### Department of Planning, Housing and Infrastructure

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# Moss Vale Plastics Recycling Facility State Significant Development Assessment Report (SSD-9409987)

October 2024





# Acknowledgement of Country

The Department of Planning, Housing and Infrastructure acknowledges that it stands on Aboriginal land. We acknowledge the Traditional Custodians of the land and show our respect for Elders past, present and emerging through thoughtful and collaborative approaches to our work, seeking to demonstrate our ongoing commitment to providing places in which Aboriginal people are included socially, culturally and economically.

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### **Preface**

This assessment report provides a record of the Department of Planning, Housing and Infrastructure's (the Department) assessment and evaluation of the State significant development (SSD) application for the Moss Vale Plastics Recycling Facility located at 74-76 Beaconsfield Road, Moss Vale, lodged by Plasrefine Recycling Pty Ltd. The report includes:

- an explanation of why the project is considered SSD and who the consent authority is
- an assessment of the project against government policy and statutory requirements, including mandatory considerations
- a demonstration of how matters raised by the community and other stakeholders have been considered
- an explanation of any changes made to the project during the assessment process
- an assessment of the likely environmental, social and economic impacts of the project
- an evaluation which weighs up the likely impacts and benefits of the project, having regard to the
  proposed mitigations, offsets, community views and expert advice, and provides a view on whether the
  impacts are on balance, acceptable
- an opinion on whether the project is approvable or not, along with the reasons, to assist the Independent Planning Commission in making an informed decision about whether development consent for the project can be granted and any conditions that should be imposed.

# **Executive Summary**

#### Introduction

Plasrefine Recycling Pty Ltd (the Applicant) proposes to construct and operate a plastics recycling and reprocessing facility (the plastics facility) at 74-76 Beaconsfield Road, Moss Vale (site) in the Wingecarribee local government area (LGA). The proposed development (the development) would recycle up to 120,000 tonnes per annum of mixed plastic waste such as bottles and containers. Recovered plastic would be converted into clean plastic pellets and flakes, which would then be reprocessed into a range of plastic products.

The development has a capital investment value of \$88,120,922 and is expected to generate up to 200 construction jobs and 140 operational jobs.

#### Site Context

The development is located approximately 2.8 kilometres (km) north-west of the Moss Vale town centre and on the southern fringe of the Moss Vale Enterprise Corridor (MVEC), a 1,053 hectare (ha) area of as yet largely undeveloped land zoned primarily General Industrial and Heavy Industrial on the outskirts of Moss Vale. The site covers approximately 7.7 hectares (ha) of E4 (General Industrial) zoned land under the *Wingecarribee Local Environment Plan 2010*. The site is currently an unused paddock containing mainly exotic pasture. The nearest dwelling is located around 240 m to the south-east and directly to the east lies the Garvan Institute's Australian BioResources (ABR) facility which breeds unique mice colonies for critical medical research such as for cancer, heart disease, skeletal diseases and autoimmune diseases.

An unformed council road reserve approximately 1,050 m long runs along the western boundary of the site from Braddon Road in the south towards Douglas Road and the Berrima Branch Line (a private rail line operated by Boral) in the north.

### **Statutory Context**

The development is State significant development (SSD) under Part 4 of the *Environmental Planning and* Assessment Act 1979 (EP&A Act) because it involves construction and operation of both a recycling facility and a reprocessing facility that meet the criteria in section 23(3) and section 10(1)(g) respectively of Schedule 1 in the State Environmental Planning Policy (Planning Systems) 2021 (Planning Systems SEPP). The Independent Planning Commission (Commission) is the consent authority for the development under section 4.5(a) of the EP&A Act and section 2.7 of the Planning Systems SEPP, because Wingecarribee Shire Council (Council) duly made a submission by way of objection and there were more than 50 unique public submissions by way of objection.

### **Engagement**

#### **Original Application**

The Department exhibited the original Development Application (DA) and accompanying Environmental Impact Statement (EIS) from 23 February 2022 until 22 March 2022. During the exhibition period, the Department received 329 submissions from the public (318 objections, five comments, six support), a submission from Council objecting to the development and advice from seven government agencies and State owned corporations. Key issues raised in public submissions related to traffic, air quality, noise, water, visual, suitability of the site and health. Due to concerns raised by the Department and in public submissions, in its Response to Submissions the Applicant proposed changes to the site access road and heavy vehicle approach route, which included some residential streets in Moss Vale. The Department continued to raise concerns with the proposed new route and recommended the Applicant further revise the approach route to reduce impacts on surrounding

residents and other sensitive receivers. The Applicant responded by further amending the access route and this change formed part of an amended DA.

#### **Current Proposal (Amended Development)**

The amended application, accepted on 29 September 2023, included the further change to the proposed heavy vehicle approach route to use Berrima Road and Douglas Road only to connect to the site, thereby removing the need to travel through residential streets. The Amended Development also involved moving the Douglas Road/Collins Road level crossing of the Berrima Branch rail line 190 m to the west of its current location.

The Department exhibited the Amended Development from 5 October 2023 until 1 November 2023. During the second exhibition period, the Department received 332 submissions from the public (324 objections, three comments, five support), a submission from Council and advice from six government agencies and State owned corporations.

Following extensive discussion with the Department, during 2024 the Applicant provided supplementary information on traffic, visual impacts, noise, an addendum Social Impact Assessment (SIA), updated architectural plans and updated mitigation measures to address the issues raised.

#### **Assessment**

The Department's assessment of the application has fully considered all relevant matters under section 4.15 of the EP&A Act, the objects of the EP&A Act and the principles of ecologically sustainable development. The Department has identified the key issues with the application as social, visual, impacts on the ABR, and operational traffic.

#### **Social Impact**

Public submissions expressed concern the development was unsuitable for the site and would impact the character of the local area, particularly in regard to traffic, air quality, noise, and visual impacts. To fully consider these issues, the Department required the Applicant to undertake a robust Social Impact Assessment (SIA) including an overall analysis and justification of social impacts, mitigation measures, and the findings of engagement. The SIA was revised on several occasions to reflect the various changes to the development during 2023 and 2024.

Overall, the SIA identified several high negative social impacts (changing character of the area due to land use and amenity impacts, effects on people's sense of place and surroundings, potential impacts on psychological health from stress, anxiety, and fear). Positive social impacts included achieving sustainability objectives through recycling of plastic, creation of jobs, and benefits to local businesses.

The SIA proposed a range of mitigation measures, including preparing a Community Engagement Plan (CEP) and establishing a Community Consultative Committee (CCC) to actively engage the community and provide a mechanism for community members to express concerns and complaints.

To ensure a robust assessment, the Department engaged an independent consultant, Professor Roberta Ryan, to review the SIA reports. In her advice, Professor Ryan noted the development's positive impacts and found the mitigation measures proposed by the Applicant would reduce many of the negative impacts perceived by the community and stakeholders. However, some social impacts would remain after mitigation. To address these impacts, in addition to convening a CCC, Professor Ryan recommended the Applicant prepare a Social Impact Management Plan (SIMP) detailing measures to engage the community, minimise negative impacts and enhance positive impacts for the life of the development. Professor Ryan concluded the proposal adequately addresses the social impacts subject to the implementation of her recommendations.

The Department acknowledges the considerable and ongoing public concern about the social impacts of the development, particularly regarding the changing character of the area. However, it notes the character changes from primarily rural residential to business and industrial uses can be attributed to the creation of the MVEC and associated land rezoning more than ten years ago.

The Department notes the Applicant has made refinements to the development over time, such as access and landscaping changes, and has proposed a range of mitigation and management strategies designed to alleviate social impacts as much as possible, including perceived impacts. In addition, the Department's assessment of other environmental concerns such as traffic, visual, air, and noise finds these can be satisfactorily managed.

To ensure any residual social impacts are carefully managed, the Department has recommended a range of conditions to reflect the Applicant's commitments in its SIA and Professor Ryan's advice. In addition, to ensure there is robust and ongoing oversight of the environmental controls for the development, the Department recommends engagement of an Environmental Representative (ER) during both construction and operation. Overall, the Department considers that with these measures in place (coupled with the conditions proposed in respect of other environmental impacts) the proposal adequately addresses the identified social impacts and the development would be unlikely to significantly impact the local community.

#### Visual Impact, Design and Landscaping

The development includes two large warehouses and three ancillary buildings which would be visible from surrounding residences.

The Department raised concerns with the bulk and scale and lack of design details, including finishes and façade treatments, and requested further information. The Applicant provided a Preliminary Design Report (PDR) in April 2024 which presented an enhanced building performance in terms of energy efficiency, functionality, and aesthetics, while also minimizing the visual impact on the surrounding area.

The proposed landscaping in the PDR included screening with mounding and mature trees with varying canopy density to help break up the large building façade. Photomontages showed the mature plantings would screen the buildings from the surrounding area and reduce the visual impact of the development. To formalise the proposed landscaping, the Department has recommended preparation of a Landscape Management Plan.

Given the proposed landscaping and façade treatments, the Department finds the residual visual impacts are low. However, as the buildings would remain partially visible from private residences to the south, the Department has recommended requiring the Applicant to offer residents to have mitigation (such as landscaping or vegetation screening) installed on their property to minimise the visual impact of the development.

On balance, the Department finds the updated design and greatly increased landscaping has improved the development's appearance such that the visible impacts of the operational buildings have been adequately reduced. The Department's assessment concludes the design, landscaping, and visual impacts of the development are acceptable.

#### Impacts on ABR Facility

The mice held in the ABR facility are very sensitive to their surroundings and there is a risk that impacts from the development may cause mice to become unwell, disrupt their breeding, or alter their behaviour which could directly affect medical research. The Department met with representatives of the ABR on three occasions and this engagement confirmed that fire and vibration present the greatest risk to the ABR facility in terms of mouse health and wellbeing.

Fire and Rescue NSW (FRNSW) advised that any toxic smoke from a prolonged fire at the development would rise directly upwards, reducing the risk of impacts on the ABR. To ensure any potential impacts are minimised and the ABR can take appropriate and timely action to protect the mice, the Department has recommended preparation of an Emergency Response Plan to include specific procedures to notify ABR staff of any fire incident at the site.

The ABR indicated that vibration during mice embryo injection can cause the procedure to fail and may negatively impact the mouse breeding program. A Construction Vibration Study was prepared which found that vibration impacts can be adequately managed through a range of measures, including limiting the size of vibratory rollers, scheduling the use of rollers and the preparation of a detailed Construction Noise and Vibration Management Plan in consultation with ABR.

On review of the information provided around fire and vibration impacts, and after consultation with FRNSW, the Department is satisfied vibration and fire risks on the ABR can be appropriately managed, subject to the recommended conditions.

#### **Operational Traffic**

During operation, waste plastic and plastic products would be accepted and dispatched by 19 m semi-trailer between 7 am to 6 pm Monday to Friday. The operational heavy vehicle route would be via the Hume Highway, Medway Road, Taylor Avenue, Berrima Road, Douglas Road, Collins Road, the new 'north-south' access road and Braddon Road.

The development would generate a total of 100 heavy vehicle movements (50 in and 50 out) and 280 light vehicle staff movements (140 in, 140 out) per day. The Applicant's traffic assessment conservatively modelled 10 heavy vehicles (5 in 5 out) and 120 light vehicles (60 in 60 out) per hour at the new intersection of the 'north-south' access road and Collins Road and one train per hour on the Berrima Branch line. During both the AM and PM peaks, the TIA identified the intersection would operate at a Level of Service A (i.e. good operation), both now and into the future.

To ensure operational traffic is in accordance with the Applicant's predictions and managed appropriately, the Department has recommended preparation of an Operational Traffic Management Plan in consultation with Council which would specifically include details of heavy vehicle routes, a Driver Code of Conduct, a Traffic Control Plan, and a Heavy Vehicle Monitoring Plan.

The Applicant provided preliminary design drawings of the level crossing, along with signage details, a sight distance assessment, swept path analysis and a preliminary Road Safety Audit to demonstrate the viability of the revised level crossing arrangement. TfNSW advised that, in accordance with the Rail Safety National Law (NSW), the Rail Infrastructure Manager (Boral) and the Road Manager (Council) are responsible for managing risks at a level crossing. The Department has recommended a condition requiring the final design and construction of the rail crossing to be to the satisfaction of Council and Boral. To ensure the level crossing would operate safely into the future, the Department also recommends the Applicant undertake a Road Safey Audit and prepare an Australian Level Crossing Assessment Model prior to constructing the level crossing and associated works.

The Department's assessment concludes the operational traffic impacts of the development are acceptable and can be managed via implementation of the recommended conditions of consent.

#### Conclusion

The Department's assessment concludes the impacts of the development can be mitigated and/or managed to ensure an acceptable level of environmental performance, subject to the recommended conditions of consent. The Department's assessment concludes the development would:

- contribute to achieving the State's targets of recovering an average of 80% of all waste streams and tripling plastic recycling by 2030
- provide a total of 140 operational jobs in the Wingecarribee LGA
- contribute \$88,120,922 to the economy
- be consistent with the strategic objectives of the South East and Tablelands Regional 2036 Plan to provide industrial investment and local manufacturing opportunities in the Wingecarribee LGA
- not have a significant impact on the local environment subject to implantation of the recommended conditions

As such, the Department considers the development is in the public interest and concludes the development is approvable, subject to conditions

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### 1 Introduction

### 1.1 Development Background

- Plasrefine Recycling Pty Ltd (the Applicant) is seeking development consent for the construction and operation of a plastics recycling and reprocessing facility (the plastics facility) in Moss Vale in the Southern Highlands region of NSW within the Wingecarribee local government area (LGA) (see Figure 1). The plastics facility would recycle up to 120,000 tonnes per annum (tpa) of mixed waste plastic such as bottles, containers and plastic pipes. Recovered plastic would be converted into clean plastic pellets and flakes, which would then be reprocessed into a range of new plastic products.
- 2. Plasrefine Recycling Pty Ltd was registered in Australia in 2020 for the purpose of building the recycling facility.



Figure 1 | Regional Context Map

### 1.2 Site Description

- 3. The proposed development (the development) is located at 74-76 Beaconsfield Road, Moss Vale (the site), approximately 2.8 kilometres (km) north-west of the Moss Vale town centre and 140 km south-west of Sydney. The site comprises 7.7 hectares (ha) of E4 (General Industrial) zoned land under the Wingecarribee LEP 2010 and is legally described as part Lot 11 DP 1084421. The entire site is owned by the Applicant.
- 4. The site is a rectangular, undeveloped paddock which was previously used for agricultural purposes. The site is approximately 294 metres (m) by 262 m and contains mainly exotic pasture, with some indigenous grass species. The topography is undulating and falls from 680 Australian Height Datum (AHD) in the southern-central portion to 670 AHD in the north.
- 5. Four ponds, including a large farm dam in the north-east of the site (the north-eastern dam), exist in the low points of the site and two watercourses feeding these ponds are located along both the western and eastern boundaries of the site (see **Figure 2**). The western stream is a second order stream, and the

eastern stream is a first order stream. On leaving the site, the western stream flows in a north-easterly direction through farm dams into a concrete channel. The eastern stream crosses the eastern boundary of the site through the north-eastern dam shared with the neighbouring site and enters the same concrete channel as the western stream. The combined flow of water travels in a north-easterly direction, under Collins Road, until it reaches the Wingecarribee River. The Wingecarribee River flows to Wingecarribee Reservoir which supplies drinking water to nearby towns, Goulburn and Sydney.



