	7%
N	6%
NE	6%
WNW	5%
SE	5%
NW	4%
ENE	4%
ESE	3%
SSW	3%
NNW	2%
SW	2%
E	2%

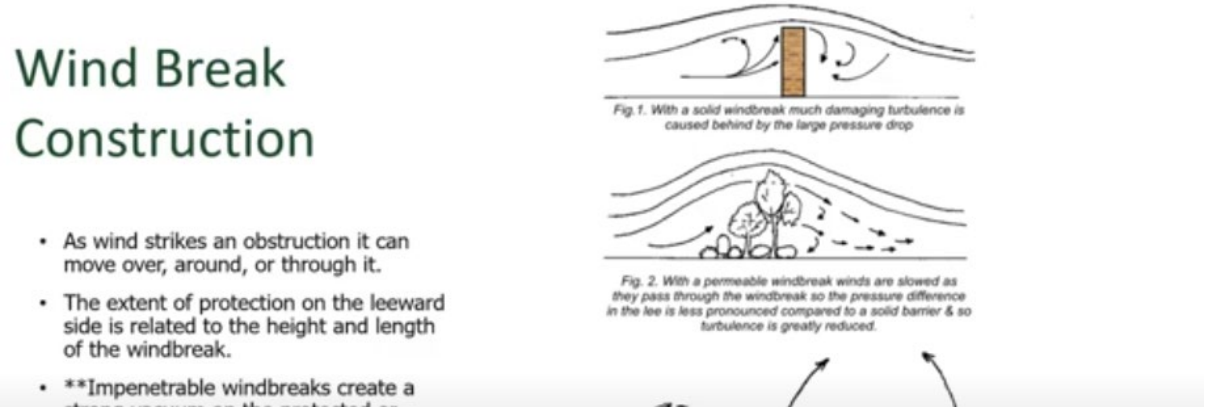
0%
< 10%
10-19%
20-30%
>30%

Turbulence

To understand how important wind is here and its risks to microplastic escape is to understand what causes turbulence.

Turbulence is caused where wind unobstructed hits a hard barrier. The Plaserefine site on its west is completely exposed with open grass lands. Plaserefine's landscaping plan has a 4 metre wall of soil with trees & bushes. When the wind hits the green wall / soil mound it creates turbulence, creating a strong vacuum on the lee side of the green landscaping wall (this is one reason why houses burn down in a bushfire, the embers are blown over the house, sucked back in on the lee side of the building and lodge in crevices, as an RFS firefighter we cover this in our training). In Plaserefine's case , the wind will come down hard onto the facility and depending on wind speed and direction that day determines where exactly it will hit. On some days it will be on the door entry.

Turbulence wind break [xii]



To effectively mitigate wind requires landscaping for windbreaks which is an assortment of trees (some deciduous) and bushes spread apart over space, this would require quite a lot of land on the NW, West and SW where the wind gradually is slowed down to calm. That is not what is planned for this site. This landscaping plan was designed for visual mitigation, not wind mitigation, these are different requirements.

Gusts are unique, they create swirling turbulence as you can see from the wind data, it will be coming in from NW, West and SW, some of which is not protected in the facility.

What GHD propose are mitigation measures is completely unfeasible

1. Building 1 has negative air pressure to offset the impact of the wind is not credible. The speed, turbulence & unpredictability would be extremely difficult to manage, it's not in any of the design reports. If it was part of the design, it would be documented in there.
2. Wind doesn't just blow in an orderly direction and when its obstructed causes turbulence, it will swirl and be unpredictable. It will come into that facility at speed into the large cavernous space and throw light weighted plastic and microplastics (maybe not visible to the human eye) around and out the doors. Wind doesn't just go in the one direction as David has cited.
3. When a truck is reversing in with doors open, far from the truck stopping wind, the wind will go around that truck at speed.
4. The water treatment plan will create turbulence, not block it
5. GHD have not discussed the door openings on the east and how that works with door opening on the west. If they're open at the same time it will create a wind tunnel

I hope that the IPC now can reappraise the effectiveness of GHD's statement in this letter, their wind behaviour theories are rudimentary. **The way to stop effectively mitigate this is for the facility to be <u>fully</u> enclosed with compartment segmentation where unprocessed and processed micro plastics cannot escape which this facility is not.** The site is constrained by its location, exposure and facility size taking up most of its land with little room for buffers. Its

neighbouring land uses are residential, schools, agriculture, tourism and incompatible industry (ABR). The facility sits between two riparian water ways feeding into the Sydney Water catchment. **There is no reasonable or satisfactory way that can be mitigated on this site. The risk of plastics escaping into this environment is credible. Given the impact of that with Sydney's drinking water catchment that is an unacceptable risk.**

This facility is a hazardous industry that requires segregation and not to be built in the water catchment area.

Hazardous Industry Definition

hazardous industry means a building or place used to carry out an industrial activity that would, when carried out and when all measures proposed to reduce or minimise its impact on the locality have been employed (including, for example, measures to isolate the activity from existing or likely future development on other land in the locality), pose a significant risk in the locality—

(a) to human health, life or property, or

(b) to the biophysical environment.

Note—

Hazardous industries are a type of ***heavy industry***—see the definition of that term in this Dictionary.

Offensive Industry Definition

offensive industry means a building or place used to carry out an industrial activity that would, when carried out and when all measures proposed to reduce or minimise its impact on the locality have been employed (including, for example, measures to isolate the activity from existing or likely future development on other land in the locality), emit a polluting discharge (including, for example, noise) in a manner that would have a significant adverse impact in the locality or on existing or likely future development on other land in the locality.

Note—

Offensive industries are a type of ***heavy industry***—see the definition of that term in this Dictionary.

Fire, plastics facilities, risk & impact

Key Summary Points

- The incidence of fire in plastics recycling facilities is high and can never be completely mitigated
- Even with contractors removing contaminants, contaminants such as lithium batteries, will still pass into Plaserefine
- Plastics fires are very hot and unpredictable and spreads quickly
- The location and design of Plaserefine makes this site even more vulnerable to fire taking hold
- We do not have the emergency service capability within reasonable distance to deal with the situation
- The conditions of consent have neglected to get material information finalised prior to approval
- Fire will result in catastrophic consequence to the neighbours, the wider area and puts at risk the waterways feeding into the drinking water catchment.

Here's some sobering reporting from the UK Guardian[xiii].

There were more than 300 fires in plastic recycling facilities and that was over 10 years ago. As well as representing an obvious danger to human life, these fires pose a major environmental hazard and impose a significant cost on business in property damage.

Most waste sites are "well run", says Nicky Cunningham, deputy director for waste regulation at the Environment Agency, and awareness of fire risks is increasing. Yet the combustibility of the materials destined for recycling centres – paper, plastic, wood, cardboard and so on – means it's impossible for waste businesses to take too many precautions.

A large proportion of fires are caused not by what happens behind the walls of waste facilities, but what passes through their gates. Hot or hazardous materials in kerbside recycling cause nearly one third (31%) of all fires in waste and recycling facilities, according to WISH. Chief culprits include hot ashes, lithium batteries, gas cylinders, flammable liquids and aerosols.

Darren Shelford, an expert on the waste industry at UK insurance broker Marsh, admits that the risk of fires at waste sites can never be fully eliminated.

Birmingham Plastics Plant fire 2013

<u>General overview of Plastics & Fire</u>

There is so much information about fires and plastics recycling / reprocessing facilities, it's a known big problem. The cost of fires is not just loss or damage to property or building process but the long lasting effect and cost to the environment is substantial. Costs include

contamination of water supplies and damage to plant & animal life due to water run-off. Noxious fumes cause an array of respiratory complications to the population in surrounding areas.

The information sourced for this section is predominantly from the Journal of Fire Sciences, article *Literature review and hazard identification relating to fire safety in commercial plastic recycling facilities by Courtney Devine , Natalia Flores and Richard Walls* [xiv]. Content from the article is in italics.

Where does fire occur?

The steps in the plastic recycling / remanufacturing process identified to pose a significant fire hazard are;

- *Storage: in all forms, that is, bales of unprocessed plastic, washed or unwashed shredded plastic and plastic pellets. This is primarily related to the high fuel loads present, rather than the chance of ignition.*
- *shredding: shredding may produce unwanted by-products such as combustible dust.*
- *melting and extrusion: these processes require a heat source and subsequently pose a risk of starting a fire.*

Bulk storage is a hazard inherent to most recycling and processing facilities, whether the material is municipal solid waste (MSW) or bales of plastic to be recycled.

Risk assessment

*A **hazard** is something that has the potential to cause loss, harm or an unfortunate event. Risk is a function of*

(1) the loss or harm to something that is valued,

(2) the hazard that may cause the loss or harm as well as

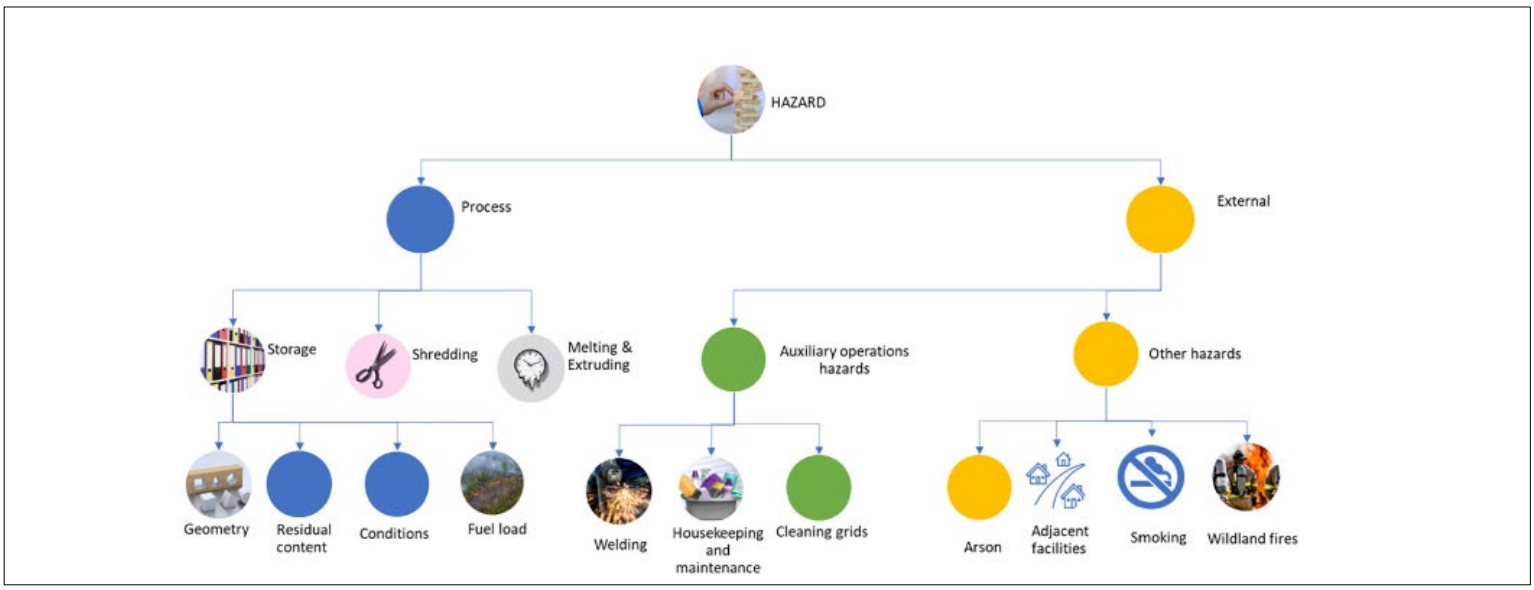
(3) the likelihood of the loss, harm or unfortunate event taking place due to the hazard.