Figure 2 | The Site

6. The remaining part of Lot 11 DP 1084421 is located to the south of the site and is zoned C4 (Environmental Living). It is also owned by the Applicant but does not form part of the application.

#### 1.3 Site Access

- 7. The site is currently accessed via Braddon Road, which runs along the site's southern boundary. Braddon Road was formerly an unformed road reserve, and its eastern section has recently been constructed as a residential access road under a consent (DA 22/0811) granted by Wingecarribee Shire Council (Council). Braddon Road connects to the end of Beaconsfield Road to the east of the site.
- 8. An unformed council road reserve approximately 1,050 m long runs along the western boundary of the site from Braddon Road in the south towards Douglas Road and the Berrima Branch Line (a private rail line operated by Boral) in the north. A row of nine *Eucalyptus macarthurii* are located within the road reserve.

### 1.4 Surrounding Land Uses

9. The surrounding land uses comprise a mix of industrial zoned land to the north, east and west and environmental living and rural residential land to the south on the outskirts of Moss Vale (see **Figure 3**). The land directly to the north and west is primarily vacant paddocks which have yet to be developed.



Figure 3 | Local Context Map

- 10. Moss Vale Hay Sales is located to the north-west of the site with access off Douglas Road at the level crossing with the Berrima Branch Line (private rail line). Various new businesses are under construction at Red Fields Road to the north of Douglas Road.
- 11. Dux Hot Water and Fast Skips Recycling are located to the north-east, with Omya Australia, Moss Vale Recycled Timber Building centre, the Fireplace Studio and AL Coating located further to the north-east and east.
- 12. Directly to the east lies the Garvan Institute of Medical Research's Australian Bioresources (ABR) facility, which breeds mice for medical research. Directly to the south on the other side of Braddon Road lies the remainder of Lot 11 DP 1084421 (owned by the Applicant) which is currently vacant.
- 13. Further to the south and south-east lie rural residences. The nearest residences are located some 220 m to the south-east along Beaconsfield Road. Around 320 m to the south-west of the site are residences along Bulwer Road.

### 1.5 Surrounding Road Network

- 14. Regional access to the site from Sydney, is via Hume Highway, Medway Road, and Taylor Avenue through New Berrima, Berrima Road, Parks Road and Beaconsfield Road which then leads directly to the current site access from an easterly direction (see **Figure 4**). Douglas Road, Collins Road, Lackey Road and Lyton Road also lead from New Berrima to Beaconsfield Road, passing to the north of the site.
- 15. A level crossing of the Berrima Branch Line is located where Collins Road joins Douglas Road.

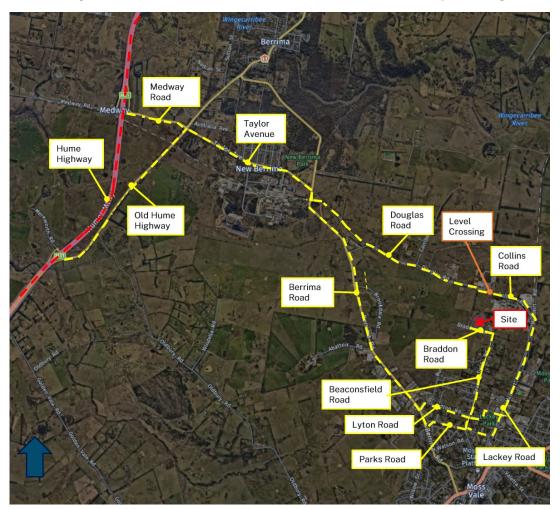


Figure 4 | Surrounding Road Network

### 1.6 Moss Vale Enterprise Corridor / Southern Highlands Innovation Park

- 16. The site is located at the southern boundary of the Moss Vale Enterprise Corridor (MVEC), a 1,053 hectare (ha) area of land between Moss Vale and New Berrima which has been identified as an employment precinct since the 1980s. The MVEC was created by Council for employment purposes in 2008 (see **Figure 5**) and is described in the Moss Vale Enterprise Corridor Development Control Plan 2008 (DCP). The aims of the DCP include the facilitation of development for employment uses and ensuring orderly and proper development of the area.
- 17. The location of the site within the MVEC is shown in the DCP to be partly within the Enterprise Precinct and partly within a Potential Constraint Area (Water Inundation). The lands in the MVEC have various zonings under the Wingecarribee Local Environment Plan 2010 (LEP), however the majority of land is zoned Heavy Industrial and General Industrial. The site is zoned IN1 General Industrial (now renamed E4 zone), where waste and recycling facilities are permitted with consent.

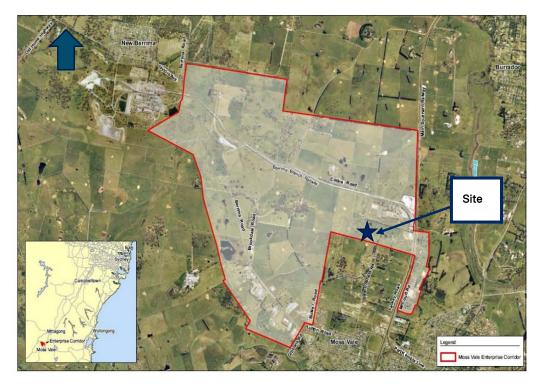


Figure 5 | Moss Vale Enterprise Corridor

- 18. More recently, Council has renamed the MVEC as the 'Southern Highlands Innovation Park' (SHIP). Council is currently preparing a more detailed Masterplan for the SHIP with funding from the NSW Department of Primary Industries and Regional Development.
- 19. The draft SHIP Vision and Masterplan, which is currently being prepared, defines several Precincts within the SHIP. The area where the development is located is within the proposed Precinct 'Research and advanced manufacturing' and the Sub-Precinct 'Bio-Tech'. It is intended this Sub-Precinct would comprise facilities in the medical device and research fields, in proximity to the ABR facility.

### 1.7 Plastics Recycling Sector

- 20. Until recently, Australia's plastic recycling sector relied heavily on exporting separated plastics to other countries where it was further processed into new plastic products. However, since 2018, China and other nations throughout Asia have restricted the import of recyclable waste.
- 21. In 2022, the Australian Federal Government placed further restrictions on plastic waste export, only permitting the export of waste plastics that have been sorted into single resin or polymer type (that is, the plastic must be grouped into individual plastic types) and further processed (for example flaked or pelletised), or waste that has been processed with other materials into processed engineered fuel.
- 22. According to the NSW Environment Protection Authority (EPA), in 2018–19, 760,000 tonnes (t) of plastic from Municipal Solid Waste (MSW) and Commercial & Industrial (C&I) sources entered the waste management system in NSW. Of this, 142,000 t was recovered through processing into new products (mostly overseas) and production of refuse-derived fuel. In the same period, 424,000 t of potentially recyclable plastics were disposed of. The EPA has identified that substantial additional plastics recycling capacity is required to ensure NSW reaches the target from the Waste and Sustainable Materials Strategy 2041 of tripling plastics recycling by 2030.

### 1.8 Australian BioResources

23.	The Garvan Institute's ABR facility is a purpose-built scientific facility for breeding and holding of unique
	genetically modified (GM) mice. Many of the mouse colonies bred at the ABR facility are unique and are
	critical in progressing research into urgent health priorities such as cancer, heart disease, skeletal
	diseases and autoimmune diseases.

24.	The ABR facility houses up to 40,000 mice at any one time and sends approximately 270,000 mice per
	year all over eastern Australia for use in research. It is one of only two similar facilities in Australia.

# 2 Development

### 2.1 Original Application

- 25. The original application, which was lodged and publicly exhibited in early 2022, sought operational access to the site off a new road to be constructed from Lackey Road to the east. Operational heavy vehicles would access the site via the Hume Highway, Medway Road, Taylors Avenue, Douglas Road/Collins Road, Lackey Road and the 'east-west' access road running from Lackey Road through the southern part of lands owned by ABR and along the northern border of a residential property at 77 Beaconsfield Road. The 'east-west' access road would connect to the site via the eastern section of the then unformed Braddon Road (now constructed to a rural-residential standard). Access to construct the 'east-west' access road was proposed via Beaconsfield Road. The Department raised concerns regarding the proposed access and requested the Applicant to consider pursuing an alternative access from the north.
- 26. The Applicant updated the site approach and access as part of its Response to Submissions (RTS) report. The RTS also included other updates to the development to address community, government agency and Department concerns raised during public exhibition of the application. The RTS was submitted in March 2023.
- 27. The operational heavy vehicle approach route proposed in the RTS connected with a site access road from the north (the 'north-south' access road). The 'north-south' access road would run from Douglas Road along the (unformed) council road reserve to the west of the site before connecting to Braddon Road. Heavy vehicles would approach the site from an easterly direction only, travelling through parts of the Moss Vale township (via Berrima Road, Innes Road, Garrett Street, Lackey Road, Collins Road and Douglas Road). As this route would pass St Pauls Catholic Parish Primary School and residences on Innes Road and Garrett Street, noise, traffic and safety concerns were raised by the Department and members of the public.
- 28. Given the potential for the approach route proposed in the RTS to impact additional members of the public who had not previously been consulted by the Applicant, the Department found an amendment to the development application (DA) was required. The Department advised the Applicant to submit an amended DA and supplementary supporting information.

### 2.2 Amended Development (final version)

- 29. On 28 September 2023, the Applicant sought and on 29 September 2023, obtained the approval of the Director, Industry Assessments, as delegate of the Independent Planning Commission (the Commission) to amend the application in accordance with section 37 of the *Environmental Planning and Assessment Regulation 2021* (EP&A Regulation 2021).
- 30. The amended development included a further revised site approach and access arrangement in response to the community's concerns about the route proposed in the RTS (see **Figure 6**).

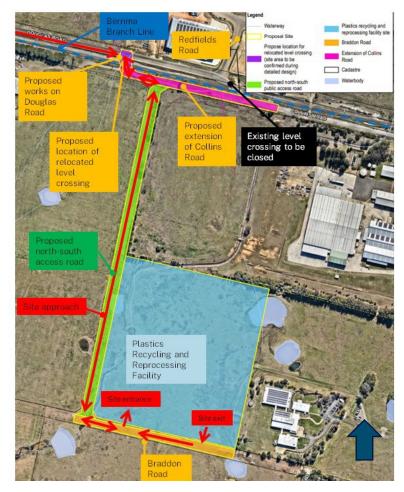


Figure 6 | Site Approach and Access (final version)

- 31. The new (final) site approach involves construction of a new level crossing of the Berrima Branch Line 190 m to the west of its current location. The new level crossing would enable operational trucks to turn right into the 'north-south' access road when coming from the west (using Douglas Road), thereby removing the need to travel through residential streets to approach from the east. Regional access to the site from both the north or south would now be via Hume Highway, Medway Road (from north), Old Hume Highway (from south), Taylors Avenue, Berrima Road, Douglas Road and Collins Road.
- 32. The amended development also included other changes made since the EIS was exhibited, in response to issues raised in public submissions and government advice regarding water and the potential impact on the Sydney Drinking Water Catchment (SDWC), capacity of existing infrastructure and visual impacts.
- 33. **Appendix A** provides a summary of the changes to the development compared to the original application.

### 2.3 Description of the Development (as amended)

- 34. The major aspects of the development (as amended) are summarised in
- 35. **Table 1** and shown in **Figure 8** to **Figure 14** and described in full in the Amendment Report. The amended development forms the basis of the Department's assessment in this report.

Table 1 | Key Aspects of the Development

Aspect	Description		
Development Summary	Construction and operation of a plastics recycling and reprocessing facility with the capacity to accept up to 120,000 tonnes of mixed plastic per annum		
Site area and development footprint	<ul> <li>site area 7.7 ha</li> <li>building footprint 3.24 ha</li> <li>development footprint 6 ha</li> <li>new 'north-south' access road - approximately 1,050 m long</li> </ul>		
Physical layout and design	<ul> <li>Building 1</li> <li>plastic receipt, sorting, cleaning, crushing and extrusion (making pellets)</li> <li>Colorbond clad, lower rendered facade wall, floor space of 22,800 m2 (168 m by 136 m), 14.5 m high. Automatic fast closing doors at entry and exit points</li> <li>Building 2</li> <li>reprocessing of recovered plastic into new plastic products (e.g. furniture)</li> <li>Colorbond clad, floor space of 8,400 m2 (72 m by 118 m), 14.5 m high</li> <li>Multi-Use Building (attached to Building 2)</li> <li>workshop, office, laboratory, outdoor seating area adjacent</li> <li>recycled brick clad, 15.5 high</li> <li>Site Office Building</li> <li>recycled brick clad, 12 m high, located near site entrance, west of Building 2</li> <li>Water Treatment Building</li> <li>treatment of water used in the processing of plastic</li> <li>floor space of 1,500 m2. Includes wastewater collection tank, filtration system, deposition tank, floatation tank, air compressor and storage tank, sludge tank, sludge treatment system and press, processed water storage tank</li> </ul>		
Ancillary works and structures	<ul> <li>two weighbridges</li> <li>emergency fire water tanks to store 1,200 kL and a pumping station</li> <li>eight truck parking spaces</li> <li>two-metre-high security fence and CCTV system</li> <li>70 car parking spaces</li> <li>four rainwater tanks with a storage capacity of at least 150 kL</li> </ul>		
Incoming waste material	<ul> <li>100,000 tpa of mixed plastic, such as bottles and containers, (polyethylene terephthalate (PET), high density polyethylene (HDPE), polypropylene (PP), acrylonitrile butadiene styrene (ABS))</li> <li>20,000 tpa of other plastics such as unplasticised polyvinyl chloride (UPVC) pipes and low-density polyethylene (LDPE) films</li> </ul>		
Operational outputs (approximate)	<ul> <li>105,000 tpa of plastic flakes, pellets, powder and new products including furniture, plastic pallets or PET sheets</li> <li>10,000 tpa residual waste such as stones, wood blocks (sent to landfill)</li> <li>9,000 tpa dewatered sludge and filter cake residue</li> <li>1,800 tpa filter residue and waste filters</li> <li>2,000 tpa metals</li> </ul>		
Storage	20,000 t of unprocessed plastic (feedstock) at any one time		
Earthworks, civil works and services extension	<ul> <li>bulk earthworks for site shaping, surface water drainage and bioretention basins</li> <li>services extension (related development) including:         <ul> <li>potable water,</li> <li>sewage, pump out to Council's sewerage treatment plant (STP) once per day</li> <li>electricity</li> </ul> </li> </ul>		

Aspect	Description		
	vegetation clearing		
Stormwater infrastructure	<ul> <li>retention of western and eastern watercourses</li> <li>gross pollutant traps</li> <li>two new bioretention basins - at south-west and northern boundaries</li> <li>a bioretention swale</li> <li>retention of north-eastern dam</li> <li>rainwater tanks (150 kL)</li> </ul>		
Road and intersection works	<ul> <li>new access to the site which includes construction of:         <ul> <li>new level crossing over Berrima Branch Line</li> <li>extension of Collins Road (part of the future Enterprise Zone Road)</li> <li>site access road running north to south between Braddon Road and Douglas Road ('north-south' access road)</li> <li>a portion of Braddon Road (upgrade from existing standard)</li> </ul> </li> <li>permanent closure and removal of the existing level crossing</li> </ul>		
Landscaping	<ul> <li>37% of the site landscaped at widths between 7 m (between Building 1 and Braddon Road) and 68 m (western side of Building 1). Includes vegetation of riparian zones adjacent to the eastern and western creeks.</li> <li>while not directly part of the development, the Applicant proposes to install 15 m wide screening planting strips along the northern boundary of the adjacent C4 zoned lot (part Lot 11 DP 1084421) including vegetated mounds up to 4 m high with approximately 178 mature trees</li> </ul>		
Traffic	<ul> <li>construction: up to 50 vehicles per day (20 heavy vehicles and 30 light vehicles)</li> <li>operation: up to 190 vehicles per day (50 heavy vehicles and 140 light vehicles)</li> </ul>		
Hours of operation	<ul> <li>waste processing and reprocessing – 24 hours per day seven days a week</li> <li>waste delivery and product dispatch – 7 am to 6 pm Monday to Friday</li> <li>administration – 9 am to 5 pm Monday to Friday</li> </ul>		
Construction	total construction time – 15 months <u>Stage 1</u> - site establishment and access road construction – two months. <u>Stage 2</u> - groundworks, excavation and slab pouring – one month <u>Stage 3</u> - construction of main structures – seven months, and installation of processing equipment – two months <u>Stage 4</u> - testing and commissioning – three months		
Capital Investment Value	\$88,120,922		
Employment	200 full-time equivalent construction jobs and 140 operational jobs		

### 2.4 Physical Layout and Design

36. The layout of the site is shown in **Figure 7** and **Figure 8.** While **Figure 9** provide elevations of Building 1 and the Multi-Use Building.