Therefore, when assigning risk, it is important to take both the magnitude of the loss, harm or unfortunate event and the likelihood thereof into account, specifically when trying to establish a risk management strategy.

The hazards identified are grouped in two categories;

(1) Hazards due to processes taking place during the recycling process and

(2) hazards external to the recycling process.



Bulk storage is a hazard inherent to most recycling facilities. The conditions of storage (ventilation, enclosure barrier conditions – when stored indoors – and very importantly detection) will determine

(1) the time to ignition to being detected,

(2) the rate and ease with which the fire grows within the enclosure or storage area,

(3) the spread of fire to adjacent enclosures or storage areas and

(4) the time taken for suppression systems to activate, appropriate emergency units to be notified and for evacuation

<u>Plaserefine processing</u>

Plaserefine proposes to process 120,000 tonnes p.a. Building 1 receives the plastic, stores it, sorts, cleaning, crushing/shredding and extrusion to make the pellets and building 2 does the deep processing remanufacturing, both buildings have storage with conditions of consent requiring no more than 20,000 tonnes of the plastic product, the (unprocessed and building 1 and the processed items for sale in building 2.

Unprocessed plastic will contain contaminants (lithium batteries, labels, chemical contents that were within the packaging), these are more flammable with the air ventilation within the bales (even when compressed down the packaging are more flammable than cleaned pelleted bales).

David Gamble of GHD in his question and answer session on day 3 advised that the plastic is sorted by contractors and contaminants removed such as batteries prior to being sent to Plaserefine. The fact is that the risk of these contaminants getting through Plaserefine doors is still possible. If contaminants were removed, why would the contractors remove the batteries

and leave all the stones and wood that GHD have estimated will still be in the bales with many tonnes going to landfill? By stating that and planning for it, they have acknowledged that contaminates get through.

According to the literature review, *the ignition time is dependent on the thickness when exposed to the trigger (heat such as a battery). The report calculates the ignition time, basically at best its 2 mins. This shows that the time to ignition, for most of the plastic geometries being stored in a recycling facility, would be significantly less than 2 min for an exposure of 30 kW/m^2 (a magnitude easily emitted by flames or heating elements).*

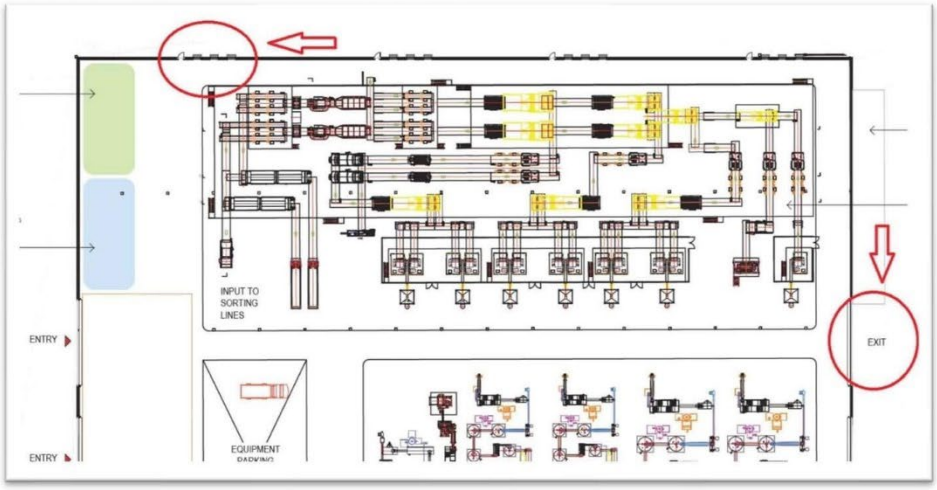
The literature found that

typically, the plastic entering the recycling plant has not yet been cleaned and, therefore, contains residual contents. These contents may include yoghurt, butter, food, fruit juice, detergents and chemicals. Moisture and heat from either outdoor storage in summer or compactness due to the dense storage conditions of the pre-processed plastic, may contribute to the decomposition of these residual contents and, therefore, potentially cause the production of gases such as ethanol, methane and hydrogen sulphide. These gases are not only toxic, but extremely flammable.

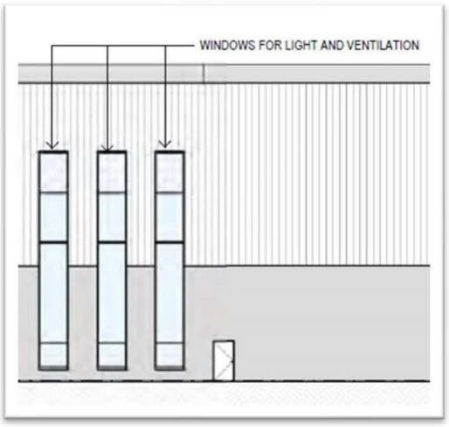
Depending on the building and enclosure layout, indoor storage will allow for the installation of various detection and suppression systems. ***Openings leading to the enclosure will affect the amount of oxygen available, while the size of the enclosure will affect how quickly maximum temperatures will be reached.***

I will add here from my experience as a volunteer fire fighter, that fire gets hold and spreads rapidly when exposed to wind as wind feeds it. I covered in the previous section the site is very windy, its exposed and the compromised facility design; a large cavernous space with no segregation, the three large roller doors facing west for trucks to enter every 5.5 minutes will create fast wind tunnels. These are ideal conditions for fire spread, ample oxygen supply and gusting will fan the spread and reducing the effectiveness of sprinkler systems. The facility is not enclosed, it has ventilation vents identified in the architectural plans.

https://www.ipcn.nsw.gov.au/resources/pac/media/files/pac/transcripts-and-material/2024/moss-vale-plastics-recycling-facility/day-3-public-meeting-transcript-moss-vale-plastics-redacted.pdf
Mr. Gamble P58/25
"No. the entire building will be like fully enclosed, so it's like if you open a roller door, you open a door and there's no other window open, air can't flow through."
APPENDIX F Architectural Plans
https://majorprojects.planningportal.nsw.gov.au/prweb/PRRestService/mp/01/getContent?AttachRef=SSD-9409987%2120230926T040743.245%20GMT (Page 11)



APPENDIX F Architectural Plans
https://majorprojects.planningportal.nsw.gov.au/prweb/PRRestService/mp/01/getContent?AttachRef=SSD-9409987%2120230926T040743.245%20GMT (Page 12)



<u>Role of temperature & location of where fires start</u>

The literature above stated there's three areas where fire starts

- ***Storage:*** *in all forms, that is, bales of unprocessed plastic, washed or unwashed shredded plastic and plastic pellets. This is primarily related to the high fuel loads present, rather than the chance of ignition.*
- ***Shredding:*** *shredding may produce unwanted by-products such as combustible dust.*
- ***melting and extrusion:*** *these processes require a heat source and subsequently pose a risk of starting a fire.*

Plaserefine's processing (Page 19, Appendix A updated Proposal Description) advises in Building 1 *the sorted PET, PP, HDPE and ABS material would be crushed, cleaned and sterilised using steam and a patented alkaline water disinfectant solution heated to* ***193 °C***. and in building 2 (page 23) the product reprocessing *"involves heating the plastic to its melting point, less than* ***280°C****, and reforming it into the desired shapes"*

Its heating the plastic inflammable product to very high temperatures is something the literature as identified as a high risk hazard.

GHD's Risk assessment Process

GHD conducted a risk assessment as part of the EIS. This 406 page document titled goes into the risk approach for assessing environmental risk. The risk assessment framework is standard, but what isn't detailed is who did this assessment and what qualifications did they have.

Page 42 - *The approach to the environmental risk assessment was informed by the principles of the Australian/New Zealand Standard AS/NZS ISO 31000:2009 Risk management – Principles and guidelines (Standards Australia 2009).* ***The assessment involved a preliminary, desktop level risk assessment, supported by a workshop, to broadly identify potential environmental impacts*** *and risks associated with constructing and operating the proposal.*

For each key issue (see section 2.2), potential impacts and risks were identified based on the results of ***preliminary investigations, previous experience and professional judgement****. The risk analysis involved assessing the risk level of each identified potential impact by identifying the consequences of the impact and the likelihood that the impact can occur (see section 2.3)*

Fire and incident management	Construction	Not applicable			
	Operation	Risk of fire due to waste stockpiling	Possible	Major	High
		Poor operation of equipment, machinery and vehicles, or careless acts by individuals or power supplies leading to fire sources.	Rare	Major	Low
Bush fire	Construction	Bush fire risks associated with operation of construction plant, equipment and machinery	Rare	Moderate	Low
	Operation	Bush fires affecting the proposal site	Rare	Moderate	Low
Hazards and risk	Construction	Accidental spills and leaks from materials handling, transport, transfer, use and disposal of construction materials	Unlikely	Moderate	Low
		Damaging or rupturing buried services and utilities	Unlikely	Moderate	Low
	Operation	Accidental release of hazardous materials in the event of a vehicle accident	Rare	Major	Low
		Incidents relating to the onsite storage of dangerous goods	Unlikely	Moderate	Low
		Road safety risks for motorists, pedestrians and cyclists during operation	Unlikely	Moderate	Low

A few concerns to raise

The statements highlighted in black indicates a pretty light touch with unnamed 'experts' sitting around a room in a workshop (maybe because the zoning and permissibility hasn't flagged that this is actually a hazardous and offensive industry)? Interestingly, they did cover the risk of incidents relating to the onsite storage of dangerous goods!

I have real doubts as to the credibility and thoroughness of this process, and that's further supported by the content of the table, for example

- the rating of "*incidents relating to the onsite storage of dangerous goods*" as unlikely and low – that is clearly not right as supported by multiple sources of credible evidence on likelihood and impact.
- The bushfire one is incorrect particularly in light of the landscaping plan that will create a bush fire hazard.
- It's missed the risk altogether of contamination from fire into the air and water
- It's missed the risk with capacity and capability of local emergency services.
- It's not addressed the fire risks if the <u>entire</u> production processes as cited in the literature above, not just storage of bales.

The initial risk analysis process is flawed.

<u>Bush fire zone</u>

GHD continue to hold the position that Plaserefine is not in a bushfire zone. It is, they are using out of date maps. Grass fires are extremely fast, a grown young man cannot outrun a grass fire. The site is windy with wind predominantly from the west. Plaserefine is exposed to long cured grass on its west, NW and SW. In addition, Plaserefine's landscaping plan of mixed native species is a bush fire hazard. This is proposed for visual screening but it's creating a fire hazard. This landscaping wall will create perfect fire fuel creating embers. Combined with the wind the facility will come under direct ember attack, it's a fire hazard. GHD by mitigating visual hazard now create a bush fire hazard and this happening because they're trying to make this development fit into a site that it's not right. Bush fire isn't a remote event, with climate change bush fires are becoming more prevalent, the recent 2019/2020, we were on high alert at our property during that time, embers can travel up to 40km from a fire front.

<u>Emergency Service response capacity and capability</u>

Our fire stations are unmanned and this delays their response time, there's limited local capacity. They are not provisioned to deal with large structure fires housing hazardous materials. It requires aerial equipment, hazmat and caber trained personnel with the associated equipment in numbers (not a few fire trucks/brigades).

The support capability is over an hour away come from Sydney and vehicles have 100km speed limit (and fully loaded fire trucks are not fast vehicles!) Can they respond? They may be attending to fires in their area. When they do attend, that ties up these resources a long distance away from their base.

What is their strategy for containing and putting out a fire? Foam is the chemical to deal with plastics fire, this will get mixed with water and it's a hazard in itself. How will they manage waste water? Foam will be mixed with water that will run off the site into surrounding lands and waterways, how will that effectively and reasonably be contained? The EPA states in their conditions (correspondence Page 6, Make all efforts to contain all fire water on the premises; 1/11/2023).

Rain over later months will pick up residue missed and with the proximity of the creeks puts at risk contaminants entering the water ways.

Impact to surrounding facilities/homes and ABR, how will they be notified in a timely manner? It's emergency services to do this, fire escalate very quickly. The smoke will be thick and toxic. People are vulnerable here.

Vehicle access – there two roads Collins and Braddon. Plastics fires burn 1200-1300 Celsius, how will they effectively get to the building? Fire & Rescue fire trucks do not drive off road, they can't go into paddocks nearby. RFS vehicles can but their equipment is not set up for large plastics factory fires. The facility *"emergency fire water tanks to store 1,200kL and a pumping station"* in the SSD assessment report. By the time fire trucks arrive, they would not even get close to it!

What effective fire fighting strategies will be employed at this point? It will be to defend surrounding assets and people and then put the fire out with the right equipment. Consider the ***catastrophic*** environmental impact at this point.

We do not have the emergency service capability to respond in a timely manner. I think we can safely say that this area will not get the necessary fire fighting capability deployed to support this facility as its not financial viable. The risk to toxic contamination into Sydney's drinking water is high. Why is this material issue defer to post approval under conditions of consent?

I've read GHD & Fire & Rescues content and struggle to understand why they have left the important work to be done *after approval with conditions of consent*. They themselves have called out the seriousness of the plastic facility fires. Here's quotes from their own analysis in 2018[xv] [xvi]

"Historically FRNSW has attended numerous fires at waste recycling facilities. These fires are often quite large and have a detrimental impact on firefighting intervention, the environment, local community and the waste recycling industry itself"

Processes undertaken at waste recycling facilities have higher risks than for other industries and will often result in greater frequency & severity of fires

Waste recycling fires in NSW have demanded significant FRNSW resources and intervention over multiple days to extinguish the fire

Waste therefore presents 'special problems of firefighting' that warrant classification as 'special hazards', and the consideration of provision for special hazards under Clause E1.10 and E2.3 of the NCC"

I question whether F&R have adequately read the material provided. The focus appears to be on bale storage and the fire management systems to go in the facility should a fire occur and

missed the other production processes, the suitability of the site and conducted adequate risk assessment prior to the approval process.

Visual Impact

Plaserefine, due to its sheer size, is going to have a significant visual impact on the landscape, that is an unescapable fact. The proponents have countered this as follows;

- Substantial landscaping on the West, South and East, The South is the aspect that will impact most of the neighbouring residents.
- Residential sensitive receivers get one off landscaping done on their properties that we maintain
- The lighting illustrated in the RFI response appendix C Preliminary Design Report cites it complies with relevant regulation and is low impact to neighbours. It also includes a picture to compare it to industrial buildings further to its north

<u>Response to these mitigation measures</u>

The lighting illustrated in the RFI response appendix C Preliminary Design Report final isn't credible. Firstly, it states that the lights on the road and parking area have no potential impact.

2.4 Site Lighting

A lighting calculation has been carried out for the highlighted roadways and parking areas. AZ/NZS 1158.3.1 2020 has been utilised as the basis for the lighting performance and design requirements. Refer to Section 5.1 for the preliminary lighting layout and lighting calculation report.

Lighting Spill Assessment

The lights on the roadways and parking areas have no potential to impact the neighbouring developments. The nearest building structures are approximately 70m away from the east side of Building 1.

AZ/NZS 4282 Table 3.1 and Table 3.2 have been utilised to assess the impact of light spill on the surrounding areas. Refer below Obtrusive Light Compliance report.

Obtrusive Light - Compliance Report

AS/NZS 4282:2019, A2 - Low District Brightness, Non-Curfew L1
Filename: Moss vale external lighting_Obtrusive Calcs
7/7/2022 10:23:15 AM

Illuminance
Maximum Allowable Value: 5 Lux

Calculations Tested (4):

Calculation Label	Test Results	Max. Illum.
Project Site - North Side 2	PASS	0.4
Project Site - East Side 2	PASS	0.1
Project Site - South Side 2	PASS	0.2
Project Site - West Side 2	PASS	0.0

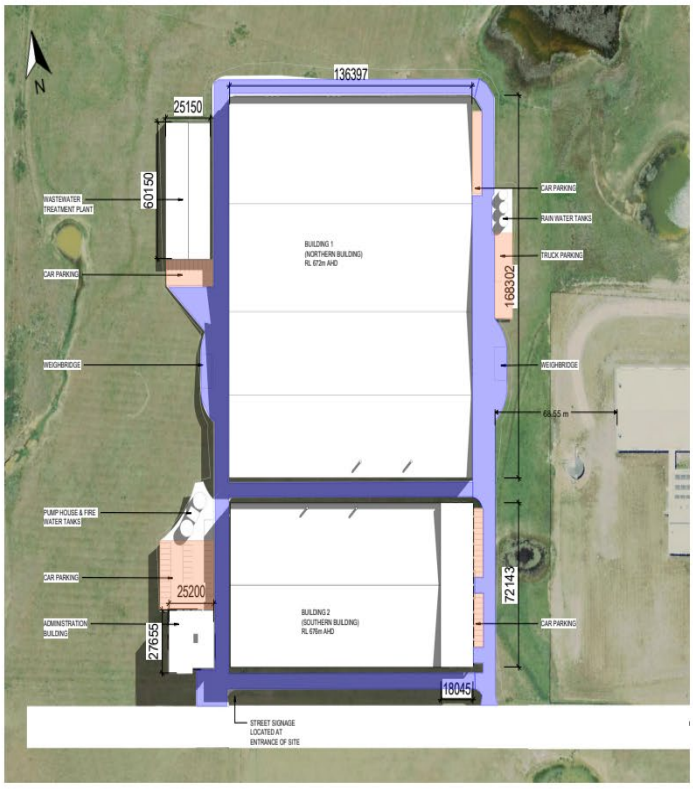
Luminous Intensity (Cd) At Vertical Planes
Maximum Allowable Value: 7500 Cd

Calculations Tested (4):

Calculation Label	Test Results
Project Site - North Side	PASS
Project Site - East Side	PASS
Project Site - South Side	PASS
Project Site - West Side	PASS

Upward Waste Light Ratio (UWLR)
Maximum Allowable Value: 1.0 %

Calculated UWLR: 0.0 %
Test Results: PASS



That is blatantly incorrect. From our site we will be looking at the facility in a NE direction and will see that road. The landscaping doesn't extend to the road.

Secondly they have acknowledged that the landscaping does not completely block out the facility, I don't know how parking lighting does not contribute to overall light pollution.

Thirdly the light compliance report, was that assessment completed at 10.23am? That time won't work.

Page 65

Their trying to show here how dim the lights will be on the Plaserefine building, and how neighbouring facilities are bright in comparison.

This is farcical! That crane factory that they have shown as very bright – I challenge GHD it **does** comply with relevant light spill codes, the external lights have hoods over them, its fairly bright but why would Plaserefine be any different? I took a photo of that factory from my back yard last night (23/11/2024)

In the foreground is 50a Bulwer Rd's lights that provide a comparison. That photo shown is misleading, it is deliberately made it brighter and shows the Plaserefine factory and some softly lit building, this isn't correct.

The landscaping plan goes someway towards mitigating it but it doesn't completely hide it because of its sheer size and height and these photo montages have not even included the smoke ventilation stacks so photomontages are not credible. I still don't even know where the stacks are and how many. No amount of landscaping can completely mitigate this. How can GHD's reports be deemed as acceptable by the DPHI?

MS CLARE SYKES: Thank you, Andrew. I had just one question around the height of the building, noting that the 14 and a half metres, is there any ventilation stacks that would exceed that height in that building area?

MR GAMBLE: Yes, on the roof there would be some ventilation systems and air

conditioning, roughly 1 to 2 metres high but they're set back quite far from the edge of the building, so they're not actually likely to be seen by anyone who's relatively close to the site. They're shown on the architectural plans.

The landscaping on the south is not on Plaserefine's site, rather its across the road with a covenant. Landscaping covenants in the conditions of consent, never hold up. They are not enforceable. Having a mitigation action where we can have landscaping on our property is cold comfort. The place for the landscaping to be effective is at the bottom of our property, otherwise it will block the broader view from various aspects of our house and garden. The plantings will require water, we're on 10 acres and I have no water at the most northern boundary of our property.

This proposed facility will create light pollution due to its height and size that cannot be reasonably or realistically mitigated. It is an offensive omission and GHD's comments are incorrect. The DPHI have accepted that the light pollution is mitigable, that is incorrect of the DPHI.

Noise & Traffic Impact

Summary Points

- The projected volumes of heavy vehicles are material numbers, particularly to residential sensitive receivers
- There are no reasonable and satisfactorily mitigations that can manage through conditions of consent for
    - heavy vehicles not accessing Plaserefine via Braddon Road
    - noise mitigation of heavy vehicles on site with reversing alarms and air brakes
- Braddon Road does not provide permissible access to industrial land.

- Controlling large vehicle access times and haulage routes requires compliance monitoring. The burden of compliance work is high and falls on residents via the community consultative committee and Council, it places a financial burden on Council

Noise

In the SSD Assessment Report and conditions of consent, the DPHI have focused on traffic volume impact on the major roads (e.g. Douglas, Berrima) and rail line crossing and given only minimal consideration to the noise impact of heavy vehicle traffic to sensitive receivers. There's some woolly wording to do an Operational Traffic Management Plan (OTMP) that includes **a strategy** to minimise and manage traffic noise and to include an Operational Driver Code of Conduct. That "code of conduct" (its unenforceable) is to

(i) minimise the impacts on the local and regional road network;
(ii) minimise conflicts with other road users;
(iii) minimise road traffic noise;
(iv) inform truck drivers of the site access arrangements and use of specified haul routes; and
(v) include a program to monitor the effectiveness of these measures

Really? This has no teeth, it's a "strategy", its consultant policy wonk wording, there's nothing specific, realistic, measurable in this condition.

In March 2022 consultation period, Paul McLean the Town Planner we engaged in his submission (appendix J) wrote the following;

Acoustic Assessment
Additional information requested

The acoustic assessment is noted as including consideration of the truck deliveries within the site, including limiting the hours of deliveries to between 7am and 6pm.

However it is unclear from the assessment whether the acoustic assessment has included an allowance for reversing alarms being installed on all delivery trucks, as is likely to be the case (given the proponent has no real control over reversing alarms fitted to trucks not under the ownership of the proponent).

Reversing alarms, at the frequency of the deliveries (10 per hour) is considered to be a significant acoustic impact on the surrounding allotments.

The applicant is requested to provide additional information in respect of the extent of assessment completed for trucks fitted with reversing alarms.

Further, the applicant is requested to consider a reconfiguration of the proposal to remove the requirement to reverse onsite. This would eliminate any possible acoustic impact from the alarms and is recommended within the acoustic assessment (Section 6.3, Page 61):

This was either insufficiently considered or not done by GHD and the DPHI. In GHD's report there is one brief mention of community objections raising issue of truck reversing noise. GHD have said in one of their documents that Plaserefine will own their own vehicles, this infers control but no-where in the conditions of consent has the DPHI made ownership of the vehicle fleet and employing the drivers a condition of consent. They can't!