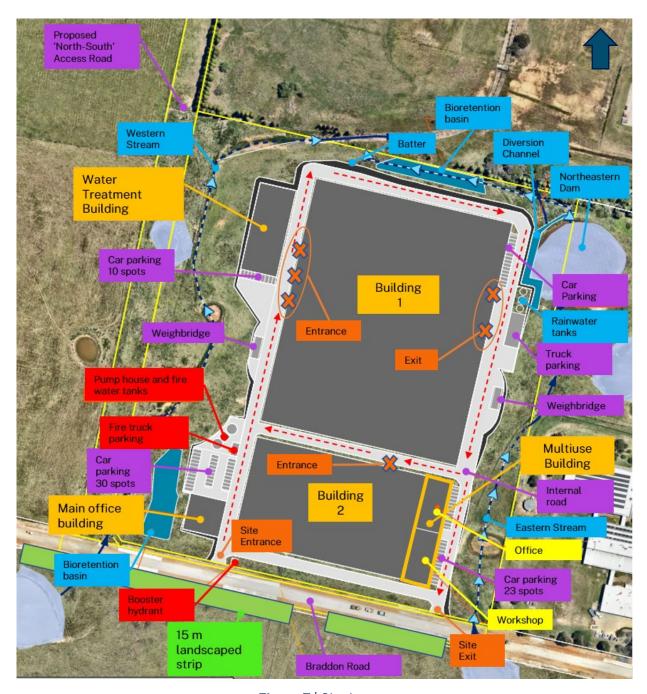


Figure 7 | Site Layout

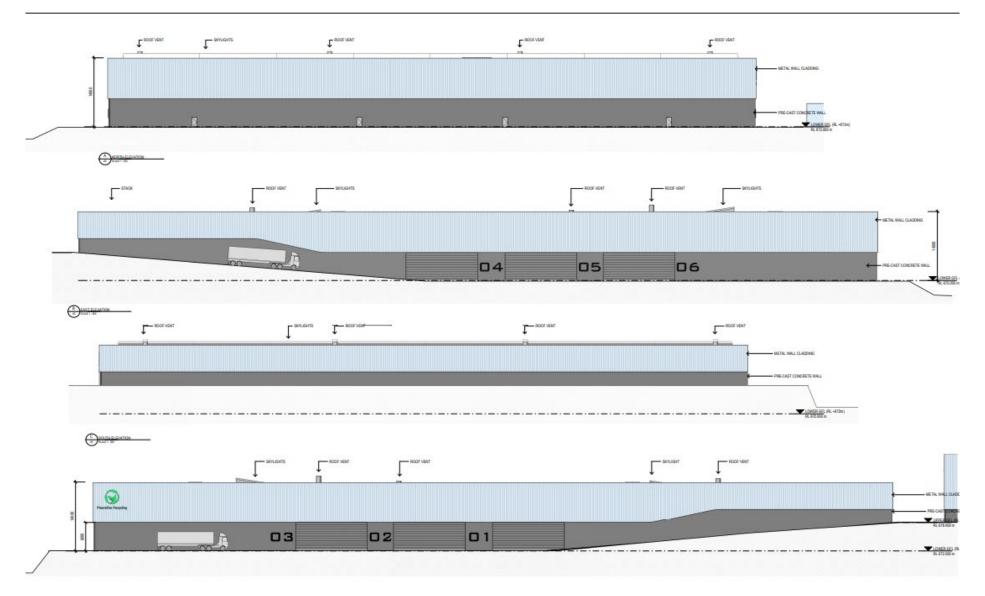


Figure 8 | Site layout Building 1 Elevations





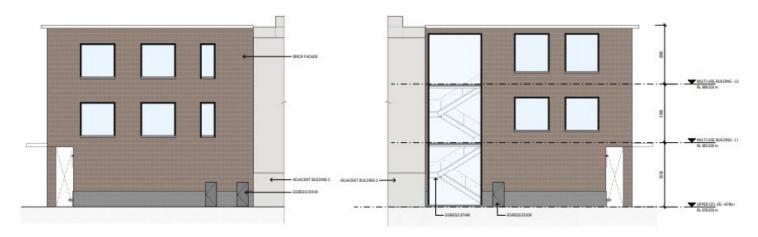


Figure 9 | Multi-Use Building Elevations (office, workshop, laboratory)

### 2.5 Process Description

37. The end-to-end waste processing procedure is briefly described below.

#### 2.5.1 **Building 1**

- 38. Waste plastic would be delivered by trucks in bales. After passing over the weighbridge, trucks would enter Building 1 through the western door (see **Figure 7**) and be unloaded in the unloading zone. Following inspection, waste would be moved to storage bunkers located along the western side of the building.
- 39. From the bunkers, plastic would be transferred to a sorting line and passed through trommel screens to remove impurities. Eddy currents would recover non-ferrous materials and a manual sorting line would pick out large impurities. Magnetic separators and a blower would separate out ferrous metals and paper and a second manual sorting line would remove large pieces of film and other impurities.
- 40. A series of vibrating screens, optical sorting and a smart arm would sort PET, PP, HDPE and ABS bottles into different types and colours. The plastic would be crushed into flakes, cleaned and sterilised using a patented disinfectant solution. Plastic flakes would be mixed in batches, melted in a heated feeder (at a maximum temperature of 220 degrees Celsius) and pelletised using extrusion granulation. Extruded pellets would then be transferred to Building 2 for reprocessing or transported offsite for sale.
- 41. LDPE film and UPVC pipe streams would be processed at different processing lines. Bales of LDPE film would be sorted into clear and coloured, then the plastic would be washed, crushed and milled (PVC) or pelletised before being transferred to Building 2 or transported offsite for direct sale.
- 42. **Figure 10** provides an example of operational machinery to be used in Building 1.



Figure 10 | Example of PET bottle washing and recycling lines

43. Any recyclable materials not suitable for further processing would be removed within 14 days to other recycling facilities. Non-recyclable materials would be stored within storage bays in Building 1 until they can be taken for disposal at a licensed facility (landfill).

#### 2.5.2 **Building 2**

- 44. Building 2 would house reprocessing of plastic flakes, pellets or powders produced in Building 1 into more advanced products, such as PET sheets, wood/plastic composites or furniture. Recovered plastic flakes and pellets would be melted and extruded or injected into moulds, as required.
- 45. Building 2 would also include storage areas for finished products as well as flakes and pellets to be used if the storage areas in Building 1 are full.

#### 2.5.3 Water Treatment Building

- 46. Water would be used during the processing and washing of plastics in Building 1. Process water would be treated in the Wastewater Treatment Plant (WTP) via dissolved air flotation (DAF) and reused in waste processing. Up to 10 kL a day of effluent would be sent to sewer as trade waste under a Trade Waste Agreement.
- 47. The DAF process injects compressed air into the water and once the aerated water is released into the floatation tank, fine air bubbles attach themselves to the particles making them float. The floating material would then be skimmed off the top of the tank and dewatered in a screw press before disposal at a licensed facility. To assist the process, pH adjustments would be made using acid and alkali solutions and other chemicals, such as polyelectrolytes, would be added to create the patented disinfectant solution used in the washing process.

### **2.6** Stormwater Management

- 48. Stormwater management infrastructure includes rainwater tanks for roof water, gross pollutant traps, bioretention basins and a swale and the existing north-eastern basin. Both of the existing water courses would be retained with various setbacks.
- 49. No rainwater would come into contact with waste, which would be unloaded, stored, processed and loaded within buildings. Once rainwater tanks are full, clean rainwater from roofs and paved areas would be directed offsite via bioretention basins which are systems designed to treat and filter large areas of stormwater before discharge.
- 50. No water used in waste processing would be released offsite into the environment.

### 2.7 Fire Management

- 51. Fire management infrastructure would include emergency fire tanks (up to 1,200 kL storage volume), internal and external hydrants, fire hose reel system, a hydrant and sprinkler booster assembly, a pumping station and a firewater containment system. Plastic stockpiles would comply with the requirements of NSW Fire Safety Guidelines *Fire Safety in Waste Facilities*, meaning each stockpile would be separated by a concrete wall that extends one metre beyond the stockpile. Site perimeter access for fire appliances would be provided.
- 52. Building 1, which would contain combustible waste material, would include an automatic fire sprinkler system, fire detection and alarm system, automatic smoke exhaust system and a building occupant warning system.
- 53. Building 2, would not contain combustible waste. However, under the Building Code of Australia (BCA), it is likely that sprinklers would be required as it would be considered a 'large isolated building'. This will be confirmed during detailed design.

### 2.8 Applicant's Justification for the Development

54. The Applicant advised the development would support the objectives of the Moss Vale Enterprise Corridor and of the NSW Waste and Sustainable Materials Strategy by recycling 120,000 tpa of plastic waste, thereby contributing to the development of a circular economy.

# 3 Strategic Context

## 3.1 Key Strategic Issues

55. The development is consistent with the strategies, plans and policies outlined in **Table 2** below.

Table 2 | Summary of Key Government Strategies, Plans and Policies

Strategy, plan or policy	Comments
South East and Tablelands Regional Plan	The South East and Tablelands Regional Plan 2036 (SETRP) and the draft South East and Tablelands Plan 2041 set regional planning priorities and provide a framework for regional and local planning decisions over the next 20 years.
2036	The SETRP sets out priorities and directions for each LGA within the south-eastern NSW and tablelands region. Economic and employment priorities for the Wingecarribee LGA include prioritisation of local manufacturing opportunities, capitalising on economic opportunities arising from the area's proximity to Sydney and capitalising on the land availability in the MVEC to attract industry and investment.
	The development is consistent with the SETRP's directions for the Wingecarribee LGA as it provides industrial investment, manufacturing opportunities and capitalises on economic opportunities.
Wingecarribee Local Strategic Planning Statement	The Wingecarribee Local Strategic Planning Statement (LSPS) sets out the 20-year land use vision for the Wingecarribee Shire. It provides a long-term planning framework to meet the economic, housing, social and environmental needs of the local community.  The LSPS outlines six key land use themes including environment and sustainability, rural lands, economy, housing, infrastructure and place. Each land use theme includes a set of planning priorities and actions to achieve the communities' vision for the Wingecarribee LGA.
	The development would align with Planning Priority 1.5 (conserve and protect waterways) through the retention of the two waterways, extensive riparian planting and stormwater infrastructure. The development would also align with Planning Priority 3.1 (support businesses and attract people to work, live and visit) as it would be a new business within the MVEC with a large workforce.
Waste and Sustainable Materials Strategy 2041	The NSW Waste Avoidance and Sustainable Material Strategy 2041 (WASM Strategy) updated the previous Waste Avoidance and Resource Recovery Strategy 2014-21. The WASM Strategy sets targets for waste reduction and landfill diversion to transition to a circular economy, including an 80% average recovery rate from all waste streams and tripling the plastics recycling rate by 2030. Part 2 of the WASM Strategy identifies the need for expanding and modernising waste and resource recovery facilities in regional NSW.
	The development would assist in achieving these aims by increasing recycling capacity for plastic waste and reducing the amount of waste sent to landfill. It would also recover resources for beneficial reuse.

Strategy, plan or policy	Comments
NSW Plastics Action Plan	The NSW Plastics Action Plan is part of the WASM Strategy. Its aim is to manage plastic throughout its lifecycle focusing on four long-term outcomes including Outcome 2: make the most of our plastic resources. The NSW government supports innovation in plastic recycling. The development would help achieve Outcome 2 by recycling 120,000 tpa of plastic into plastic pellets for reuse and new products.
NSW Circular Economy Policy Statement	The NSW EPA prepared the Circular Economy Policy Statement in 2019, outlining principles for transitioning NSW towards a circular economy.  The development is consistent with the principles of the policy, including maintaining the value of products and materials. The development would provide reuse opportunities for 120,000 tpa of waste plastic materials.
The National Waste Policy Action Plan	The National Waste Policy Action plan includes targets and actions to guide Australia's investment and national efforts to avoid waste and improve resource recovery up to 2030 and beyond. The targets include a requirement for Australia to achieve an 80% resource recovery rate from all waste streams following the waste hierarchy by 2030. To this end, all states in Australia have agreed to work with the private sector to design out waste and pollution, keep materials in use and foster markets to achieve a circular economy by 2030. The development would provide resource recovery opportunities for 120,000 tpa of waste plastic materials.

# 4 Statutory Context

### 4.1 Permissibility and Assessment Pathway

56. Details of the permissibility of the development and the assessment pathway under which consent is sought are provided in **Table 3** below.

Table 3 | Permissibility and Assessment Pathway

Consideration	Description		
Permissibility	Permissible with consent		
	Waste or resource management facilities are permissible with consent in the E4 General Industrial zone of the Wingecarribee Local Environment Plan 2010 (Wingecarribee LEP)		
Assessment pathway	State significant development		
	The development is SSD under Section 4.36 of the EP&A Act as it satisfies the criteria under Section 2.6(1) of the Planning Systems SEPP:		
	<ul> <li>the development on the land concerned is not permissible without development consent, and</li> </ul>		
	the development type is specified in Section 23 of Schedule 1 of the Planning Systems SEPP; and		
	<ul> <li>the development type is specified in Section 10 of Schedule 1 of the Planning Systems SEPP</li> </ul>		
Consent authority	Independent Planning Commission (the Commission)		
	The Commission is the declared consent authority under Section 4.5(a) of the EP&A Act and Section 2.7(1) of the Planning Systems SEPP. This is because:		
	<ul> <li>Council has duly made an objection in accordance with the EP&amp;A Act</li> <li>more than 50 submissions have been made by way of objection</li> </ul>		

### 4.2 Other Approvals and Authorisations

- 57. Should development consent by granted, other approvals may be required in order to carry out the development. Section 4.42 of the EP&A Act lists a number of approvals that cannot be refused if required to carry out the development and must be approved in a manner that is substantially consistent with any SSD consent granted under the EP&A Act.
- 58. The development will require the following licences/approvals:
  - an Environment Protection Licence (EPL) issued by the EPA under Section 42 of the *Protection of the Environment Operations Act 1997*
  - approval under section 138 of the Roads Act 1993 issued by Council.
- 59. The Department has consulted with and considered the advice of the EPA and Council in its assessment of the development (see **Section 5** and **Section 6**) and has included the EPA's recommendations in the recommended instrument of consent (see **Appendix F**).

### 4.3 Mandatory Matters for Consideration

#### 4.3.1 Matters of Consideration Required by the EP&A Act

60. Section 4.15 of the EP&A Act sets out matters to be considered by a consent authority when determining a DA. The Department's consideration of these matters is set out in **Appendix D**.

#### 4.3.2 Public Exhibition and Notification

- 61. In accordance with Section 2.22 and Schedule 1 to the EP&A Act, the DA and any accompanying information of an SSD application are required to be publicly exhibited for at least 28 days. The Department publicly exhibited the application on two occasions:
  - the DA and EIS were on exhibition from 23 February 2022 until 22 March 2022
  - the amended application and Amendment Report were on public exhibition from 5 October 2023 until 1 November 2023.

Details of the exhibition process and notifications are provided in **Section** 5.

#### 4.3.3 Objects of the EP&A Act

- 62. In determining the application, the consent authority should consider whether the development is consistent with the relevant objects of the EP&A Act (s 1.3) including the principles of ecologically sustainable development (ESD). Consideration of those factors is described in **Appendix D**.
- 63. As a result of the analyses in **Appendix D**, the Department is satisfied that the development is consistent with the objects of the EP&A Act and the principles of ESD.

#### 4.3.4 Biodiversity Development Assessment Report

- 64. Section 7.9(2) of the *Biodiversity Conservation Act 2016* (BC Act) requires all SSD applications to be accompanied by a Biodiversity Development Assessment Report (BDAR) unless the Planning Agency Head and the Environment Agency Head determine that the project is not likely to have any significant impact on biodiversity values (as identified in the BC Act and in the *Biodiversity Conservation Regulation 2017*).
- 65. The EIS included a BDAR (see **Appendix A**). The BDAR and the overall impact of the project on biodiversity values is assessed in **Section 6**.

# 5 Engagement

### 5.1 Application Timeframe

- 66. The Department notes the development application was submitted in early 2022. As the site is located on the edge of the MVEC, at the interface between rural residential development and industrial lands, as well as being adjacent to the ABR facility, the Department spent considerable time over the period of early 2022 to mid-2024 ensuring appropriate information was provided by the Applicant that demonstrated impacts could be managed to an appropriate level. A brief overview of the application timeframe is provided below.
- 67. Due to the many concerns raised by the Department, government agencies, and the public following exhibition of the original EIS (the first exhibition) in February/March 2022, the Applicant was required to provide a substantial amount of additional information in a Response to Submissions report (RTS).
- 68. The RTS was provided in March 2023 and proposed certain amendments to the development. These amendments included a change in the site approach route from the south via Berrima Road and Innes Road. As this had the potential to impact additional sensitive receivers (residences and schools), the Department advised the Applicant that an amendment to the development was required. An amended DA was lodged in September 2023.
- 69. The Department placed the Amendment Report on public exhibition from 5 October 2023 until 1 November 2023 (the second exhibition). The Applicant was required to provide further information in response to public submissions, government agency advice and Department concerns following the second exhibition.
- 70. The Department extensively consulted with the Applicant, Council and government agencies throughout the period November 2023 to May 2024 to ensure all concerns and potential impacts were appropriately addressed. The Department engaged a specialist consultant to independently review the Social Impact Assessment report. Ultimately, the outstanding information required to finalise the Department's assessment was provided in April and May 2024.

### 5.2 Original Application (EIS)

71. As required by the Planning Secretary's Environmental Assessment Requirements (SEARs), the Applicant undertook consultation with relevant local and State agencies as well as the community and affected landowners prior to lodgement of the EIS. The Department undertook further consultation with these stakeholders and these consultation activities are described in detail in the following sections.

#### 5.2.1 Consultation by the Applicant

- 72. The Applicant undertook a range of consultation activities throughout preparation of the EIS including:
  - establishing a toll-free project hotline
  - establishing a project email and website
  - project newsletter and letter box drops
  - carrying out of door knocks
  - email responses to direct queries
  - advertising in local newspapers
  - online and in-person engagement sessions.

73. The Applicant also kept the community informed through periodic updates on its project website.

#### 5.2.2 Consultation by the Department

#### Public Exhibition of the EIS (first exhibition)

- 74. After accepting the DA and EIS, the Department:
  - publicly exhibited the project from 23 February 2022 until 22 March 2022 on the NSW planning portal and at the Council offices and Moss Vale public library
  - notified occupiers and landowners in the vicinity of the site about the public exhibition
  - notified and invited comment from relevant government agencies and Council.

#### Further Consultation

75. Staff from the Department undertook a site visit in May 2022 during which it met with a number of local residents, and the adjacent business (ABR facility).

#### 5.3 Submissions and Advice on EIS

76. During the exhibition period, the Department received 329 submissions from the public, a submission from Council and advice from seven government agencies and State owned corporations.

#### 5.3.1 Key Issues - Public Submissions (February-March 2022)

77. A summary of the number of public submissions received during the first exhibition is provided in **Table 4** and a link to the full copy of the submissions is provided in **Appendix A**. The majority of community members (65%) who made a submission live within 5 km of the site, with 19% within 5-25 km of the site (see **Figure 11** and **Figure 12**).

Table 4 | Public Submissions on the EIS

Distance	Number	Position
	214	Object
< 5 km	0	Support
	2	Comment
	64	Object
5–25 km	1	Support
	0	Comment
	34	Object
> 25 km	1	Support
	1	Comment
No address	6	Object
	4	Support
	2	Comment

Distance	Number	Position
TOTAL	318 6 5	Object Support Comment

- 78. Of the 329 public submissions received during exhibition of the EIS, four were from private businesses, of which three objected to the development and one provided comments. One submission was from the local member, the Hon Wendy Tuckerman MP, who objected to the development. Two submissions were received from Community Groups which also objected.
- 79. Two utility providers provided comments. Endeavour Energy advised the Applicant to complete the application for connection of load process with Endeavour Energy's Customer Network Solutions Branch, and Transgrid advised the site was not part of its network.
- 80. The key issues raised by the public relate to traffic, air quality, noise, water, suitability of the site, fire and health. A summary of the key issues from public submissions is provided in **Table 5**.

**Table 5** | Key Issues Raised in Public Submissions on the EIS

Issue	Number and % of Submissions
<b>Traffic</b> - capability of existing road infrastructure, potential damage to roads, safety impacts along residential streets, impacts of COVID on assessment, willingness of heavy vehicles to follow specific haulage routes	228 (71%)
<b>Air Quality</b> - impact of microplastics, odour, VOCs, toxic releases and impact on schools	169 (54%)
Noise - traffic noise and concerns over 24/7 operations	132 (41%)
Water - concerns over the potential pollution to the SDWC, lack of infrastructure, impacts of drought	120 (37%)
<b>Visual</b> - size and bulk of development spoiling rural vistas, night lighting, overdevelopment of the site	93 (32%)
<b>Suitability of the site</b> - not suitable in a residential and rural area, no infrastructure, westerly wind will blow rubbish	102 (29%)
<b>Health</b> - impacts of microplastics, VOCs, and concerns for people with asthma and for mental health impacts	70 (22%)
<b>Fire</b> - the region does not have adequate resources to deal with a large-scale fire, recent fires in recycling facilities have caused a large detrimental impact upon the local community	33 (10%)
<b>Positive benefits</b> - addresses a need to recycle plastic in New South Wales, aligns with NSW Waste Strategy. Will create jobs within the Wingecarribee LGA, recycling local plastic waste reduces carbon footprint. It will help bringing manufacturing back to Australia	4 (1%)

#### 5.3.2 Government Agency Advice on EIS (February-March 2022)

- 81. The Department received advice from seven government agencies and State owned corporations on the EIS. Details of the agency advice on the EIS and a link to the full copy of the advice is provided in **Appendix A**.
- 82. EPA, Biodiversity Conservation and Science Group (BCS of NSW DCCEEW), Heritage NSW (HNSW), NSW Fire and Rescue (FRNSW), Transport for NSW (TfNSW), DCCEEW Water (former DPE Water), and Water NSW all provided advice. Most of the agencies requested further details and information in an RTS to be able to finalise their assessment.

83. TfNSW, FRNSW, HNSW, BCS recommended a range of preliminary conditions of consent which may apply if the development were to be approved.

#### 5.3.3 Key Issues - Council on EIS (February-March 2022)

84. A summary of the issues raised by Council is provided in Error! Reference source not found. below and a link to Council's submission in full is provided in **Appendix A**.

Table 6 | Summary of issues raised by Council

Council	Submission summary
Wingecarribee Shire Council	Objected to the development and raised concerns about the suitability of the site and inconsistency with the Moss Vale Enterprise Corridor DCP, traffic and infrastructure, water supply and water treatment, air quality, noise, waste storage, landscaping and social impact.

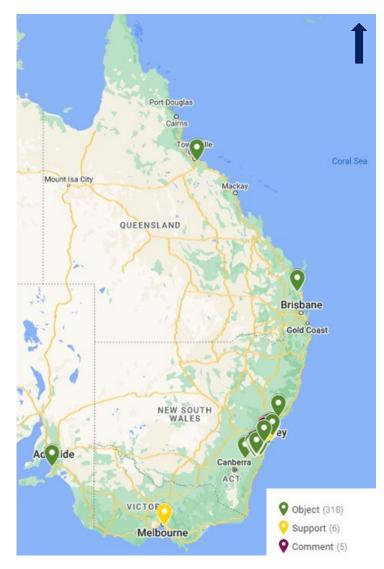


Figure 11 | Indicative location of all submitters

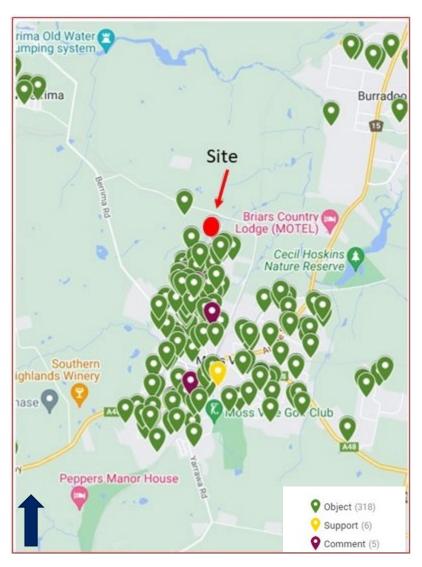


Figure 12 | Indicative location of all submissions in 5 km radius of site

### 5.4 Response to Submissions Report (March 2023)

- 85. Following the public exhibition period for the EIS (first exhibition), the Department requested the Applicant to respond to the issues raised in submissions and the advice received from government agencies. The Department also provided comments on the EIS which included investigation of an alternative site access from the north to help mitigate impacts to residents. The Applicant provided a RTS report to the Department on 10 March 2023 (see **Appendix A**).
- 86. The RTS included a revised site access arrangement from the north, with an approach route via Moss Vale. The RTS also included supporting studies including a revised BDAR and an addendum ACHAR. The RTS also included an amended stormwater arrangement including an additional bioretention basin area and retention of the eastern stream path. Additionally, the RTS provided updated MUSIC modelling, revised architectural plans, a social impact assessment, additional information on air quality, updated noise information, and a response to the issues raised in submissions made during exhibition of the EIS. The RTS also included the option of trucking out the wastewater due to potential lack of capacity at Council's STP.
- 87. The Department published the RTS report on the NSW planning portal and forwarded it to relevant government agencies and Council for comment on 15 March 2023.

#### 5.4.1 Government Agency Advice on RTS (March 2023)

- 88. The Department received further advice from six government agencies and State owned corporations on the RTS. Details of the agency advice on the EIS and a link to the full copy of the advice is provided in **Appendix A**.
- 89. The EPA requested further information about air impacts and recommended noise limits. DECCEW raised some concerns about the proximity of the development to the stream, and Water NSW raised concerns with the transport of wastewater offsite and recommended conditions.
- 90. Council did not provide any comments on the RTS report.
- 91. The Department also received various correspondence from the community raising strong concerns about the revised access route proposed in the RTS.

#### 5.5 Amendment Report (September 2023)

#### 5.5.1 Public Exhibition of the Amendment Report (second exhibition)

- 92. After accepting the Amendment Report, the Department:
  - publicly exhibited the Amendment Report from 5 October 2023 until 1 November 2023 on the NSW planning portal (second exhibition)
  - re-notified landowners in the vicinity of the site about the Amendment Report
  - re-notified and invited comment from relevant government agencies and Council.

## 5.5.2 Summary of Public Submissions on the Amendment Report

93. The Department received 332 submissions during the public exhibition period of the Amendment Report (two submissions from special interest groups, seven from local businesses and 323 submissions from individuals). Further detail is summarised in **Table 7** below and a link to all submissions in full is provided in **Appendix A**.

Table 7 | Submissions on Amendment Report

Submitter	Number of submissions	Position	
Businesses			
Asia Pacific BL Energy Group	1	Support	
ABR	1	Comment	
<b>Boral Limited</b>	1	Comment	
REVAX Pty Ltd - ATF Kufner Family Property Trust	1	Object	
Eilbeck Cranes	1	Object	
The Kindred Practice	1	Object	
Mouthwater Foods	1	Object	
Special Interest Groups			
WinZero Inc	1	Object	
Friends of Bowral	1	Object	
Public			
Submissions from community members	318	Object	
	4	Support	
	1	Comment	
TOTAL	5 3 324	Support Comment Object	

94. The key issues raised by the public relate to health impacts, water contamination including from microplastics, impacts of drought, infrastructure, traffic, air, lack of information in reports, suitability of Applicant, visual impacts including light spill and access across the rail crossing.

## 5.5.3 Summary of Government Agency Advice on the Amendment Report

- 95. Further advice was provided from seven agencies on the Amendment Report. A summary table of the agency advice is provided in **Appendix A**.
- 96. Overall, most agencies provided conditions or had no further comments, however TfNSW sought further information about the rail crossing. NSW Health advised it had no comments on the proposal.

## 5.5.4 Summary of Council Submission on the Amendment Report

97. Council provided a submission on the amended development and maintained its objection to the development. A summary of Council's submission is provided in **Table 8** below.

**Table 8** | Summary of Council's submission on the Amendment Report

Cou	

#### **Submission summary**

## Wingecarribee Shire Council

Council advised the development compromises the SHIP, a State-funded Master Plan for a regionally significant innovation park.

However, it acknowledges that the Amendment Report identifies some substantial and positive changes to the proposed development, and advised the traffic route is reasonable.

Remained concerned about the suitability of the site and inconsistency with the MVEC Development Control Plan and the first phase of the SHIP Master Plan. It advised the Department needed to ensure adequate consideration of impacts and whether the concerns and issues raised by the community can be mitigated.