The facility design with its doors on the west has 2 trucks every 11 minutes reversing into the facility will create noise. Heavy vehicles are entering the facility, pass over the weighbridge before reversing into Building 1. Truck reversing alarms are loud and that noise carries a long distance. When Red Fields Road off Douglas Road was being built, the sound was a nuisance, that's more than double the distance than Plaserefine. I could hear the "beep, beep, beep" through closed doors of our home.

Truck parking

"Parking would be provided on the eastern side of the facility for up to eight medium rigid sized vehicles on-site. This is to allow for Plaserefine Recycling to operate its own fleet of collection vehicles, for plastic waste collection, if required".

Did the proponent actually do modelling of how many trucks would require parking? Plaserefine stated they will own the truck fleet, therefore parking is required. 120,000 tonnes of product delivery, hours of operation between 7am & 6pm Monday to Friday will require truck parking at night and during the weekend. How many trucks is that? Given the volumes, its likely more than 8 and the parking has not been allowed. The site doesn't have the space to allow for this.

Braddon Road Access

I really do question Plaserefine's proposal for Braddon Road as both acceptable and permissible.

DPHI stated that all heavy truck traffic would access the facility off the north-South access Collins Rd from Douglas Rd and then uses Braddon Rd for access into the facility. Braddon Road connects to Beaconsfield Rd. In the IPC DHPI Transcript (Page 8)[xvii] Braddon Road was covered Commissioner Mr Mills raises questions of trucks accessing Braddon Rd from Beaconsfield Rd as a viable concern, the DPHI's responses on this and their conditions of consent are not enforceable. The only way is for the facility should have no access to Braddon Rd.

Braddon Road is zoned RU2. In the Planning Proposal for the rezoning to E4 of properties fronting Braddon Road, the RU2 zoning of Braddon Road was retained for a buffer area to the industrial zoning.

Another legal precedent case is that of Justice Pain J 2022 that supports the position that although a zoning may permit a "road" the use of the road must be in accordance with the zoning of the road in the case of Braddon Road RU2. Based on that judgement, it is not permissible for Plaserefine to utilise Braddon Road for access to industrial land. Further to that, a local town planning consultant supported that Plaserefine cannot use Braddon Road zoned RU2 to access the E4 industrial zoned land.

Out of hours

Deliveries outside of hours will occur as there are factors outside of the control of drivers (traffic jam, accidents causing delays) what will happen then? Pull over and park somewhere until the facility opens? when trucks do deliver outside of those hours (which they will) what happens

then? Have a meeting with the proponent as part of the community consultative committee? What will be the response "I'm sorry, we'll look into that and make sure it doesn't happen again? How would it even be monitored and if it was the proponents responsibility to do it, would be trusted? Not likely.

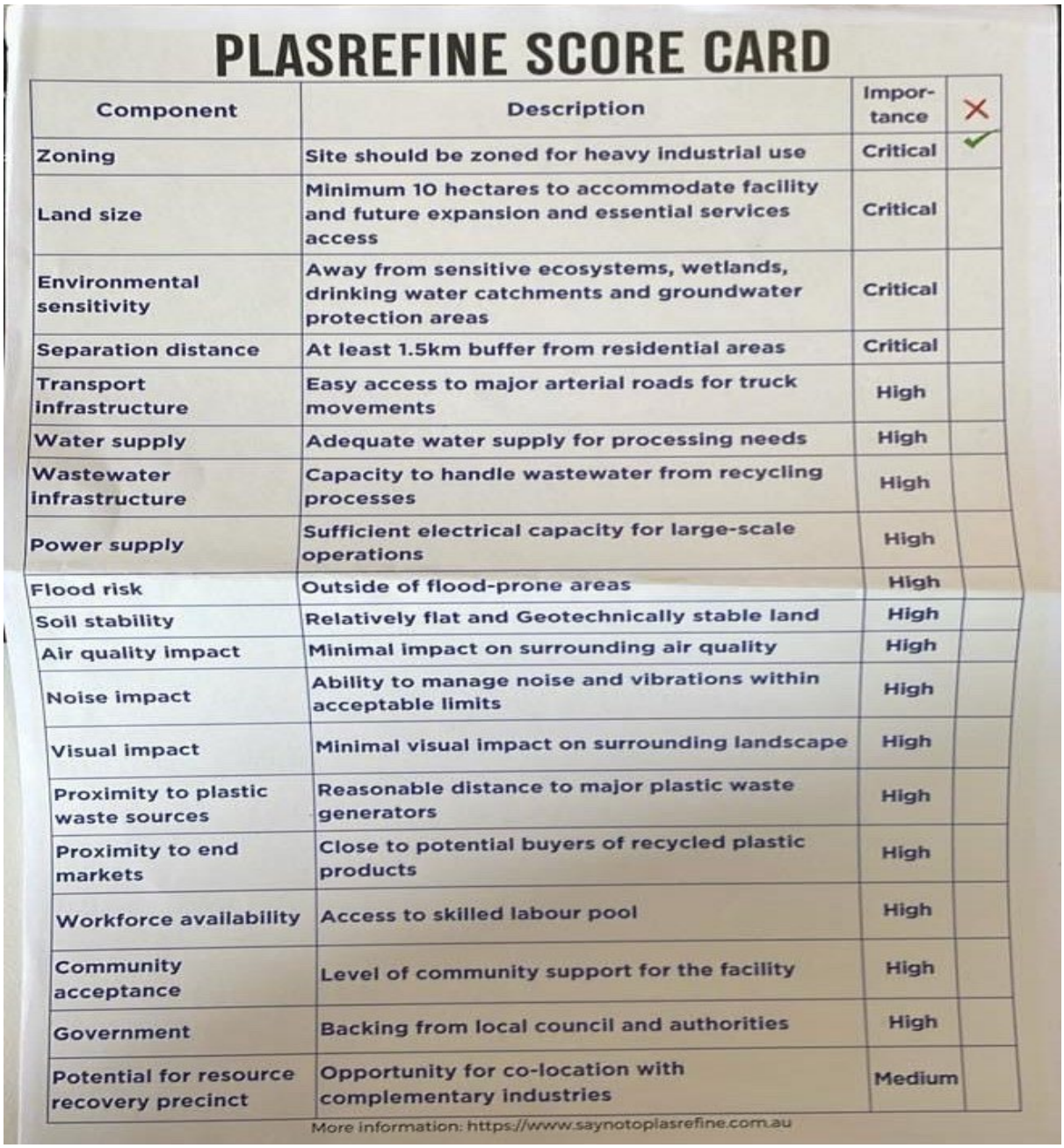
Traffic Load

SSD Assessment Report Page 49 *At full operating capacity of 120,000 tpa, the development would generate a total of 100 heavy vehicle movements (50 in 50 out) and 280 light vehicle movements (140 in 140 out) per day. Light vehicles would be generated by 40 staff per shift entering and leaving the site around the shift changeover times of 7 am, 3 pm, and 11 pm. Office-based staff would work the hours of 9 am – 5 pm*

The condition of our roads is already an issue with potholes. Heavy vehicles take a high toll on roads. DPHI advising the Council will be financial compensated isn't adequate, they are not keeping up with the issue now.

Site Suitability Assessment

I used a checklist (below) from Gaye White, Director of Win Zero Southern Highlands who has worked with Council on master planning, regional plans, strategic plan and WLEP and presented at the IPC hearing. Whilst it's not a formal document, it does provide a useful checklist to assess Plaserefine against. Following on from zoning and permissibility, its clear why the proposal fails when assessing site suitability.



PLASREFINE SCORE CARD

Component	Description	Impor-tance	✗
Zoning	Site should be zoned for heavy industrial use	Critical	✓
Land size	Minimum 10 hectares to accommodate facility and future expansion and essential services access	Critical	
Environmental sensitivity	Away from sensitive ecosystems, wetlands, drinking water catchments and groundwater protection areas	Critical	
Separation distance	At least 1.5km buffer from residential areas	Critical	
Transport infrastructure	Easy access to major arterial roads for truck movements	High	
Water supply	Adequate water supply for processing needs	High	
Wastewater infrastructure	Capacity to handle wastewater from recycling processes	High	
Power supply	Sufficient electrical capacity for large-scale operations	High	
Flood risk	Outside of flood-prone areas	High	
Soil stability	Relatively flat and Geotechnically stable land	High	
Air quality impact	Minimal impact on surrounding air quality	High	
Noise impact	Ability to manage noise and vibrations within acceptable limits	High	
Visual impact	Minimal visual impact on surrounding landscape	High	
Proximity to plastic waste sources	Reasonable distance to major plastic waste generators	High	
Proximity to end markets	Close to potential buyers of recycled plastic products	High	
Workforce availability	Access to skilled labour pool	High	
Community acceptance	Level of community support for the facility	High	
Government	Backing from local council and authorities	High	
Potential for resource recovery precinct	Opportunity for co-location with complementary industries	Medium	

More information: https://www.saynotoplasrefine.com.au

I am not commenting on items I have not researched, I can comment on these;

Zoning – Fails - This fails, as per the previous section. This is a fundamental flaw of the proposal.

Land size – Fails - the size of this facility is huge, too big for this site and has resulted in a lack of buffers. Lack of buffers with the road being right next to the building in event of fire is an issue .

Noise is another buffer issue. In the online IPC public meeting Tuesday 2024 on consideration of buffer zones with *"Lighting at night and site setbacks were considered with buffer zones, Ms Laguana said, it would have to follow guidelines"*.

In terms of buffer zones, it's sort of something that is only really required if there are going to be impacts that would actually impact people within those buffer zones. Because the traffic would be travelling away from the community, up through part of the industrial area, Ms Laguna said "in terms of traffic, I suppose no buffer zones are really required"

Has GHD actually read their own documentation? There are homes very close to this site, we are one of them!. Traffic noise is one of my biggest concerns. The volume of trucks driving, reversing every 5.5 minutes (beep, beep, beep), leaving using air brakes, the facility design is flawed requiring reversing (and this goes back to the constraints of the size of the facility and land size) is flawed. There's also all the other vehicles and operational vehicles and their noise such as forklifts have not been covered either. This noise concern is not something that can be effectively mitigated and establishing a community consultation group for feedback and issue resolution (as per the conditions of consent), I have **no confidence whatsoever** that governance process based on how this process has been conducted to date, will work

Environmental sensitivity – positioned away from sensitive eco systems, drinking water catchments and ground water protection areas. Fails. This hazardous facility is sitting on a slope with water courses on either side feeding into the water reservoir and Sydney's water catchment.

Separation distance – 1.5km away from residential – Fails. Multiple homes close to the facility with future subdivisions in process close to the facility. This area to its south will continue to build out residential. It also is too close to the Garvan institute which also has a DA in to extend it closer to Plaserefine.

Visual impact – Partial pass. Landscaping plan (assuming they do actually deliver what they have said on mature stock and maintain it) will go towards screening out the factory. So often though, developers put in landscaping and don't manage it and it dies. Covenants have to be maintained and conditions of consent implemented that are enforceable.

Lighting - GHD states is complies with relevant regulations but that's no comfort. On a 24x 7 facility this size it's going to be a huge impact to us neighbours and the landscaping won't block it all out. It will illuminate a very wide area. There's a lighting diagram showing 48 lights on building one, 32 lights on building two and 8 on the admin building and that's not including Collins Rd lighting to be built. Even with treatments such as this, its going to illuminate the area like a spaceship and be visual pollution from our households at night.

Page 5 *"the use of eco lighting and, where appropriate, the use of directional luminaires, shields and baffles to minimise sky glow and light spill for surrounding rural residential properties"* its not going to be reasonably mitigatable due to its sheer scale and no buffers. It's not acceptable. I already know this from other facilities that comply to regulations that are 1/10th the size in the zone!

Transport infrastructure – Fail. The site is someway from the freeway and roads are not in good condition. Council have already advised on this matter and this traffic volume will place a financial burden on the Council. The proposal has to build major road and rail upgrades.

Air quality impact - Fail - This is technical in the reports however given the nature of what this facility proposed and GHD advised in their reports that there will be some odour along with the proximity to homes, schools, sporting facilities, Garvan institute this site is unsuitable to have an offensive industry situated.

Noise impact – Fail – Covered above.

Proximity to plastic waste sources –Fail- the vast majority will come from Sydney, it is 2 hours away.

Proximity to plastic waste markets – Fail – the market is not here, it will likely be Sydney through distribution centres and as GHD advised, shipped back overseas in pellet form. We are not close to a port.

Workforce availability – Fail - It is very unlikely that they will be sourcing most of their labour from the southern highlands based on the profile of this business and the type of labour in this area. Local business of low and manual skilled personnel have trouble getting staff now. People will need to travel to this site for work .

Community acceptance – **FAIL!!**. The IPC presentations and submissions are evidence of this.

Government – all 3 layers of Government do not support this proposal, our local, state and federal members have publicly stated this development is not appropriate for the location.

Potential for resource recovery precinct – Fail. The DCP for the SHIP does not align with Plaserefine, in fact it will have the conflicting impact driving away industries the SHIP is trying to attract. Regardless of what Plaserefine conditions of consent, a plastic remanufacturing factory is not attractive. They are smelly, noisy and dirty, plastic does escape into the environment. The Council have made this very clear that its in direct conflict with the SHIP DCP.

SUMMMARY

Of the 19 site suitability considerations;

- 5 no comment
- 1 partial pass
- 13 fails

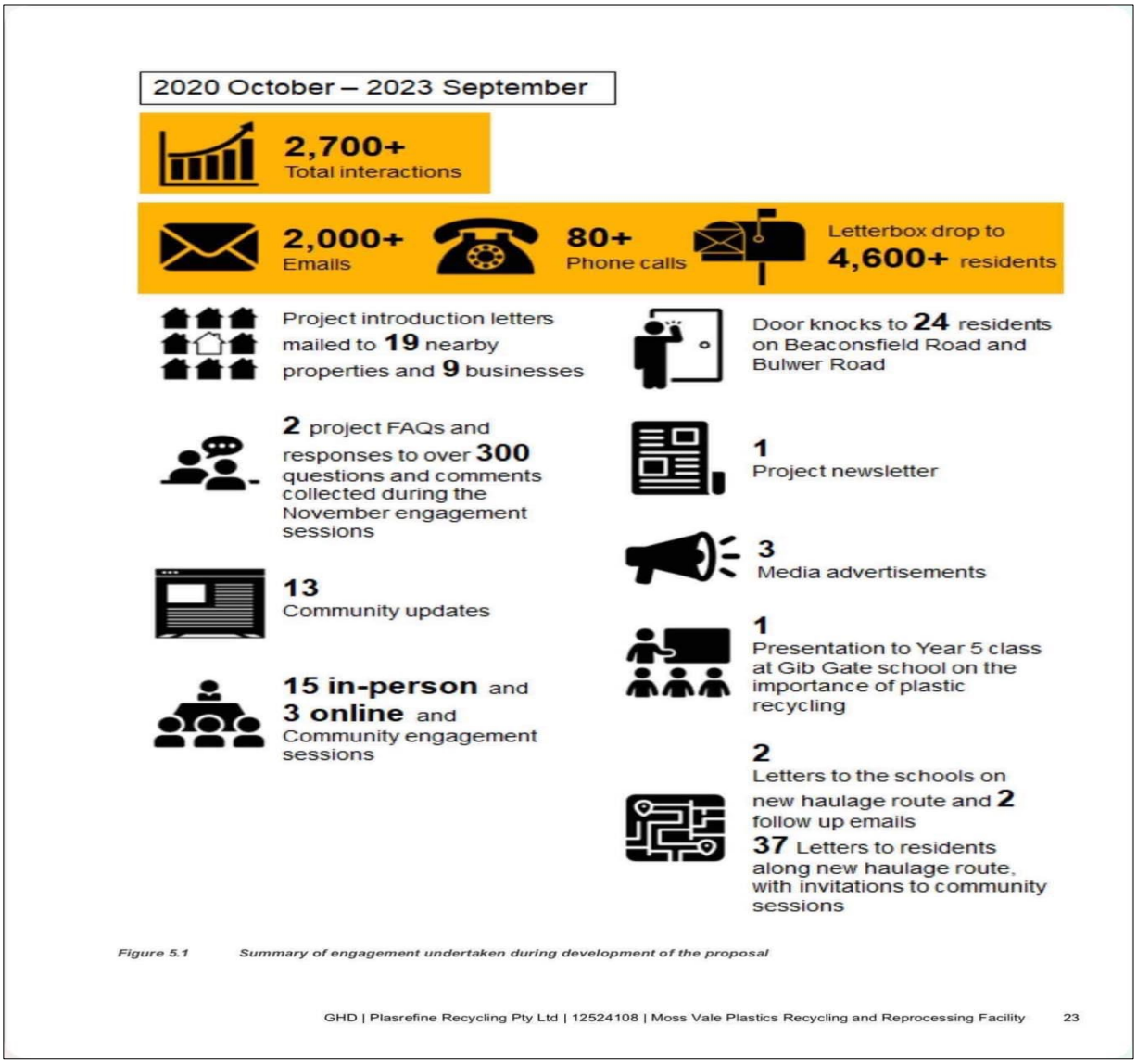
On its merit this proposal fails the site suitability assessment.

Community consultation process

I am not going to provide much feedback on this as it's been well covered by other submissions. I will briefly cover our contact and experience with GHD and the proponent.

We received the letter in our letterbox right on Christmas 2020. We were invited to two community consultation sessions with GHD and Nancy the proponent was present, the first was fairly early in the process at Exeter village hall and the second at Moss Vale community centre. We also received an online survey regarding the revised traffic route via Innes & Garrett Roads. We elected to have a noise monitoring device installed on our property.

GHD included this slide in one of their numerous documents



As a nominated residential sensitive receiver it's reasonable to expect that we would be the receivers of these communications they've cited in that slide. We did not receive a phone call or door knock visit. I don't recall much publicity about this proposed project and that's consistent

with my observation that many in this community didn't know about Plaserefine until very late after conditional approval and the informal communication channels went viral.

The first community engagement was ok, it was basically an information presentation session. The social impact electronic survey had the wrong traffic route. That route (old Garvan Institute access off Lackey Rd) impacted very few people, when I raised this error in the survey, I never heard back and that survey was not re-issued. I interpret that as deliberately misleading as those survey results would have been skewed.

The second community consultation session was poor, GHD were belligerent and aggressive and I felt quite uncomfortable. It became clear that they had not secured the traffic route they really needed that avoided the township and then found another option which was through the township past many homes, schools, busy bus route etc. The road, in sections was narrow and simply not feasible. This route, we all knew (and the DHPI) was totally unsuitable. It was dangerous and would have seriously degraded the liveability and safety of the area. Their reasoning was that it was legally allowed and it became clear that they were ticking boxes and were going to just bulldoze their way through. This, along with the incorrect electronic survey really changed my perception of GHD and this project. They were not operating in good faith.

I refer to the transcript 22nd October 2024 between the Proponent and IPC and GHD's answer to the IPC questioning on community angst. GHD's response is indicative of their behaviour towards the community. I have another explanation for the community angst. At that community engagement meeting showing the revised traffic route, one community member was so angry because he'd heard about it **that day**. He owned property on Innes road and found out about it from a neighbour. Yes he was very angry, not from misinformation on Facebook but not being informed as someone directly impacted. This is one example of how GHD conducted the community engagement process.

We went from being neutral conducting a fact finding discovery and talking with Nancy to strong objectors not from "Facebook frenzy" but from GHD's evasive, opaque processes and DPHI questionable capability to appropriately question and vet the application. DPHI have been overly focused on the road access (whilst is very important), landscape mounds and trees for visual screening, but neglected many material other items (many raised in this submission).

I understand the consultant business model, win client business, represent their interests, using your expertise and do your best to get the client outcomes but there is an ethical line how one goes about doing that. The integrity comes from company management, its values, walk and talk, day in day out. GHD demonstrated poor values and the proponent is part of this as paying for GHD's services and present in the community consultation.

When one reads the detail in GHD's documents, it's clear that this is not a well run process but a carefully controlled plan to appear to comply but has none of the good faith intent behind it. There were no meeting minutes or transcripts published from agencies and the community engagement sessions, only their reports with their narrative, who knows where the truth is?

I urge the IPC to consider this in light of the proposed conditions of consent that involve community cooperation and engagement. There is no trust and the submissions explain why.

Conditions of Consent review

Key Summary Points

- Conditions of consent must be; realistic, achievable, enforceable, not impose unreasonable financial burden on Council and not impose significant social distress and disharmony onto the community.
- Many of the conditions proposed are not realistic, achievable or enforceable. Some do pose financial burden onto council and some do impose significant social distress onto the community
- Conditions are onerous reflecting the facility incompatibility at this location.
- Documentation presented is of insufficient detail to enable consent.
- Information material to have prior to approval has not been done and included in the considerations of consent.

Part B – Specific Environmental Concerns[xviii]

Rather than regurgitate the contents of the SSD Recommended Development Consent, the reference points from the document are included to read alongside with.

Social impact statement Section BI.

Response: The consultants and proponent have not conducted the social engagement process in good faith and the trust with community members is irrevocably broken. This report and process recommended in this section will be a consultant's tick box process only.

Community Consultative Committee B3 & Community Consultation Plan B4

Response: As above. Unless there is good faith behind it, this will unsuccessful. GHD and the proponent will "comply" and continue to operate this facility that fundamentally is in the incorrect zoning and its offensive emissions (e.g. light, noise, odour) emitting environmental hazards (toxic microplastic waste). It will simply cause volumes of complaints, stress and disharmony.

Lighting B12

Response: The development will comply with latest version of AS 4282-2019 - Control of the obtrusive effects of outdoor lighting (Standards Australia, 2019. That offensive polluting discharge cannot be mitigated due to the volume of lighting due with the size of this facility and its proximity to residential housing.

Visual Amenity - Landscaping plan B7

Response: This condition is unenforceable. Landscaping is a known issue in Developments where Developers put in landscaping and then don't maintain and it dies off. The Environmental Officer requirement is for the first two years of operation only then the burden of enforcement is transferred to the Council who don't have the resources to do this. It then becomes residential sensitive receivers and ABR's issue to raise.

Traffic and Access - Construction Management Plan B15

Response: This CMTP plan will be shoved in the bottom drawer as much of it is theory and not enforceable. The condition to *"include a clear figure illustrating the heavy vehicle route and site access, which are to avoid residential areas and the Argyle Street and Lackey Road intersection",* by opening Plaserefine access to Braddon Road means all traffic can access that facility. Unless there are cameras on Braddon Road with financial penalties attached to using it (which is also not enforceable) truck drivers will take the most convenient route and sometimes that will be Braddon Road. This condition does not prevent the workers vehicles which are significant volume from using the road.