Specifically, requested the Department ensure there is adequate consideration and mitigation of the noise and amenity impacts, visual, social and health impacts and consideration of the suitability of the site for the proposed development and the MVEC DCP.

Requested traffic movements generated by the proposed development be modelled against a baseline scenario of full development of the surrounding area of the precinct.

Stated the Applicant must continue to engage with the community and Council on health and wellbeing impacts.

Requested details about the new road and costings for the required infrastructure associated with the proposed development.

Requested the rail crossing be financially and logistically viable and safe.

Requested, all mitigation measures within the SIA are implemented and the proposed amendments to water use and wastewater discharge are incorporated if the development is approved,

# 5.6 Response to Submissions Report on Amended Application (Amendment RTS) (February 2024)

- 98. Following the public exhibition period of the amended DA and Amendment Report, the Department again requested the Applicant to respond to the issues raised in submissions and the advice received from government agencies. The Applicant provided a Response to Submissions Report (the Amendment RTS) to the Department on 2 February 2024 (see **Appendix A**).
- 99. The Amendment RTS included additional information on traffic, visual impacts, noise and an addendum Social Impact Assessment, updated architectural plans and updated mitigation measures.
- 100. The Department published the Amendment RTS on the NSW planning portal and forwarded it to relevant government agencies and Council for comment on 6 February 2024. A summary of the government agency responses is in **Appendix A**.
- 101. The EPA reiterated its previously provided conditions with one change to noise limits, DCCEEW provided conditions and requested a demonstration the streams will connect with watercourses, TfNSW recommended conditions and provided a number of questions that should be considered by Boral, Council and the Department when considering the new rail crossing.
- 102. Council provided advice about the rail crossing and asked that it be designed to cater for A-Double vehicles.

## 5.7 Request for Further Information

103. On 8 February 2024 the Department requested the Applicant to provide further information to address outstanding concerns regarding air, noise and vibration, fire, water and visual impacts.

- 104. The response included further design information, an updated project layout and site figure, a Vibration Report and a response to the final concerns raised by agencies and the Department.
- 105. Council provided its final comments on the additional information, raising concerns the development would adversely impact the ability of both current and potential businesses to operate efficiently and safely due to restrictions on vehicle movements and recommended that the level crossing cater for B-Doubles.
- 106. Council advised that, although microplastics are an emerging contaminant, currently there is no legislative requirement to manage the complete removal of microplastics in wastewater. Any industrial-scale source for microplastics should be addressed at the source rather than at the treatment site.
- 107. Council also reiterated advice provided to the Local Planning Panel about the SHIP and advice provided to it from the panel.

## 6 Assessment

- 108. The Department has considered the EIS, the issues raised in submissions, the Applicant's RTS and the Amendment Report and supplementary information in its assessment of the development. The Department considers the key assessment issues are:
  - social impacts
  - visual impact, design and landscaping
  - impacts on the ABR facility
  - operational traffic
- 109. A number of other issues have also been considered. These issues are considered relatively minor and are assessed in Error! Reference source not found. and Section 6.5 below.

## 6.1 Social Impact

### 6.1.1 Introduction

- 110. Social impact can affect people both positively and negatively and, in the context of development assessment, 'social impacts' generally refer to the consequences that people experience when a new development brings change.
- 111. There is potential for a range of social impacts from the development due to its industrial nature, its location near the town of Moss Vale and its relative proximity to the nearest residences (the nearest being 220 m to the south-east). Issues relating to social impacts were raised in public submissions during both the first and second exhibitions. In addition, the Department has received many emails from the public over the course of the project expressing concern about the development.
- 112. As discussed in Section 5, submitters expressed concern the development would impact the local area, particularly in regard to traffic increases, air quality, noise and visual impacts. They also raised issues related to the suitability of the site ('wrong site'). A number of submissions raised that the level of social impact assessment (SIA) undertaken by the Applicant was insufficient for the scale of the development. Generally, most of the submissions received from the public objected to the development.

### 6.1.2 Applicant's Assessment

## Background

- 113. The EIS included a brief assessment of the socio-economic impacts of the development. In accordance with Phase 2 of the transitional arrangements for the Department's Social Impact Assessment Guideline 2021 (SIA Guideline), a detailed SIA prepared in accordance with the SIA Guideline was not required at that time as the EIS was already under preparation and was submitted before the deadline in the transitional arrangements of 31 March 2022.
- 114. The assessment in the EIS included discussion of the socio-economic make up of Moss Vale and Wingecarribee LGA as well as the socio-economic impacts of both construction and operation of the facility. Impacts identified included that community perception of the development involved 'uncertainty, stress and anxiety' about the operation of the development. The EIS proposed formation of a Community Consultative Committee (CCC) to inform, consult and receive feedback from the public during construction and operation over the short and long term.
- 115. Following review of the EIS, the Department identified social impact as a key assessment issue and requested the Applicant provide a more detailed SIA in the RTS. To ensure a robust SIA was prepared

in line with best practice, the Department requested that it be prepared in accordance with the SIA Guideline, which provides a framework to identify, predict and evaluate likely social impacts of major projects.

- 116. The Applicant engaged a consultant (Ethos Urban) to prepare an SIA, which included a review of submissions and consultation with Council. During 2022 and 2023, the Department engaged social impact experts at WSP to review several iterations of the draft SIA to ensure it adequately addressed the SIA Guideline and provided a considered assessment of social impacts of the development. WSP advised the Department on the adequacy of public engagement for the SIA and provided feedback on the required improvements to the documentation.
- 117. This SIA (RTS SIA), which included an addendum capturing use of the 'north-south' access road proposed in the RTS, was provided in March 2023 with the RTS.
- 118. The Department reviewed the RTS SIA and found it did not specifically address the impacts of the new approach route proposed via Innes Road and Garrett Street and requested it be revised as part of the Amendment Report to be prepared for the amended development.

## Final SIA

- 119. An updated SIA (the Amendment SIA) was provided in September 2023 which superseded earlier SIAs. The Amendment SIA was placed on public exhibition (second exhibition) as part of the Amendment Report. The Amendment SIA was prepared based on specific and targeted community SIA engagement undertaken in June 2023 and provided an assessment of the social impacts of the amended development, including the final proposed site access route.
- 120. Following WSP's review of the Amendment SIA, the Department requested it be updated to comprehensively justify and discuss individual impacts and provide an overall analysis of social impacts. This included providing greater clarity around which mitigation measures were proposed and how effective they would be. In addition, the Department advised the findings of engagement appeared not to have been well utilised throughout the Amendment SIA.
- 121. In February 2024, an Addendum SIA was submitted with the Amendment RTS which was to be read in conjunction with the Amendment SIA. The Addendum SIA included a review of 30 randomly selected public submissions from the second exhibition in October 2023.
- 122. Overall, the Addendum SIA found the high negative social impacts to be:
  - changing character of the area due to the land use and associated amenity impacts, affecting people's sense of place and surroundings
  - during operation, an increased number of heavy vehicles with the potential to cause adverse impacts on amenity, surroundings, and accessibility
  - potential impacts on psychological health from stress, anxiety, and fear.
- 123. The Addendum SIA found the following positive social impacts:
  - addressing sustainability objectives through recycling plastic may benefit the community and their values.
  - benefits to livelihoods due to the creation of jobs and potential benefits to local businesses.
- 124. The Applicant proposed an extensive range of mitigation measures in the Amendment SIA which were specifically developed to manage social impacts. These included measures for during the preconstruction and final design, construction and operation stages of the development. During preconstruction, proposed mitigation measures included planting of trees on the adjacent lot to screen the development from nearby residents. During construction, mitigation measures included preparation and

- implementation of a Construction Traffic Management Plan (CTMP), a Construction Noise Management Plan (CNMP) and a consultation and a community information and awareness strategy which would be included in the Construction Environmental Management Plan (CEMP).
- 125. During operation, proposed mitigation measures included monitoring of air and noise and all activities to occur inside. Key community engagement methods to support mitigation of identified impacts included a Community Engagement Plan (CEP) to actively engage the community and provide a mechanism for community members to express concerns and complaints, and it was reiterated that a CCC would be established for the duration of construction and operation of the development. Access for local residents to a health and wellbeing service was also proposed. In addition, the Applicant proposed to implement a monitoring plan which would ensure the community is kept updated and well-informed of the development and next steps were proposed to minimise perceived risks to health and the environment.

## 6.1.3 **Department's Assessment**

126. As the social impact of the development is a key assessment issue and is of critical importance to the community, the Department engaged a second experienced SIA expert, Professor Roberta Ryan of the University of Newcastle's Institute for Regional Futures, to assist with its assessment. Dr Ryan was specifically engaged to provide an independent merit review of the final SIA.

## **Expert Advice**

- 127. In her advice to the Department, Professor Ryan confirmed the Amendment SIA and Addendum SIA are both robust documents, prepared by social science professionals in accordance with the assessment framework documented in the SIA Guideline.
- 128. Professor Ryan noted the mitigation measures proposed by the Applicant would reduce many of the impacts identified by the community and stakeholders, in particular noting the measures proposed to address the high and medium social impacts identified.
- 129. However, the key matters for consideration are the residual impacts after mitigation. In this regard, Professor Ryan found the Addendum SIA provided a clear explanation of who is affected by each potential social impact and clarified these social impacts would be experienced by community members to differing degrees. For example, residents with views of the facility once constructed would be most directly affected
- 130. To address residual social impacts, Professor Ryan recommended the Applicant be required to prepare a Social Impact Management Plan (SIMP), a performance-based document that sets out how the mitigation measures identified in the Addendum SIA and Amendment SIA would be managed and monitored and reviewed. Secondly, a Community Consultative Committee (CCC) be established to provide input to the mitigation strategies for the life of the development.
- 131. In terms of the local and wider communities, Professor Ryan noted the development would deliver positive economic and social benefits from job creation and increased business activity. For both the local and wider communities, the development could deliver on sustainability objectives through recycling plastic and associated technological research.
- 132. Based on her objective and independent analysis, Professor Ryan concluded the proposal adequately addresses the social impacts subject to implementation of the SIMP and establishment of the CCC.

## **Department's Consideration**

133. The Department notes that in the period 2022 to 2024, the SIA documents were revised multiple times to ensure the final version was as robust and comprehensive as possible and was prepared in

- accordance with the SIA Guideline. The Department's assessment in this section is based on the final versions of the SIA (the Amendment SIA and Addendum SIA) which reflect the amended development.
- 134. The Department acknowledges the significant number of concerns raised about impacts on the local community and recognises that many of the social impacts relate to traffic, air quality, fire, visual and other environmental impacts. These have been assessed separately in this report (see Sections 6.2 to 6.5).
- 135. The Department acknowledges it is difficult to accurately predict the nature and scale of social impacts, particularly in relation to intangible aspects and perceived impacts which may affect the community.
- 136. The site is located at the southern edge of the SHIP at the fringe of Moss Vale, with the nearest houses on Beaconsfield Road, 220 m to the south-east. Some of these residential properties have a direct line of sight to the development and views are also possible from the rear boundary of properties on Bulwer Road, located some 320 m to the south. From the public submissions, the Department has noted there is considerable concern in the community relating to the siting of the development close to residential areas (the 'wrong site').
- 137. The SIA identified some less tangible social impacts which would remain despite mitigation and management strategies. These include the changed character of the area affecting people's sense of place, surroundings and amenity, as well as psychological health risks from stress, anxiety, and fear.
- 138. In an effort to alleviate community and Department concerns, the Department notes the Applicant has made refinements to the development over time and has proposed a range of mitigation and management strategies to address the identified social impacts. The amendments to the development relevant to the key areas of concern include:
  - Traffic impacts: change in site access route to the 'north-south' via a new level crossing utilising Braddon Road and Collins Road. This removes the use of Beaconsfield Road, the formerly proposed 'east-west' access road, and avoids schools and residential areas to the south
  - Visual impacts: significant increase in landscaping, including early planting of mature trees, use of landscaped mounds to reduce views of the buildings, landscaping of adjacent land, reduction in building heights from 18m to 15.5m, and refinement of architectural design to soften appearance
  - Noise and emissions: operations are to be carried out within enclosed buildings with automatic closing doors which would be oriented away from residential areas
  - Other impacts: a reduction in operational water consumption and altered construction practices to ensure there are no vibration effects on the ABR facility.

### 6.1.4 Conclusion

- 139. After reviewing all the relevant documentation and considering Professor Ryan's advice, the Department finds the Amendment SIA and Addendum SIA have assessed the social costs and benefits of the development in significant and sufficient detail and represent good practice in social impact assessment. The Department also notes the mitigation measures proposed by the Applicant in the SIA are extensive and designed to alleviate social impacts as much as possible, including perceived impacts.
- 140. The Department notes that concerns regarding the changing character of the area from primarily rural residential to business and industrial uses can be attributed to the creation of the MVEC (now SHIP) and associated land rezoning more than ten years ago. While the draft SHIP Masterplan intends for the site to be part of a Sub-Precinct 'Bio-Tech' around the ABR facility, the Department notes the SHIP Masterplan is yet to be finalised and is not currently in effect. Notwithstanding, the development has been designed to minimise its visual impact through appropriate landscaping and façade treatment and has reduced traffic impacts by rerouting the site access to avoid residential areas. Air quality, noise and

fire management can be satisfactorily managed through the Applicant's proposed management and mitigation measures and conditions of consent. Further, the proposal will also be fully enclosed thereby minimising amenity impacts on nearby current and future businesses. This ensures the development will provide a satisfactory transition between the residential area and broader SHIP land.

- 141. To ensure any residual impacts are carefully managed the Department has recommended a range of conditions to formalise the Applicant's commitments in the Amendment SIA, and as recommended by Professor Ryan:
  - establishment of a CCC in accordance with the Department's guideline before construction commences. The CCC should include a representative from Council
  - preparation and implementation of a Community Consultation Plan for construction and operation to ensure the procedures for keeping the community informed of the development are readily available to the public
  - preparation and implementation of a Social Impact Management Plan (SIMP) in consultation with the CCC. The SIMP would include:
    - i. measures to avoid, minimise and mitigate the negative social impacts associated with the development, including specific measures to minimise stress-related impacts
    - ii. measures to enhance the development's positive impacts, by detailing opportunities to support community services and facilities
    - iii. a stakeholder engagement strategy to evaluate and implement social management and mitigation measures over the life of the development.
- 142. In addition, to ensure there is robust and ongoing oversight of the environmental controls for the development, the Department recommends engagement of an Environmental Representative (ER) during both construction and operation. Among its tasks, the ER would inform the Planning Secretary of all matters specified in the conditions of consent and independently review management plans prior to their submission and during their implementation.
- 143. The Department acknowledges the considerable public concern regarding the impacts of the development on the local community. However, it considers that with the implementation of the mitigation measures proposed by the Applicant in respect of the various social impacts, changes made to address concerns, and the application of the Department's recommended conditions, the extent of actual and perceived social impacts could be appropriately managed. Overall, the Department considers that with these measures in place (coupled with the conditions proposed in respect of other environmental impacts) the proposal adequately addresses the identified social impacts and the development would be unlikely to significantly impact the local community.

## 6.2 Visual Impact, Design and Landscaping

- 144. The design of the development has the potential to adversely impact the visual amenity of the surrounding locality, particularly as the site is located close to the interface of rural-residential areas of Moss Vale. The development includes two large warehouses and three ancillary buildings which would be visible from surrounding residences.
- 145. The Applicant provided preliminary plans of the development, a visual impact assessment and a concept landscape plan in the EIS, however the original plans provided inadequate information on the buildings and landscaping. The Department had concerns about the bulk and scale, lighting, and lack of design details, including finishes and façade treatments and requested further information. As part of the RTS, the Applicant reduced the height of the Multi-Use Building.

## 6.2.1 Applicant's Assessment

- 146. The Applicant submitted updated architectural plans and a light spill assessment as part of the Amended DA which also further reduced the highest building (Multi-Use Building) to 15.5 m. However, the Department found the visual impact of the facility's buildings still unclear and requested updated photomontages reflecting the bulk and scale of the latest design, including emission stacks, and views from the most affected residential and commercial receivers. The Department also requested that more thought be given to improving landscaping and the articulation and treatment of the buildings to ensure they were more visually appealing.
- 147. As part of the Amendment RTS, the Applicant provided a Preliminary Design Report (PDR) which included a comprehensive set of updated design drawings, landscaping and details of façade treatments. The PDR also featured details of how the development was designed using environmentally sustainable design principles. The proposed façade featured a monochromatic design with vertical ridged exterior panels for the operational buildings and recycled brick with large windows for the buildings at the front of the site facing Braddon Road. The Applicant noted the design has undergone several modifications based on feedback from various stakeholders, with the objective of enhancing the building's performance in terms of energy efficiency, functionality, and aesthetics, while also minimising the visual impact on the surrounding area.
- 148. The proposed landscaping was considerably increased in the PDR and included four types of screening trees with varying canopy density to help break up the large building façade. The trees proposed were of different pot sizes (up to 400 litres) so that advanced trees could be incorporated. Mounding up to 4 m high was included along the front boundary and at the eastern and western side of the buildings to enable plantings to more easily screen the development from the outset. Although not part of the development, to provide additional mitigation of visual impacts to the south, the Applicant also proposed landscaping (15 m wide) comprising of bushland screen planting and mounding along the northern boundary of the property on the other side of Braddon Road (part Lot 11 DP 1084421) which is also owned by the Applicant (see **Figure 13**).
- 149. Four planting types were included in the landscape plan:
  - TYPE 1: Vegetated Riparian Zone mass planting of a mix of trees, shrubs and grasses along drainage courses east, west and north of the facility.
  - TYPE 2: Bushland Screen Planting mass tube stock planting of trees, shrubs, grasses and groundcovers that will help screen the facility. Some tree species would be planted at advanced pot sizes to provide more immediate screening and would include 150 *Eucalyptus macarthurii*. This planting type along with Type 1 are the two predominant types proposed across the site.
  - TYPE 3: Steep batters shrubs grasses and ground covers used to help stabilise soils associated with batters along the access road.
  - TYPE 4: Groundcover Planting includes a monoculture planting of Purple Coral Pea in a strip landscape bed around the perimeter of Building 2.



Figure 13 | Landscape Plan

150. Photomontages were provided of the amended development (showing existing, constructed and constructed including mature landscaping scenarios). These showed that the mature plantings would screen the buildings from the surrounding area and reduce the visual impact of the development (see Figure 14).

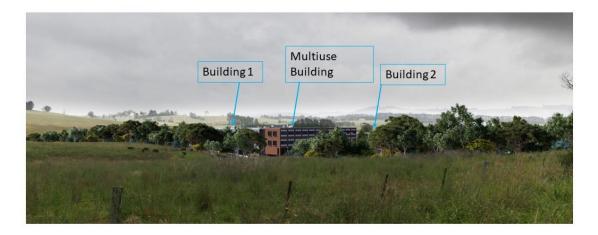


Figure 14 | View From 20 Metres North-East of 72 Beaconsfield Road (with mature landscaping)

## 6.2.2 **Department's Assessment and Conclusion**

- 151. The Department notes the concerns of the community about the appearance of the facility at the southern edge of the MVEC/SHIP in an area that has yet to be developed. To ensure the overall appearance of the development would be optimised, the Department requested a substantial amount of additional design and landscaping information, as well as revised photomontages from nearby viewpoints at residential receivers that reflected the latest versions of the design.
- 152. In terms of the bulk and scale of the development, while the height of buildings was reduced in the RTS and Amended Development Report, the Department notes the building area was not reduced. The Applicant explained the footprint and height of the buildings are required for operational purposes to enable machinery layout and heights. On review of the internal layout, the Department is satisfied of this operational need. The Department notes the height of buildings, setbacks, building materials and building footprint are in line with the development controls in the MVEC DCP.
- 153. The Department found that information in the initial iterations of the building and landscape design was sparse and high level and did not fully consider the visual impact on nearby residents. However, the updated, final design and landscaping represents a considerable improvement, especially in terms of screening provided by mature plantings set on landscaped mounds to increase height. The landscaping surrounds the buildings on all sides and includes revegetation of the riparian corridors on the east and west sides to help shield views of the operational buildings.
- 154. While it is acknowledged the large buildings would remain partly visible to nearby residents, the design appears to work with shadow and light on the façades to help break up the long blank building walls, integrated within panelling profiles and the use of tree planting to create texture. The proposed landscaping aims to integrate with this approach, further enhancing the interplay of light and shadow.
- 155. The Department has recommended conditions requiring the final design, including the external finishes to the façade, to be consistent with the architectural plans in the PDR.
- 156. In terms of landscaping, to ensure this is undertaken in accordance with the landscape design and there is sufficient provision for its ongoing maintenance, the Department recommends preparation and approval of a Landscape Management Plan. To ensure the landscaped mounds on the adjoining property provide additional screening for the life of the development, the Department also recommends a covenant be registered on title of Lot 11 DEP 1084421.
- 157. Given the proposed landscaping is substantial, the Department finds the residual visual impacts are low, however there remains some potential for visual impacts from private residences to the south of the site. Conditions are therefore recommended requiring the Applicant to notify landowners with sight of the development that they are eligible to have mitigation (such as landscaping or vegetation screening) installed by the Applicant on their property to help block views of the development.
- 158. On balance, the Department finds the updated design and greatly increased landscaping have improved the development's appearance such that the visual impacts of the operational buildings have been largely minimised.
- 159. The Department's assessment concludes the design, landscaping, and visual impacts of the development can be mitigated and are acceptable, subject to the recommended conditions.

## 6.3 Impacts on ABR Facility

160. There is potential for the development to impact on the ABR facility due to its proximity and industrial nature. As the mice held in the ABR facility are very sensitive to their surroundings, there is a risk that impacts from the development, if severe, may cause mice to become unwell, disrupt their breeding, or alter their behaviour. If the mouse lines of the ABR were to be disrupted or suspended, this in turn poses

- a risk to the medical research industry which relies on use of the specially bred mice for its work. For this reason, as part of its assessment, the Department has carefully considered potential impacts on the ABR facility to ensure they are acceptable.
- 161. While it did not object to the development, the ABR raised several issues in its two submissions on the EIS and Amendment Report, respectively. The Department met with representatives of the ABR on three occasions during the course of its assessment to discuss their concerns. This engagement confirmed that fire and vibration present the greatest risk to the ABR facility in terms of mouse health and wellbeing.

## 6.3.1 Fire

- 162. If there is prolonged fire at the development during its operations, it is likely smoke and fumes would be emitted. If the fire spreads to the ABR facility or fumes enter the building via the air conditioning inlet, the mice are likely to be affected.
- 163. However, FRNSW has advised that any smoke would be hot and buoyant and therefore would rise directly upwards, away from nearby sensitive receivers such as the ABR. Noting this advice, the Department finds the risk of smoke impacts on the ABR is relatively low, especially given the sprinklers, fire detection and warning system and smoke hazards management system to be installed in the facility.
- 164. The Department also raised concerns about the response time of emergency fire services given the regional location of the development.
- 165. To ensure any potential impacts are minimised and the ABR can take appropriate and timely action to protect the mice, the Emergency Response Plan (ERP) recommended as a condition of consent would include specific procedures to notify ABR staff of any fire incident at the site.
- 166. As discussed in Section 6.5, the Department is satisfied that appropriate measures are in place for the development to ensure fire safety is a priority and any fire can be quickly brought under control to reduce potential smoke and fire impacts, including on the ABR. These measures would include sizing of the sprinkler systems to ensure any fire can be extinguished quickly and storage of sufficient water onsite for emergency services use during fire events in accordance with the Fire Safety in Waste Facilities (waste fire safety guidelines).

#### 6.3.2 Construction Vibration

- 167. ABR has advised vibration during mice embryo injection can cause the procedure to fail and may negatively impact the continuity of the mouse lines. The EIS did not include a full assessment of construction vibration impacts on the ABR and the Department requested this be thoroughly considered.
- 168. A Vibration Study (submitted in April 2024) was prepared after consultation with ABR on the construction materials of its facility, the location of the most vibration sensitive areas, and the appropriate vibration criteria. The Vibration Study determined that vibration impacts during construction can be adequately managed through a range of measures including limiting the size of vibratory rollers, scheduling the use of rollers and the preparation of a detailed Construction Noise and Vibration Management Plan (CNVMP) in consultation with ABR.
- 169. During its meetings with the Department, ABR has advised it is satisfied with the measures proposed to mitigate vibration impacts on the mice.
- 170. To ensure construction vibration is managed to minimise effects on the ABR, the Department is recommending a CNVMP be prepared, in consultation with the ABR, detailing implementation of all the mitigation measures recommended in the Vibration Study.

## 6.3.3 Conclusion

- 171. The Department has consulted with the ABR throughout its assessment and, on review of the additional information provided around fire and vibration impacts, and after consultation with FRNSW, is satisfied vibration and fire risks on the ABR can be appropriately managed. The Department has recommended the Applicant prepare the ERP and CNVMP in consultation with the ABR. This would ensure ABR has input into the procedures proposed around notification in case of fire and other emergencies as well as vibration management during construction.
- 172. In conclusion, after careful consideration of the risks to the ABR, the Department's assessment finds these can be satisfactorily managed through conditions of consent.

## 6.4 Operational Traffic

- 173. Traffic associated with the operation of the development has the potential to impact on the safety and efficiency of the surrounding road network. Operational traffic impacts was raised as a concern in around 70% of public submissions during both exhibitions.
- 174. The Department's assessment of operational traffic in this section considers the impact of the additional traffic on local roads and the effects of the relocated level crossing.

## 6.4.1 Applicant's Assessment

- 175. The EIS included a quantitative Traffic Impact Assessment (TIA) prepared by GHD in accordance with the RMS Guide to Traffic Generating Development. The TIA was later updated in the RTS and again in the Amendment Report (Amendment TIA) to reflect the revised operational approach route.
- 176. The operational heavy vehicle route to the site from Sydney would be via the Hume Highway, Medway Road, Taylor Avenue, Berrima Road, Douglas Road, Collins Road, the new 'north-south' access road and Braddon Road. Waste plastic and plastic products would primarily be transported to and from the site by 19 m semi-trailers. Although processing of waste plastic would be undertaken 24/7, material acceptance and dispatch by truck would only occur 7 am to 6 pm Monday to Friday.
- 177. 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.
- 178. Traffic counts found the current AM and PM peak road traffic times of the existing Collins Road/Douglas Road intersection are 6:30 am to 7:30 am and 3:30 pm to 4:30 pm. To be conservative, the Amendment TIA assessed 120 light vehicles (60 in 60 out) and 10 heavy vehicles (5 in 5 out) an hour during both the AM and PM peak times during operations, noting that trucks would not access the site before 7 am. The distribution of light vehicles was assumed to be 14% travelling to/from the west (direction of New Berrima and Hume Highway) and 86% travelling to/from the east (direction of Moss Vale via Lackey Road) (see **Figure 4**) in line with estimates of employee origin and residence.
- 179. Based on these traffic numbers, the TIA modelled the performance of the proposed new intersection of the 'north-south' access road and Collins Road. The model conservatively included simulation of one train per hour on the Berrima Branch line and the delay this would cause on the road during train crossing. With these assumptions, the TIA identified the intersection would operate at a Level of Service A (i.e. good operation), both now (2025) and into the future (2035).
- 180. The proposed site access and approach requires the relocation of the existing level crossing at Douglas Road/Collins Road and readjustment of the road alignment at the rail level crossing. The Applicant provided preliminary design drawings of the level crossing, along with signage details, a sight distance

- assessment, swept path analysis and a preliminary Road Safety Audit to demonstrate the viability of the revised level crossing arrangement.
- 181. Following review of documentation, Council sought additional information on the proposed new road design and its impacts on the surrounding road network. Council also raised concerns about the future performance of the Douglas Road/Berrima Road intersection, wear and tear on the road pavement, and potential traffic conflicts with future development approvals within the SHIP, including vehicles travelling from Red Fields Road. Council also recommended the Applicant build roundabouts at the intersections of Douglas Road/Berrima Road and Taylor Avenue/Berrima Road and that new roads include bicycle paths.
- 182. The Applicant addressed Council's concerns by demonstrating that B-Double trucks can cross the relocated level crossing and that the observation angles for both the left and right sides can be achieved for both directions of traffic along the revised road alignment. It also responded to Council's detailed questions about the new crossing and roads. However, the Applicant did not revise its traffic model to include a baseline of full development of the SHIP, stating that too many assumptions would be required and this work should be undertaken by Council. The Applicant did, however, commit to covering all costs of the relocated level crossing. In terms of the requested roundabouts, the Applicant found this was not warranted due to the low hourly traffic numbers from the development predicted to use Berrima Road and Taylor Avenue.
- 183. TfNSW advised it had no objections to the development providing it is operated as described and traffic does not access the site via the Argyle Street/Lackey Road intersection. Regarding the level crossing, TfNSW advised that, in accordance with the *Rail Safety National Law* (NSW), the Rail Infrastructure Manager (Boral) and the Road Manager (Council) are responsible for managing risks at a level crossing. TfNSW provided a range of questions that should be addressed by Boral, Council and the Department in considering the suitability of the new rail crossing.

## 6.4.2 **Department's Assessment and Conclusion**

- 184. The Department has reviewed the Applicant's TIA and the advice of Council and TfNSW. The Department notes the TIA included modelling of the 10 year traffic forecast which demonstrated that impacts from 5 heavy vehicles an hour each way on local intersections would be negligible. Although the Applicant did not undertake an analysis of the Taylor Avenue/Berrima Road and Douglas Road/Berrima Road intersections, the estimated heavy vehicle number is low (less than 5% of the existing traffic along Berrima Road in peak hours). The Department finds this does not warrant a new roundabout, particularly given the same requirement was not imposed by the Local Planning Panel on other developments with higher traffic volumes in the new industrial area at Red Fields Road (for example, 35 heavy vehicles per AM peak hour for a concrete batching plant).
- 185. The Department does not consider it reasonable to expect the new roads to include bicycle lanes given they would not connect to any other bicycle paths/lanes along the alignment. However, the Department has recommended the Applicant prepare a Work Place Travel Plan to encourage alternative transport methods to be used.
- 186. The Department sought advice from Boral, as the Rail Infrastructure Manager, and Council, as the Road Manager under the *Rail Safety National Law*, on the design of the proposed level crossing. Boral raised no concerns with the level crossing in terms of its impact on its private rail line. However, Council advised the level crossing should be designed to allow A-double trucks to use it in the future as the SHIP is developed. The Department agrees with this approach and has recommended a condition requiring the final design of the level crossing to include provision for A-double trucks and be prepared in consultation with Council and Boral. In addition, to ensure the level crossing would operate safely into the future, the Department recommends the Applicant undertake a Road Safey Audit and prepare and

Australian Level Crossing Assessment Model prior to constructing the level crossing and associated works.