Detail parking arrangements – please include parking for all the trucks Plaserefine are going to own for after hours and weekends. We already know that the site has not the space and allowed for that.

The condition to include a Driver Code of Conduct to:

(i) minimise the impacts of earthworks and construction on the local and regional road network;
(ii) minimise conflicts with other road users;
(iii) minimise road traffic noise; and
(iv) ensure truck drivers use specified routes;

the last 3 are theory and unenforceable. They are woolly vague motherhood statements, a code of conduct is not legally enforceable. Telling truck drivers to not use airbrakes will not stop them using airbrakes. It also doesn't address noise with reverse beep beep sounds on trucks.

That offensive polluting discharge cannot be mitigated because; a) they have no legal control over driver behaviour, b) owning the trucks and employing drivers (greater control as they're employees) can be outsourced at any time, c) the site proximity to the site to sensitive receivers, d) volumes of heavy vehicles and e) facility design with reversing vehicles

Level Crossing, Roadworks and Access B17 & B20

Response: Has the DPHI with Plaserefine confirmed that Plaserefine's heavy vehicles has legal access to use Braddon Road? *"The Applicant must obtain approval for the works under section 138 of the Roads Act 1993*. this should resolved prior to approval not a condition of consent.

Operational Traffic Management Plan B22

Response: Same points as B15. In addition, this OTMP plan has conditions that are not realistically implementable and enforceable, e.g. The traffic route for vehicles not using Argyle St and Lackey Rd and vehicles to not be over 19m in length. Plaserefine's site layout referenced in section <<2>> of this document and David Gamble's updated layout released following IPC hearing day 3, that high level design at a fundamental level appears to not support the conditions for "the swept path of the longest vehicle entering and exiting the site". What's going to happen then? They will have to extend the driving swept path area out westward eating into the landscaping plan and riparian water areas?

I question that the levels between building one and two have been checked, seems a very steep drop, can these trucks navigate that?

Odour Management B46

Response: *"The Applicant must ensure the development does not cause or permit the emission of any offensive odour (as defined in the POEO Act)"*

How is it going to achieve this? This condition is not realistic to achieve with any condition of consent. Firstly it's a plastics facility receiving plastics that will have contaminants in them. It will have odour. The facility is not fully enclosed and with its design, odour will escape. Secondly its within close proximity (65m?) to the ABR and 250m to the closest residential neighbour. This is an offensive industry that no measures can mitigate the prevention of odour escaping the facility into the air and impacting near by land uses.

Noise & Vibration, Operational Noise Limits - Noise mitigation B50, 56 & 57

Response: *Works outside of the hours identified in condition B49 may be undertaken in the following circumstances: (a) works that are inaudible at the nearest sensitive receivers;*

This is not a realistic or enforceable condition of consent. Firstly, Plaserefine need noise measures in place in order to report, this would require cooperation from the nearest sensitive receivers to; a) install noise monitors on their site which is unlikely and b.) relying on these receivers to report the noise issues via Condition B3 community consultation pushing the onus onto neighbours causing ongoing stress and disharmony. Further to that, this table B49 with commentary on B50 allows Plaserefine to conduct all those activities including truck deliveries outside of those set hours if the work is deemed inaudible. This condition of consent is a mess!

Condition to "limit egressing heavy vehicles to two per 15 minute period" – that's a lot of traffic and they will use their airbrakes". The conditions have not even addressed the incoming trucks and their reversing noise which is worse.

The fundamental issue here, is that the construction and operation of Plaserefine will have a significant adverse impact, noise specifically here, on its existing locality (residents, ABR) and future planned development (residential) on other lands nearby due to the nature of it being offensive, hazardous with its proximity to incompatible land use.

Operational Noise Verification Report B59.

Response: *"Within three months of the commencement of operation of the development and again at a throughput of 120,000 tpa, the Applicant must prepare and submit a noise verification report for the development".* This is unachievable. In order to get **accurate reliable truthful** data requires cooperation from neighbouring sensitive receivers, and this can only be from installation of the noise monitoring devices by an **independent** operator who collects the data.

Compliance management is for initial two years goes to Environmental Representative (ER), paid for by the Applicant, with Plaserefine reporting to the Planning Secretary. This compliance raises questions on trust and reliability. The DPHI have not demonstrated responsiveness or competence in this process, the community are "disgusted, devastated, furious" (Mayor Fiztpatrick's speech Day 1 IPC hearing), the audience's reaction is a good gauge of the accuracy of community sentiment. The ER is paid by Plaserefine, there's a credibility issue right there. The proponent is not trusted or were not responsive during the 4 years. Following the two year period, Council have already advised they don't have resources to regulate this development. This condition is unrealistic, unenforceable and will create great community angst, it will just end up being a hostile rock chucking exercise.

Hazards & Risk - Fire Safety Study B60

Response: *"At least one month prior to the commencement of construction the Applicant must prepare a Fire Safety Study for the development to the satisfaction of Fire and Rescue NSW and the Planning Secretary. This study must:*

(a) cover the relevant aspects of the Department's Hazardous Industry Planning Advisory Paper No. 2, 'Fire Safety Study Guidelines' and the New South Wales Government's Best Practice Guidelines for Contaminated Water Retention and Treatment Systems (NSW HMPCC, 1994); and

(b) consider the operational capacity of local fire agencies and the need for the development to achieve an adequate level of on-site fire and life safety independence

Of all the conditions of consent, this one stands out as the **most material oversight.** The risk, likelihood and consequence of fire is catastrophic and the emergency response capabilities is inadequate, we already know this and it cannot be reasonably mitigated. The location of this facility with its proximity to neighbouring land uses and water catchment prohibits an industry like this to be located here and there are no reasonable mitigation measures in the event that fire takes hold that can occur. This is all far too late to be drawing up these plans, these plans are a pre-requisite to approval. If this facility was appropriately categorised as hazardous with correct risk assessment completed, it would not have got to this point.

Dangerous Goods B65, B66, B67

Response: This condition of consent is vague and non specific. Plaserefine should have to set out in their detailed design exactly how they would comply with the SEP 33.

The DPHI must require Plaserefine to calculate credible quantities of the dangerous goods and apply the calculation of distance from site boundary. This should be done and verified by someone suitability qualified and independent to GHD prior to recommended development consent because its not clear in the GHD reports that the PHA was run and that the site complies with its distance to site boundary requirements.

Waste Monitoring Program B80.

Response: This condition of consent statutory requirement where no waste goes onto neighbouring properties is not realistic and achievable with the facility location and design. The high wind and site exposure coupled with its roller door design opening up, doors on the east and west and cavernous open plan means it's not achievable. Rubbish including microplastics will transfer. How does the DPHI propose that condition is measured? Neighbours go around and pick up plastic and report it through the community representation group? (microplastics are not visible), have some sort of screen at the doors to capture debris?

Wrap up

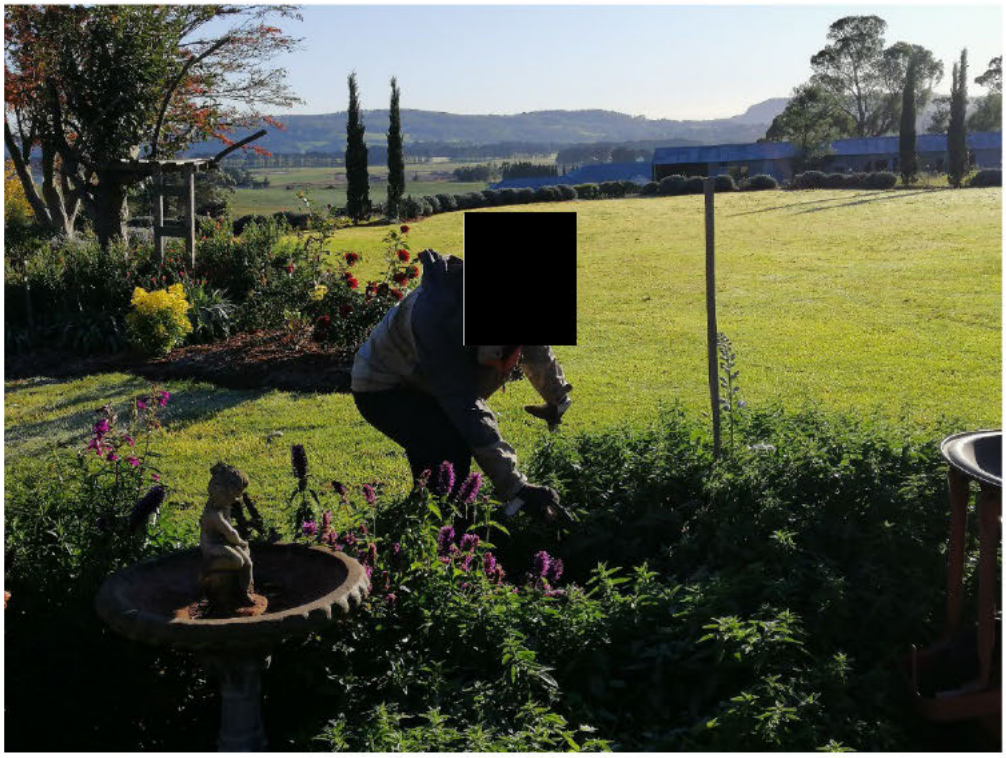
This development will be weighed up as per the IPC criteria[xix]. From my analysis and experience talking to many people, and that includes GHD and Nancy the proponent, I cannot see how this proposed development merits approval. I don't see how the IPC can legally support its approval and I am flabbergasted that the DPHI has given approval with the information that has been presented.

This development;

- Does not comply with rules and regulations, nor planning instruments and it doesn't align with the aims and objectives of relevant strategic plans
- It has a high negative environmental impact on both the natural and built environment. It presents a risk to Sydney water, run off, a lack of contingency planning for surface water management where that untreated water and contaminates could escape
- The economic benefits presented are far outweighed by the detrimental impacts
- It has no social benefits, in fact the project would result in adverse social impacts relating to
    - Residents way of life
    - The community
    - Surroundings
    - Community fears and aspirations
- It is not in the public interest, it leaves a negative legacy for now and generations to come
- It is incompatible with surrounding land uses to existing and desired land uses such as rural residential on its south, east and west and small scale agriculture to its north 1.2km away and tourism function centre close by on it south west (The Briars)
- It will create lasting community angst and disharmony. This disharmony isn't temporary, this development with how it operates and where it is will cause ongoing community stress.
- Result in land use conflicts and social impacts that cannot be appropriately managed & long lasting negative amenity impacts on surrounding land holders

When I heard that the DPHI had recommended this for approval to proceed I actually felt sad. I felt we'd been let down by the DPHI and the process. Some neighbours that I had not seen for a few years have significantly aged from all this.

I finish this submission with pictures of our property. I have spent many thousands of hours building this garden and creating this home where we have raised our family. I know that if this factory goes ahead, this place will never be the same and it's just not right what is happening here to us and to this community.



`

APPENDICES

Appendix A - GHD's Letterbox drop in December 2024

GHD Letter Scan.pdf

Appendix B – GHD's Page 22 EIS_12524108-REP-6_Scoping Report_Release 1

4.2 Environmental planning instruments

4.2.1 State environmental planning policies

State Environmental Planning Policy (State and Regional Development) 2011

State Environmental Planning Policy (State and Regional Development) 2011 (SRD SEPP) is an environmental planning instrument under the *Environmental Planning and Assessment Act 1979* , which identifies particular types of development as state significant infrastructure (SSI) or state significant development (SSD).

Under Clause 23 (waste and resource management facilities) of Schedule 1 of the policy, the proposal is considered to be:

(3) Development for the purpose of resource recovery or recycling facilities that handle more than 100,000 tonnes per year of waste.

The proposal is applicable to the criteria listed in Clause 23(3) as it will have the capacity to receive up to 150,000 tonnes per year of mixed plastics and waste containing plastics. As the capacity of the proposed facility is greater than 100,000 tonnes per year, it is considered to be SSD.

Under Schedule 1 Clause 10 of the policy, development that has a capital investment value of more than $30 million for the purpose of the manufacture or reprocessing of polymers, plastics, rubber or tyres is classified as a SSD. As the capital cost of the proposed plastics recycling facility is greater than $30 million, it is considered to be SSD. In this regard, there are two triggers for the SSD designation.

Appendix C - SEPP - waste or resource recovery facility definition.

23 Waste and resource management facilities

(1) Development for the purpose of regional putrescible landfills or an extension to a regional putrescible landfill that—

(a) has a capacity to receive more than 75,000 tonnes per year of putrescible waste, or

(b) has a capacity to receive more than 650,000 tonnes of putrescible waste over the life of the site, or

(c) is located in an environmentally sensitive area of State significance.

(2) Development for the purpose of waste or resource transfer stations in metropolitan areas of the Sydney region that handle more than 100,000 tonnes per year of waste.

(3) Development for the purpose of resource recovery or recycling facilities that handle more than 100,000 tonnes per year of waste.

(4) Development for the purpose of waste incineration that handles more than 1,000 tonnes per year of waste.

(5) Development for the purpose of hazardous waste facilities that transfer, store or dispose of solid or liquid waste classified in the Australian Dangerous Goods Code or medical, cytotoxic or quarantine waste that handles more than 1,000 tonnes per year of waste.

(6) Development for the purpose of any other liquid waste depot that treats, stores or disposes of industrial liquid waste and—

(a) handles more than 10,000 tonnes per year of liquid food or grease trap waste, or

(b) handles more than 1,000 tonnes per year of other aqueous or non-aqueous liquid industrial waste.

Appendix D – GHD's reference of applicability of the 2007 SEP

State Environmental Planning Policy (Infrastructure) 2007

State Environmental Planning Policy (Infrastructure) 2007 (Infrastructure SEPP) aims to facilitate the effective delivery of infrastructure across NSW and allows for a range of developments to be permitted with and without consent.

The SEPP also includes provision for traffic generating development and requires referral and concurrence of the NSW Roads and Maritime for certain development which is expected to generate significant traffic. Schedule 3 of the Infrastructure SEPP identifies 'traffic generating development' which must be referred to the Roads and Maritime for concurrence.

The schedule includes development for the purposes of waste or resource management facilities of any size. The proposed facility will be considered a traffic generating development and concurrence from Roads and Maritime will be required as part of the proposal.

Appendix E – Definitions of Resource recovery facilities.

Definitions of a waste or resource recovery facility and its 3 nominate uses

waste or resource management facility means any of the following—

(a) a resource recovery facility,

(b) a waste disposal facility,

(c) a waste or resource transfer station,

(d) a building or place that is a combination of any of the things referred to in paragraphs (a)–(c).

resource recovery facility means a building or place used for the recovery of resources from waste, including works or activities such as separating and sorting, processing or treating the waste, composting, temporary storage, transfer or sale of recovered resources, energy generation from gases and water treatment, but not including re-manufacture or disposal of the material by landfill or incineration.

Note—

Resource recovery facilities are a type of ***waste or resource management facility***—see the definition of that term in this Dictionary.

waste or resource transfer station means a building or place used for the collection and transfer of waste material or resources, including the receipt, sorting, compacting, temporary storage and distribution of waste or resources and the loading or unloading of waste or resources onto or from road or rail transport.

Note—

Waste or resource transfer stations are a type of ***waste or resource management facility***—see the definition of that term in this Dictionary.

waste disposal facility means a building or place used for the disposal of waste by landfill, incineration or other means, including such works or activities as recycling, resource recovery and other resource management activities, energy generation from gases, leachate management, odour control and the winning of extractive material to generate a void for disposal of waste or to cover waste after its disposal.

Note—

Waste disposal facilities are a type of ***waste or resource management facility***—see the definition of that term in this Dictionary.

Appendix F – Definitions from the Infrastructure SEPP 2007

Waste or Resource Management facilities. Schedule 3 is a table that states (P116);

Industry	20,000m^2 in area	5,000m^2 in area
Landfill, recycling facilities, waste transfer station	Any size or capacity	

Page 98 & 99, SEPP, Infrastructure 2007.

Division 23 Waste or resource management facilities

120 Definitions

In this Division:

prescribed zone means any of the following land use zones or a land use zone that is equivalent to any of those zones:

(a) RU1 Primary Production,

(b) RU2 Rural Landscape,

(c) IN1 General Industrial,

(d) IN3 Heavy Industrial,

(e) SP1 Special Activities,

(f) SP2 Infrastructure.

resource recovery facility means a facility for the recovery of resources from waste, including such works or activities as separating and sorting, processing or treating the waste, composting, temporary storage, transfer or sale of recovered resources, energy generation from waste gases and water treatment, but not including re-manufacture of material or goods or disposal of the material by landfill or incineration.

Page 98

waste disposal facility means a facility for the disposal of waste by landfill, incineration or other means, including associated works or activities such as recycling, resource recovery and other resource management activities, energy generation from waste gases, leachate management, odour control and the winning of extractive material to generate a void for disposal of waste or to cover waste after its disposal.

waste or resource management facility means a waste or resource transfer station, a resource recovery facility or a waste disposal facility.

waste or resource transfer station means a facility for the collection and transfer of waste material or resources, including the receipt, sorting, compacting, temporary storage and distribution of waste or resources and the loading or unloading of waste or resources onto or from road or rail transport.

Appendix G – E4 Land Use objectives and land use tables

2.3 Zone objectives and Land Use Table

(1) The Land Use Table at the end of this Part specifies for each zone—

(a) the objectives for development, and

(b) development that may be carried out without development consent, and

(c) development that may be carried out only with development consent, and

(d) development that is prohibited.

(2) The consent authority must have regard to the objectives for development in a zone when determining a development application in respect of land within the zone.

(3) In the Land Use Table at the end of this Part—

(a) a reference to a type of building or other thing is a reference to development for the purposes of that type of building or other thing, and

(b) a reference to a type of building or other thing does not include (despite any definition in this Plan) a reference to a type of building or other thing referred to separately in the Land Use Table in relation to the same zone.

(4) This clause is subject to the other provisions of this Plan.

Notes—

1 Schedule 1 sets out additional permitted uses for particular land.
2 Schedule 2 sets out exempt development (which is generally exempt from both Parts 4 and 5 of the Act). Development in the land use table that may be carried out without consent is nevertheless subject to the environmental assessment and approval requirements of Part 5 of the Act.
3 Schedule 3 sets out complying development (for which a complying development certificate may be issued as an alternative to obtaining development consent).
4 Clause 2.6 requires consent for subdivision of land.
5 Part 5 contains other provisions which require consent for particular development.

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.
- 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 child care; 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

Appendix H. WLEP Land Use tables Industries and Heavy Industry Storage Establishments

Light industry

light industry means a building or place used to carry out an industrial activity that does not interfere with the amenity of the neighbourhood by reason of noise, vibration, smell, fumes, smoke, vapour, steam, soot, ash, dust, waste water, waste products, grit or oil, or otherwise, and includes any of the following—

(a) high technology industry,

(b) home industry,

(c) artisan food and drink industry,

(d) creative industry.

General Industry

general industry means a building or place (other than a heavy industry or light industry) that is used to carry out an industrial activity.

Note—

General industries are a type of ***industry***—see the definition of that term in this Dictionary.

Industry

industry means any of the following—

(a) general industry,

(b) heavy industry,

(c) light industry,

but does not include—

(d) rural industry, or

(e) extractive industry, or

(f) mining.

Heavy Industry

heavy industry means a building or place used to carry out an industrial activity that requires separation from other development because of the nature of the processes involved, or the materials used, stored or produced, and includes—

(a) hazardous industry, or

(b) offensive industry.

It may also involve the use of a hazardous storage establishment or offensive storage establishment.

Note—

Heavy industries are a type of ***industry***—see the definition of that term in this Dictionary.

Hazardous Industry

hazardous industry means a building or place used to carry out an industrial activity that would, when carried out and when all measures proposed to reduce or minimise its impact on the locality have been employed (including, for example, measures to isolate the activity from existing or likely future development on other land in the locality), pose a significant risk in the locality—

(a) to human health, life or property, or

(b) to the biophysical environment.

Note—

Hazardous industries are a type of ***heavy industry***—see the definition of that term in this Dictionary.

Offensive Industry

offensive industry means a building or place used to carry out an industrial activity that would, when carried out and when all measures proposed to reduce or minimise its impact on the locality have been employed (including, for example, measures to isolate the activity from existing or likely future development on other land in the locality), emit a polluting discharge (including, for example, noise) in a manner that would have a significant adverse impact in the locality or on existing or likely future development on other land in the locality.

Note—

Offensive industries are a type of ***heavy industry***—see the definition of that term in this Dictionary.

Heavy Industrial storage establishment

heavy industrial storage establishment means a building or place used for the storage of goods, materials, plant or machinery for commercial purposes and that requires separation from other development because of the nature of the processes involved, or the goods, materials, plant or machinery stored, and includes any of the following—

(a) a hazardous storage establishment,

(b) a liquid fuel depot,

(c) an offensive storage establishment.

Hazardous Storage Establishment

offensive storage establishment means a building or place that is used for the storage of goods, materials or products and that would, when all measures proposed to reduce or minimise its impact on the locality have been employed (including, for example, measures to isolate the building or place from existing or likely future development on other land in the locality), emit a polluting discharge (including, for example, noise) in a manner that would have a significant adverse impact in the locality or on existing or likely future development on other land in the locality.

Note—

Offensive storage establishments are a type of ***heavy industrial storage establishment***—see the definition of that term in this Dictionary.

Offensive Storage Establishment

hazardous storage establishment means a building or place that is used for the storage of goods, materials or products and that would, when in operation and when all measures proposed to reduce or minimise its impact on the locality have been employed (including, for example, measures to isolate the building or place from existing or likely future development on other land in the locality), pose a significant risk in the locality—

(a) to human health, life or property, or

(b) to the biophysical environment.

Note—

Hazardous storage establishments are a type of ***heavy industrial storage establishment***—see the definition of that term in this Dictionary.

Appendix I - Day 3 IPC Hearing transcript P64

MS MILLIGAN: But it may get to the land around the building. So, I'm thinking if there were to be a flood event, I understand what you're saying about the microplastics that might be generated or might occur within the building. But I'm just wondering if you can talk to us a little bit about microplastics and the possibility of them being outside the building, on the roof, around the building, and what would the implications be of a catastrophic event like major flood.

MR GAMBLE: Well, I suppose the first thing, I guess, there's no – it's not zero discharge in terms of particulates. It's meeting the EPA requirements. It's a very low level. And added to that is the background level from other sources. So, all areas around the site would experience some form of particulates settling on it. So, certainly during a normal rainfall event, these would potentially enter the bioretention basin etc. and they would potentially be collected in that basin.

But in a catastrophic event, obviously there would be a lot bigger waterflow through the area, and it could certainly carry some particulates with it. But in the whole scheme of things in that event, the volumes of water will be so huge that there will be an immense dilution effect, which would occur, so, in the, like a catastrophic flood event.