- 187. Overall, the Department finds the predicted hourly operational traffic numbers have been conservatively estimated. The Department acknowledges the public concern regarding operational traffic, however notes that 5 trucks per hour in each direction represents a low contribution to heavy vehicle traffic and operational shift changeover traffic (light vehicles) would only occur three times per day, two of which are outside the peak traffic hours (around 3 pm and 11 pm). Also, given the majority (86%) of light vehicles would not travel via the new level crossing or Berrima Road, no additional impacts are expected to roads to the west. In terms of road pavement impacts, the Department has recommended a dilapidation report be undertaken prior to construction and notes that contributions to Council in accordance with the MVEC Contributions Plan would contribute towards road maintenance and resurfacing, as required.
- 188. To ensure operational traffic from the development is in accordance with the Applicant's predictions and managed appropriately, the Department has recommended preparation of an Operational Traffic Management Plan in consultation with Council which would specifically include details of heavy vehicle routes, a Driver Code of Conduct, a Traffic Control Plan, and a Heavy Vehicle Monitoring Plan.
- 189. The Department's assessment concludes the operational traffic impacts of the development are acceptable and can be managed via implementation of the recommended conditions of consent.

## 6.5 Other issues

190. The Department's consideration of other issues is summarised in Table 9 below.

Table 9 | Assessment of other issues

#### Findings and conclusions

#### **Recommended conditions**

## Moss Vale Enterprise Corridor DCP

- The MVEC DCP envisions the Moss Vale Enterprise Corridor as a sustainable employment area catering for light and general industrial development. The draft SHIP Masterplan intends to allocate the area surrounding the ABR facility as a Sub-Precinct 'Bio-Tech' within a larger 'Research and advanced manufacturing' Precinct. This Masterplan is yet to be finalised and is not in effect.
- Appropriate conditions relating to amenity and environmental impacts have been recommended and are described elsewhere in this section.
- Council raised concerns in its submission and subsequent advice on the amendment report that the proposed development was inconsistent with the MVEC DCP and requested the Department give due consideration to this Masterplan to ensure appropriate amenity related buffers and setbacks are applied, should the Department recommend the proposal be approved.
- The Department notes DCPs do not apply to SSD applications in accordance with section 2.10 of the Planning Systems SEPP, however, the Department has had regard to this Masterplan.
- The aims of the DCP include to facilitate the development of the MVEC
  for employment purposes, to ensure the orderly and proper development
  of the area and to protect the scenic amenity of the Moss Vale region. The
  development would be located within the Enterprise Precinct outlined in
  the DCP, a part of the transitional interface between rural residential
  areas and the heavier industrial areas planned across the northern portion

of the corridor. The Enterprise Precinct is intended to accommodate a mix of light industrial and commercial office uses.

- The DCP contains controls which seek to limit site coverage and the bulk and scale of buildings, and to support landscaping on individual sites to mitigate visual impacts of development within the precinct, particularly in interface areas. The development meets the majority of the land use controls in the DCP in terms of height, minimum lot size, site coverage and measures to reduce water and energy use. The bulk and scale of the buildings would be appropriately managed through landscaping using mounding and mature trees. The buildings would not be visible from the public viewpoint identified in the DCP, and would be designed to reduce water, energy, noise and air emissions.
- While the landscaping setback to the site's frontage is less than the
  recommended 15 m in the DCP, the Applicant has sought to address this
  through providing off-site landscaping. The DCP also notes the site is
  located in a potential constraint area due to potential water inundation. A
  detailed flood study submitted as part of the RTS, identified the
  development would actually be flood free in a Probable Maximum Flood
  event.
- Although the SHIP Masterplan is not in effect, the Department is satisfied
  the proposed development will provide a satisfactory transition between
  the residential area and broader MVEC/ SHIP land through enclosing the
  building's operations, providing suitable visual mitigation in the form of
  façade treatment and landscaping and managing air quality, traffic and
  noise amenity impacts.
- Overall, the Department's assessment has found the development would not result in offsite impact and largely meets the objectives and controls within the DCP.
- The Department concludes the proposed development is appropriately located within the Enterprise Precinct of the MVEC.

#### Fire and Hazards

#### <u>Fire</u>

- The development would handle up to 120,000 tpa of waste plastic, which is a combustible material.
- The EIS provided an assessment against the FRNSW guidelines Fire Safety in Waste Facilities (waste fire safety) and included a range of management measures in accordance with the guidelines including limits on stockpile size, separation distances, provision of access for fire engines, provision of fire-water hydrants and associated tanks (1,200 kL), fire water containment and preparation of plans.
- Building 1 would contain combustible waste and would therefore include sprinklers, a fire detection system and warning system and smoke hazards management system in accordance with the waste fire safety guideline. The other buildings would require compliance with the

- prepare **FSS** in accordance with the requirements of the Hazardous Industry Planning Advisory Paper No. 2 in consultation with FRNSW with consideration of the operational capacity of the local fire agencies
- prepare and implement an Emergency Response Plan in consultation with FRNSW

- stringent fire provisions in the National Construction Code (NCC) including the requirement for sprinklers in large isolated buildings.
- Concerns were raised in public submissions about the fire risks posed by plastics recycling facilities and the local fire brigade's resources.
- To address these concerns, the Department requested additional information, which included the response capacity of the local fire brigades. The Applicant advised there were three fire trucks near the site, which would be effective as first attack units. More fire trucks are available in Campbelltown and Wollongong, if required.
- Following its review of documentation, FRNSW provided detailed recommendations including the requirement to prepare a Fire Safety Study (FSS) prior to construction. The FSS would include detailed design of all the fire safety infrastructure and would be robustly reviewed by FRNSW prior to its finalisation. The FSS would also include consideration of the operational capability of local fire agencies to respond to a fire, fire water containment, and an ERP to be prepared in consultation with FRNSW.
- The Department acknowledges the increased risk of fire in waste facilities, however, also notes the purpose of the waste fire safety guidelines is to ensure waste facilities are designed and operated to manage this risk. On careful review of the information provided, the Department is satisfied the Applicant has demonstrated the design of the facility would be in accordance with the guidelines and as such, fire risk has been managed to ensure there is a low risk of a large fire.
- However, to ensure the final details of the onsite fire safety measures and procedures are very robust, the Department has adopted FRNSW's recommendations for preparation of a FSS.
- The Department also recommends that an ERP be prepared that would include a clear notification procedure for the community, including the ABR facility, should an incident occur.

#### 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,
- On review, the Department identified the WTP may contain small quantities of DG and the extrusion of plastics may emit small quantities of flammable gas. However, these are unlikely to exceed the threshold quantities in Applying SEPP 33 and, as such, the development was not considered as potentially hazardous, and a Preliminary Hazard Analysis (PHA) was not required.
- To appropriately manage DG, the Department has recommended the development restrict storage of DG to under the threshold quantities and store them in accordance with Australian Standards.

## Conclusion

 The Department's assessment concludes the fire and hazards aspects of the development can be appropriately managed through complying with

- prepare an Emergency Services Information Package
- store dangerous goods below the Hazardous and Offensive Development Application Guidelines – Applying SEPP 33 at all times
- store all chemicals, fuels and oils used on-site in accordance with all relevant Australian Standards and EPA guidelines

#### **Recommended conditions**

storage requirements for DG, the waste fire safety guidelines and recommended conditions for a FSS and ERP.

#### Water

#### Stormwater

- As the site is located within the Sydney Drinking Water Catchment, construction and operation has the potential to pollute the catchment and Chapter 6 of the State Environmental Planning Policy (Biodiversity and Conservation) 2021) (the Biodiversity and Conservation SEPP) applies.
- The Applicant provided a stormwater strategy with the EIS, which considered the impacts of the constructed development on the surrounding environment.
- Roof-water, rainwater tank overflow and gross pollutant trap outflow
  would be directed to water storage basins. Some of this water would be
  directed into the operational buildings for reuse within the plastics
  recycling process, however stormwater remaining in the storage basins
  would not come into contact with waste as all waste activities would occur
  within buildings.
- Overflow from the water storage basins would be directed to bioretention basins for treatment before being released offsite via the east and west streams.
- Public submissions raised concerns about potential impacts on the Sydney Drinking Water Catchment. WaterNSW also had some concerns regarding stormwater management and water quality. The Applicant amended the stormwater strategy to incorporate repositioned and resized retention basins, retention of the eastern creek alignment, updated water use requirements and revised modelling that demonstrated the neutral or beneficial effect on water quality (NoRBE) requirement from the Biodiversity and Conservation SEPP would be met.
- WaterNSW advised it was satisfied with the changes in the amended stormwater strategy and requested it be consulted during final detailed design of the stormwater system and preparation of management plans.
- The proposed stormwater management system has been designed to manage stormwater to ensure all water discharged offsite would have a neutral or beneficial effect on water quality, noting the water would not come into contact with waste. The Department has reviewed the stormwater strategy and the advice of WaterNSW and considers the system proposed is appropriate for managing stormwater quality and quantity to ensure there would be no impacts on the Sydney Drinking Water Catchment in accordance with the Biodiversity and Conservation SEPP.
- However, to ensure the final stormwater system performs as modelled, the Department recommends its detailed design is undertaken in consultation with WaterNSW. In addition, an Operational Water Management Plan (OWMP) is recommended to formalise practical details

- design the stormwater system in consultation with Water NSW
- prepare and implement the following plans in consultation with WaterNSW:
  - ESCP and CSWMP including upsizing the sediment basins if necessary
  - Operational Water Management Plan including wastewater disposal methods and monitoring and contingency measures for exceedances
- ensure all floor levels are no lower than the 1% Annual Exceedance Probability flood level plus 500 mm of freeboard

such as wastewater disposal methods and monitoring and contingency measures for managing exceedances of water quality standards.

#### Operational Water

- The processing of plastic would require use of up to 15.5 kL of water per day. After use, dirty operational water would be directed to the WTP for treatment before being reused in operations and retreated multiple times. Any treated water that cannot be reused in operations (up to a maximum of 10 kL per day) would be sent to sewer as trade waste.
- Council and public submissions raised concerns over the proposed use of Council's STP for surplus treated operational water as the STP is near its capacity. In response, the Applicant advised that (until Council's planned upgrade of the Moss Vale STP), it would release water to the STP during nighttime only to avoid peak periods.
- Council has indicated it supports this approach.
- Noting Council's advice regarding the ability of the STP to accept water at night, the Department finds that operational water can be adequately dealt with and has recommended conditions requiring this to be included in the site's Operational Water Management Plan.

#### Construction

- Construction requires a large area of disturbance adjacent to the two streams. The Applicant's erosion and sediment control strategy includes the use of the bioretention basins as sediment basins during construction.
- The EPA identified measures which would reduce potential erosion during construction, including larger sediment basins where practical, stabilising areas as quickly as possible, and inspecting and monitoring erosion and sediment control measures regularly.
- To ensure soil and water are properly managed, the Department recommends the preparation of a construction phase Erosion and Sediment Control Plan (ESCP) in accordance with Landcom's (2004) Managing Urban Stormwater. The ESCP is to include the EPA's recommendations, be prepared in consultation with Water NSW and be included within a Construction Soil and Water Management Plan (CSWMP).
- The Department is satisfied the potential stormwater impacts during construction can be managed through the implementation of the proposed conditions of consent.

#### Flood

- The development is located on flood prone land and has the potential to impact flood behaviour and offsite flood levels.
- The flood assessment provided in the EIS was revised on one occasion in response to issues raised by BCS. The final revised flood assessment included an increased development pad height along the eastern boundary of the pad, to protect the development from inundation in a Probable Maximum Flood (PMF) event.

#### **Recommended conditions**

- The flood assessment, which modelled a range of flood events up to and including the PMF event, concluded there would be minimal offsite impacts from the presence of the development on the site and only a minor increase in flood velocity in a 1% AEP flood event. There would be a slight increase in flood levels in the eastern and western creeks (by up to 300 millimetres (mm)) and around the dam on the lot to the east (by 100 mm). This increase could be reduced through adjustments to the dam spillway and stream alignment during detailed design.
- BCS raised no concerns with the final flood assessment.
- The Department has reviewed the RtS and revised flood assessment and has concluded all buildings would be protected in the PMF event and the development would have minimal offsite impacts in the 1% AEP flood event, which would be reduced further during detailed design.

#### Conclusion

The Department's assessment concludes the potential water impacts can
be minimised and managed by the Applicant via the implementation of
proposed water management measures and consent conditions which
include the requirement to finalise design of the north-eastern dam
spillway in consultation with BCS, prepare and implement an OWMP and
a CSWMP to ensure water use and management remain as predicted and
the Sydney Drinking Water Catchment is protected.

### **Air Quality**

- The acceptance, melting and milling of plastic has the potential to generate particulate, Volatile Organic Compounds (VOCs) and odour emissions. 54% of submissions from the public raised concerns with air quality and emissions from the development.
- The Applicant provided an Air Quality Impact Assessment (AQIA) prepared in accordance with the Approved Methods for Modelling and Assessment of Air Pollutants in NSW (the Approved Methods) with the EIS. The AQIA was revised on two occasions in response to issues raised by EPA.
- Within Building 1 and Building 2 each process area would have a series of air collection hoods located above relevant process emission points. Flow rates would ensure that all fumes are collected, and all captured air would be piped to one of the four air pollution control (APC) systems for treatment. Emissions would go through a staged emission reduction process before being discharged from a stack on the roof and dispersed to minimise ground level impacts.
- The amended AQIA modelled emissions of pollutants of concern, namely particulate matter (PM) and VOCs including Benzene, Toluene and Styrene. While the amended AQIA found that most pollutants of concern were within the impact assessment criteria in the Approved Methods, updated contemporaneous modelling identified one additional exceedance of PM<sub>2.5</sub> (24 hour) and two additional exceedances of PM<sub>10</sub> (24 hour) criteria, both at the ABR.

- comply with emission limits in the EPL
- prepare and implement an OAQMP
- keep doors shut when not in use
- prepare a series of post commissioning verification reports including contingency measures in case of exceedances of the limits in the EPL

#### **Recommended conditions**

- The AQIA explained that risks of health impacts from this would be low as exceedances only occur when background levels are high and ABR staff would be working in an enclosed building.
- The AQIA found that odour generation potential would be minimal. Any
  operational processes with potential to produce odour would be carefully
  managed, for example filter cake would be bagged immediately.
- NSW Health advised it had no comments on the proposal.
- On review of the revised AQIA, the EPA advised that if a lower discharge concentration was permitted than was modelled, exceedances would not occur. The EPA recommended a range of operating, monitoring and verification conditions for the EPL, including an emission limit of 10 mg/m<sup>3</sup> for Total Solid Particles which would ensure no additional exceedances of PM<sub>2.5</sub> and PM<sub>10</sub> would occur.
- Noting the community's concerns regarding air quality and to ensure any
  potential risks are managed in a timely manner, the Department has
  recommended a range of stringent conditions. These include undertaking
  a series of air quality validation events after commencement of operation
  (at six months, two years and full operation) which would ensure that if
  the development is not operating as predicted, additional contingency
  measures would be implemented in a timely manner.
- The Department also recommends the preparation of an Operational Air Quality Management Plan (OAQMP) detailing how air quality would be controlled, which is to include the requirement for all doors to operational buildings to be shut when not in use.
- The Department's assessment concludes the implementation of the recommended conditions would ensure air quality impacts are acceptable and can be adequately managed by the Applicant. If exceedances are identified by the verification process, a range of contingency measures would be implemented to ensure compliance with the relevant criteria.