Appendix J – Our Submission to the community consultation 2022

SSD9409987
Submission -Resolve.p

END NOTE REFERENCES

---

[i] https://ehq-production-australia.s3.ap-southeast-2.amazonaws.com/e9642e85f61d952425192d7aab951b072c82411c/original/1645159278/b2e1c381071dedbc27207b6b8be94c22_Tell_Me_More_1__Local_Environmental_Plans_and_Zoning.pdf?X-Amz-Algorithm=AWS4-HMAC-SHA256&X-Amz-Credential=AKIA4KKNQAKIOR7VAOP4%2F20241113%2Fap-southeast-2%2Fs3%2Faws4_request&X-Amz-Date=20241113T045549Z&X-Amz-Expires=300&X-Amz-SignedHeaders=host&X-Amz-Signature=f99ca26f0b73703f4e4daf22e4e823b80e12a9676395497d64f950bbd6ba27d4

[ii] https://legislation.nsw.gov.au/view/html/inforce/2020-05-15/epi-2011-0511#sch.1-sec.23
[iii] https://legislation.nsw.gov.au/view/html/inforce/current/act-1979-203#sec.4.36
[iv] https://legislation.nsw.gov.au/view/html/inforce/2020-05-15/epi-2011-0511#sec.4 *"Policy have (subject to this clause) the same meaning as they have in the standard local environmental planning instrument prescribed by the Standard Instrument (Local Environmental Plans) Order 2006.*

[v] >>> Glass Resource Facility Case judgement https://emea01.safelinks.protection.outlook.com/?url=http%3A%2F%2Fclassic.austlii.edu.au%2Fcgi-bin%2Fsinodisp%2Fau%2Fcases%2Fnsw%2FNSWLEC%2F2015%2F49.html%3Fstem%3D0%26synonyms%3D0%26query%3DGlass%2520recovery&data=05%7C02%7C%7Ced73f51cf7894c9967c808dd0379d3b0%7C84df9e7fe9f640afb435aaaaaaaaaaaa%7C1%7C0%7C638670543963237584%7CUnknown%7CTWFpbGZsb3d8eyJFbXB0eU1hcGkiOnRydWUsIlYiOiIwLjAuMDAwMCIsIlAiOiJXaW4zMiIsIkFOIjoiTWFpbCIsIldUIjoyfQ%3D%3D%7C0%7C%7C%7C&sdata=aNpF5%2Bzyi5bIevrj%2FwbSkpul0cx3s2UMuFxLfkG%2FR8o%3D&reserved=0

[vi] https://www.ipcn.nsw.gov.au/resources/pac/media/files/pac/projects/2024/10/moss-vale-plastics-recycling-facility/public-submission-rounds/speaker-presentations/barry-anstee-apprendix-to-presentation.pdf
[vii] Australian Dangerous Goods Code - Table 3.2.3 (1).xlsx
[viii] hazardous-industry-planning-advisory-paper-no-4-risk-criteria-for-land-use-safety-planning.pdf
[ix] Page 21 Table 3 hazardous-industry-planning-advisory-paper-no-4-risk-criteria-for-land-use-safety-planning.pdf
[x] https://www.epa.gov/pfas/pfas-explained
[xi] PFAS chemicals found in Sydney's drinking water
[xii] Source: https://www.youtube.com/watch?v=_Bu95rbkBUk – Designing wind breaks

https://www.theguardian.com/sustainable-business/2017/jul/06/troubling-fire-record-uk-recycling-plants
[xiv] Source: Journal of Fire Sciences Volume 41, Issue 6, November 2023, Pages 269-287. © The Author(s) 2023 , Article Reuse Guidelines https://doi org/10 1177/07349041231199894

[xv] Microsoft PowerPoint - FRNSW Waste Recycling Facilities SFS Seminar June 2018
[xvi] https://www.fire.nsw.gov.au/gallery/files/pdf/guidelines/guidelines_fire_safety_in_waste_facilities.pdf

[xvii] https://www ipcn nsw gov au/resources/pac/media/files/pac/transcripts-and-material/2024/moss-vale-plastics-recycling-facility/department-meeting-transcript.pdf)
[xviii]https://majorprojects.planningportal.nsw.gov.au/prweb/PRRestService/mp/01/getContent?AttachRef=SSD-9409987%2120241010T000206.432%20GMT
[xix] https://www.ipcn.nsw.gov.au/resources/pac/media/files/pac/general/ipc-policies/march-2022/220330-submission-guidelines_final.pdf?la=en&hash=D194F66AEACD86C46D3DCDC7083E9C61

Office of the Independent Planning Commission NSW

Attention: Commissioners; Andrew Mills (Panel Chair), Janett Milligan and Clare Sykes

RE: MOSS VALE PLASTICS RECYCLING FACILITY- SDD- 9409987

I am aware that the IPC has closed submissions in relation to the Plaserefine proposal. I request that the IPC Panel consider this short submission because, there is a fundamental and key critical issue that has not been considered by most of the submissions lodged with the IPC.

The issue that requires investigation and determination by the IPC Panel is, **can permissibility with consent be given to the described Plaserefine use in the General Industrial E4 Zone**.

The ultimate decision in relation to the Plaserefine proposal is extremely important as evidenced by the large number of submissions made to the IPC and the implications of the Plaserefine proposal which will have far reaching implications well beyond Moss Vale and the Southern Highlands.

GHD on behalf of the applicant Plaserefine, has asserted the purpose of the use of the proposal is a "waste or resource management facility" and that such use is permissible with consent in the General Industrial E4 Zone. (see GHD's Submission to the IPC 25th November, Section 7.2 Site Selection, Page 14).

A "waste or resource management facility" is only permissible in the General Industrial E4 Zone as an innominate use. I have previously assessed the Plaserefine use as described in ADR Appendix A-5-1 and A-5-2 against the "waste or resource management facility" definition in my submission (ID218305).

The Plaserefine use as described is not a "waste or resource management facility" because:

a.) the described Plaserefine use is a remanufacturing plant which is producing pelletised and/or powdered plastic and either selling that product or manufacturing plastic products from that product and
b.) the described Plaserefine use is not a resource recovery facility because the material received is feedstock which is not "waste". (See Pain J in Director-General, Department of Planning and Infrastructure V Glass Recovery Services Pty Ltd [2015] NSWLEC 49 (1 April 2015)

Hence a "waste or resource management facility' as defined by WLEP 2010 does not apply to the described Plaserefine use.

State Environmental Planning Policy (Infrastructure) 2007 (now repealed) and State Environmental Planning Policy (Transport and Infrastructure) 2021 both authorise consent for a "waste or resource management facility' in a prescribed zone which includes the General Industrial E4 Zone of WLEP 2010. These SEPP's do not permit the described Plaserefine use as it is not a "waste or resource management facility" as defined.

"General industry" means *a building or place (other than heavy industry or light industry) that is used to carry out "industrial activity' as defined*. The description of "industrial activity" as defined contains elements of the described Plaserefine use.

Industrial activity *means the manufacturing, production, assembling, altering, formulating, repairing, renovating, ornamenting, finishing, cleaning, washing, dismantling, transforming, processing, recycling, adapting or servicing of, or the research and development of, any goods, substances, food, products or articles for commercial purposes, and includes any storage or transportation associated with any such activity.*

However, "industrial activity" is in the context of "general industry" which states it's not "light industry" or "heavy industry". The described Plaserefine use (which I assessed in my submission) aligns to "heavy industry" as defined.

"Hazardous industry*"* means *a building or place used to carry out an industrial activity that would, when carried out and when all measures proposed to reduce or minimise its impact on the locality have been employed (including, for example, measures to isolate the activity from existing or likely future development on other land in the locality), pose a significant risk in the locality-*
(a) to human health, life or property, or
(b) to the biophysical environment

"Offensive industry" means *a building or place used to carry out an industrial activity that would, when carried out and when all measures proposed to reduce or minimise its impact on the locality have been employed (including, for example, measures to isolate the activity from existing or likely future development on other land in the locality),emit a polluting discharge (including, for example, noise) in a manner that would have a significant adverse impact in the locality or on an existing or likely future development on other land in the locality*.

The described Plaserefine use is receiving, storage, processing, pelletising of plastic feedstock for sale or further manufacturing, which is both hazardous and offensive due to the definitions of "hazardous industry" and "offensive industry", and further because;

a.) The known fire risk of plastic recycling facilities combined with the volumes of plastics being stored and processes as described in the Plaserefine use. (several high-quality researched submissions have confirmed these facts)
b.) The risk of micro plastics escaping into the air and water and its resulting impacts to biodiversity, water, air, eco system and human health.

The Plaserefine described use is both a "hazardous industry" and an "offensive industry" and therefore a "heavy industry" which is a prohibited use in the General Industrial E4 Zone.

The Plaserefine described use requires separation from neighbouring land uses and is therefore prohibited use in the General Industrial E4 Zone.

SEPP 33 calculates required distances from neighbours. For point b) above, a *fully contained* facility with capability to effectively eliminate plastics from the wastewater is required. The Plaserefine proposal does not meet point a) or b). above. SEPP33 is guidance for "heavy Industry" in land zoned for "heavy industry" uses.

The fact the Plaserefine described use is proposed in a General Industrial E4 zone neighbouring housing, schools, water catchments which confirms the Plaserefine described use when assessed against required definitions is a prohibited use in the location.

The purpose of the use as described by the Plaserefine application of a “waste or resource management facility” is not the use as described by Plaserefine.

This is a planning matter in which the incorrect purpose of use has been applied for by Plaserefine.

Further the Department of Planning in its Assessment Report has accepted the use nominated by Plaserefine and has not applied the applicable planning instruments as required.

It is evident from the above that the proposed purpose of use described by Plaserefine is prohibited in the General Industrial E4 Zone and that the IPC does not have the statutory power to approve the Plaserefine described use.

Sincerely

Gabby Kent

[redacted]

7.2 Site Selection

What we heard: the site location is inappropriate, 'Not the right site'.

The site has been identified for 'general industrial' development for more than 15 years. '*Waste or resources management facilities*' are permissible with consent in the E4 General Industrial zone.

There are a wide range of uses permitted within the E4 General Industrial zone (including depots, freight transport facilities, garden centres, general industries, hardware and building supplies, warehouse or distribution centres) which generally require large building footprints and would be considered traffic generating developments. Unlike the industrial land ~1km to the south-west of the site (which immediately adjoins residential zoned land), the proposal site was never zoned by Council for light industrial development, as a transition/ buffer with residential areas.

Sorting, washing and reprocessing of plastics within an enclosed building is a safe and low impact process, aligned with the advanced manufacturing precinct in which it would be located. The project involves advanced manufacturing through the use of robotics for optical sorting, a research and development laboratory to advance recycling technology and an educational facility for improving knowledge about sustainability and circular economy. The proposal also includes facilities to enable educational activities for school groups and other interested parties to learn about plastic waste, plastic recycling and turning wastes into valuable resources.

The Environmental Impact Statement prepared to support the proposal has assessed the impacts and benefits of the project in accordance with the relevant requirements of the *EP&A Act*. Whilst the proposal has the potential to result in minor increases in traffic and amenity impacts, it is considered a suitable development for the site, sited within the broader MVEC and SHIP with other manufacturing and research facilities. It will deliver local, regional and state benefits through the diversion of up 120,000 tonnes per annum of plastics from landfill, research improving knowledge about sustainability and circular economy,

140 jobs during operation and a capital investment in the LGA of over $88 million. The new north-south road is an enabler for further development and realisation of land within the southern part of the SHIP.