### **Microplastics**

- Microplastics can be generated by physical, chemical and biological fragmentation of plastic. As crushing and moulding of plastic has the potential to create microplastics, concerns were raised by Council, the public and the EPA about the fate of microplastic particles in the environment.
- All plastic recycling and processing activities would occur within enclosed buildings, with no plastic coming into contact with stormwater that is released offsite. The Applicant has advised process water from plastic washing activities would contain microplastics, however, the DAF system at the WTP would capture more than 90 % of the microplastic particles in dewatered filter cake. This filter cake would be taken to landfill as general solid waste and would not enter the environment. The remaining 10 % (up to 40 milligrams per litre (mg/l)) of microplastic particles would remain in the process water sent to sewer as trade waste (up to 10 kL per day at full operations). This level is well below Council's trade waste requirement for maximum total particulates of 300 mg/l.

- undertake final design of the WTP in consultation with the EPA
- include consideration of new technology for the reduction of microplastic in wastewater

- The Department requested the Applicant to consult with Council about the ability of its STP to remove microplastics from wastewater. Council advised its upgraded STP (due in 2026) would be able to capture an additional 90 % of the microplastics disposed of via trade waste, noting there is currently no legislative requirement to manage the complete removal of microplastics in wastewater.
- WaterNSW did not raise concerns as water entering the onsite water bodies and SDWC would not come into contact with microplastics.
- The Department notes DAF systems are very effective in removing microplastics from water and, in combination with secondary wastewater treatment at Council's STP, the level of microplastics in residual water are predicted to be very low (less than 4 mg/l).
- To ensure the onsite WTP is optimised to effectively reduce microplastics, the Department recommends requiring the Applicant to consult the EPA during its detailed design and regularly consider new wastewater treatment technologies and update the WTP accordingly.
- Microplastics in the air within the operational buildings would take the
  form of fine particulate matter. The PE wood plastic floor production line
  in Building 2 would be the primary source of particulates. This matter
  would be extracted from the source and captured by the dust collection
  system which includes filter cartridges. The filter cartridge device is
  composed of shell, filter unit, air storage bag, electromagnetic pulse
  valve, pulse controller, ash collecting hopper.
- The EPA did not raise any specific concerns about microplastics escaping
  to the air. The Air Quality section of this report outlines that particulate
  matter can be managed and conditions have been recommended to
  ensure this, including post commissioning verification at three stages
  after operation has commenced.
- The Department acknowledges the public's concern regarding microplastics in the environment, however, is satisfied these can be restricted to an acceptable level. With the recommended conditions for final design and potential upgrade of the WTP over time and postcommissioning air quality validation, the Department's assessment concludes the risk from microplastics is low.

#### Noise and Vibration

- Construction and operation of the development has the potential to generate noise which could impact on the amenity of the locality. Public submissions raised concerns over the facility operating 24 hours, 7 days a week.
- Nearby receivers are located approximately 320 m to the south-west and 220 m to the south-east. The Noise Impact Assessment (NIA) included in the EIS grouped the receivers into three noise catchments: NCA1 residential dwellings within approximately 300 m of Lackey / Collins Road and the railway line, NCA2 - Residential dwellings between approximately 300 m and 800 m of Lackey / Collins Road and the railway line and NCA3

- ensure the design of the facility accords with the noise requirements in the NIA
- prepare and implement a CVNMP in consultation with ABR including monitoring requirements.
- Prepare a TNMP

- residential dwellings beyond 800 m of Lackey / Collins Road and the railway line.
- As the final operational plant and machinery to be used has not been chosen, the equipment sound power levels in the Applicant's assessment were based on reference plant and machinery or were modelled based on the assumption of an internal noise level of 85 dBA at one metre.

#### Construction noise and vibration

- Construction is expected to take up to 15 months across four stages. The NIA assessed the impacts of each stage on the three noise catchments and determined there would be several exceedances of the noise management level (NML), by up to 19 dBA (with a maximum of 65 dBA predicted in NCA2). The model was highly conservative as it assumed the two loudest items of equipment to be operating at maximum capacity simultaneously at the closest distance between the construction works and the receiver, which is unlikely to occur and if it did it would be for short periods only.
- To mitigate noise impacts, the NIA proposed a range of mitigation measures including and mufflers on machinery, which are likely to reduce noise by up to 10dBA.
- As discussed in Section 6.3.2, a vibration study found vibration impacts on the ABR during construction can be adequately managed through a range of measures including limiting the size of vibratory rollers and scheduling the use of rollers.
- To ensure any residual noise and vibration impacts are managed, the Department recommends a Construction Noise and Vibration Management Plan (CNVMP) be prepared in consultation with the ABR that includes a complaints protocol, details of implementation of all the relevant mitigation measures, and the requirement to monitor noise and vibration during construction. Finally, if monitoring shows exceedances, the Applicant must take action to ensure compliance with the noise and vibration management levels.
- Due to the temporary nature of the construction period, the conservative nature of the modelling and proposed management measures, and conditions, the Department considers construction noise and vibration can be managed appropriately.

#### Operational and traffic noise

- As requested by the Department, the Amendment RTS included modelling of two worst-case operational scenarios. Both scenarios assumed roller doors were open and the second scenario also considered worst-case onsite heavy vehicle movements. The predicted noise levels remained compliant with the Project Trigger Noise Level (PNTL), including sleep criteria, at the most-affected residences during all assessment periods, assuming only two trucks leave the site in any 15 minute period.
- The NIA also determined the development would not increase road traffic noise by more than 2 dB given the distance of the road to residential dwellings.

- ensure all doors are closed when not in use
- ensure only 2 trucks per 15 min leave the facility
- prepare an operational noise verification report at three months and at full operation

- The EPA reviewed the assessment and raised some concerns given the uncertainty in source noise and mitigation, as there is some risk of noise emissions above what was modelled. The EPA proposed noise limits reflecting the predicted noise levels and a requirement to undertake noise monitoring which, it advised, would be sufficient to address the uncertainty. The EPA also recommended a Traffic Noise Management Plan (TNMP) be prepared.
- The Department has carefully considered the information provided in the Applicant's assessment, issues raised in submissions and advice from the EPA and notes the development has incorporated noise controls to ensure no adverse amenity impacts at sensitive receivers, including design considerations and enclosure of all processing areas.
- To ensure operational noise remains as predicted, the Department recommends a range of stringent conditions including compliance with operational noise limits and requiring all doors to be closed when not in use. A condition is also recommended limiting truck movements to daytime only and limiting the number of trucks egressing to a maximum of two per 15 minute period. In addition, the Department recommends the preparation of a noise verification report at both commencement and at full operations, which would require noise monitoring and outline a range of contingency measures to be implemented should operational noise exceed the recommended noise limits.
- The Department notes that increase in road traffic noise would remain under 2dB, which is considered to be negligible. However, to minimise any effects on the community, it recommends a TNMP to manage traffic noise in line with EPA advice.
- With these measure in place, the Department's assessment concludes operation of the development is unlikely to have adverse noise impacts on sensitive receivers and the requirements for noise verification would ensure the development remains compliant with its noise limits.

#### **Construction Traffic**

- Construction of the development has the potential to impact the safety and efficiency of the surrounding road network. Construction would be undertaken over a period of 12 months (with an additional three months for testing and commissioning) during standard construction hours.
- During the peak times of construction, for instance during concrete pours, the development would generate approximately 40 heavy vehicle movements (20 in 20 out) and up to 60 light vehicle movements (30 in 30 out) per day equating to four heavy vehicle movements and 30 light vehicle movements during the busiest hours of 6:30 am (construction starts at 7 am) to 7:30 am and 3:30 pm to 4:30 pm.
- The Applicant undertook an intersection analysis at the originally proposed intersection of Lackey Road and the 'east-west' access road which identified an acceptable level of service. The Department notes that, although additional modelling was not undertaken for the 'north south' access road intersection, traffic would equate to less than 4 % of traffic along Berrima Road, which is less than for operational traffic.

- prepare and implement a CTMP
- engage a traffic controller to direct construction traffic at the existing level crossing before the new level crossing is constructed
- not undertake onsite construction activities other than earthworks until the relocated level crossing is operational

#### **Recommended conditions**

Therefore, construction is unlikely to significantly impact the surrounding road network.

- To ensure construction timeframes are streamlined, the Applicant requested that, following initial construction of the 'north south' site access road, some works could take place on the site while the final design and construction of the new level crossing is being undertaken. The Department had some concerns about the safety of trucks undertaking a hook-turn at the existing level crossing and requested additional information about construction activities.
- The Applicant advised that earthworks equipment (on semi-trailers) and tipper trucks would be transported to the site over a period of three days via the existing gravel road used by trucks accessing Moss Vale Hay Sales. During earthworks five staff per day would also access the site. As described above, other construction works such as concrete pours and building construction would require considerably more traffic to travel to and from the site each day.
- While noting the need to minimise construction time for the community and the Applicant, the Department wishes to minimise the safety risks associated with the hook-turn at the existing level crossing. The Department finds that with careful management a small number of trucks may safely access the site over a limited period. Noting the low level of traffic movements involved, the Department has recommended conditions allowing earthworks only to occur onsite before the level crossing and Collins Road extension works are complete, with an approved traffic controller engaged to ensure safe movement of the construction heavy vehicles required for earthworks over the level crossing for a maximum of three days.
- To ensure construction traffic is managed appropriately, in addition the
  Department recommends preparation of a Construction Traffic
  Management Plan (CTMP) detailing heavy vehicle routes (which are to
  avoid residential areas, and the Argyle Street/Lackey Road intersection),
  access and parking arrangements and a Construction Driver Code of
  Conduct.

and works on Collins Road and Douglas Road are finalised

#### **Biodiversity**

- The site primarily contains exotic pasture, with some native vegetation located around the dams, and a small number of planted native and exotic trees
- The EIS included a BDAR prepared by an accredited assessor in accordance with the Biodiversity Assessment Method (BAM).
- The BDAR identified that 0.32 ha of poor condition native vegetation would be impacted by the development, including a row of nine planted *Eucalyptus macarthurii* which is listed as endangered under the NSW *Biodiversity* Conservation *Act* 2016 (BC Act) and the EPBC Act.
- To be conservative, the BDAR report assumed the planted *Eucalyptus* macarthurii were an Endangered Ecological Community. The BDAR also included an Assessment of Significance for the trees in accordance with

- purchase and retire six ecosystem credit and 24 species credits prior to any clearing or construction works
- prepare and implement
  a Landscape
  Management Plan
  including a Riparian
  Vegetation
  Management Plan that
  incorporates the

#### **Recommended conditions**

the 'Matters of National Environmental Significance Significant Impact Guidelines'.

- The BDAR recorded the presence of two vulnerable fauna species under the BC Act, the Large Bent-winged Bat, for which species credit is not required, and the Southern Myotis with 0.28 ha of its foraging habitat to be impacted by the development.
- The BDAR concluded the development would have minimal biodiversity impacts and recommended these be offset by the retiring of six ecosystem credits and 24 species credits for the Southern Myotis (6 credits) and Eucalyptus macarthurii (18 credits).
- Some public submissions raised concerns about the impacts on the nine planted *Eucalyptus macarthurii* and the effects on wildlife.
- BCS recommended conditions requiring the mitigation measures specified in the BDAR, including preparing a Riparian Vegetation Management Plan.
- The Department notes the site is already highly degraded and primarily cleared of vegetation including along the two riparian corridors. The existing Eucalyptus trees have been planted and contain no understory. Although some degraded habitat would be removed, it would be offset through the retirement of credits.
- The Applicant also proposes to engage an ecologist to undertake a preclearing survey and supervise the staged vegetation clearing. The revegetation of the riparian zones of the two streams, landscaping buffers around the site, including the planting of *Eucalyptus macarthurii*, would increase the ecological features and biodiversity onsite.
- These additional measures have been included in the recommended conditions along with a condition requiring the riparian land to be managed in accordance with guidelines for Controlled Activities on Waterfront Land in consultation with DCCEEW Water.
- The Department has reviewed the BDAR, public submissions and advice by the BCS and concludes the biodiversity impacts of the development would be minor and adequately offset by the purchase and retirement of ecosystem and species credits and the revegetation of the two drainage lines.

- planting of 150 Eucalyptus macarthurii
- implement management measures outlined in the BDAR both during construction and where appropriate, operation
- undertake the riparian restoration works in accordance with guidelines for controlled activities on Waterfront land in consultation with DCCEEW

#### Aboriginal heritage

- The site has the potential to impact Aboriginal Cultural Heritage during bulk earthworks and construction. The EIS and RTS included an Aboriginal Cultural Heritage Assessment Report (ACHAR), prepared in accordance with the relevant guidelines and policies.
- The archaeological investigation, undertaken in consultation with Registered Aboriginal Parties (RAPs) recorded 14 artefacts, across six sites. The ACHAR concluded there was low artefact density and no subsurface archaeological deposits of conservation value within the areas to be impacted by the development.

- prepare and implement an ACHMP in consultation with the RAPs and to the satisfaction of Heritage NSW including:
  - procedures for unexpected finds

#### **Recommended conditions**

- To manage any residual impacts on Aboriginal heritage, the Applicant committed to a range of measures including the preparation of an Aboriginal Cultural Heritage Management Plan (ACHMP), an attempt to locate the isolated finds and the reburying of excavated artefacts in consultation with the RAPs.
- Public submissions raised concerns over potential impacts on the Aboriginal cultural sites and a perceived lack of consultation. However, the Department notes the RAPs were consulted in accordance with the guidelines and the ACHAR assigned the artefacts a low scientific value.
- Heritage NSW advised it supported the proposed mitigation measures and recommended several conditions, including the continued involvement of the RAPs, salvage and appropriate long- and short-term management of items.
- To ensure impacts are managed in accordance with the ACHAR, the Department has incorporated these measures into the recommended conditions.
- On consideration of the investigations and advice from Heritage NSW, the
  Department's assessment concludes the development would not
  significantly impact Aboriginal cultural heritage and any unexpected
  finds would be appropriately managed.

- a program of surface collection including an attempt to locate isolated finds MVRec IF1, BR IF1 and BRIF2
- measures for the appropriate management of salvaged Aboriginal objects and sites
- update the AHIMs database

#### Contamination

- Historical use of the site for agriculture may have led to onsite contamination.
- A Preliminary Site Investigation (PSI) including a qualitative risk assessment, identified potential onsite contamination from historical agricultural land uses, fill material and water from offsite. However, the PSI did not identify any complete source-pathway-receptor linkages and concluded the risk from contamination is low. It recommended the inclusion of unexpected finds procedures in the CEMP.
- Despite the PSI findings, the EPA raised concerns over data gaps and recommended additional site investigations.
- The Applicant undertook further investigations of old aerial photos (before 1949) and found it appears no contaminating activity had taken place nor has the site been filled.
- The EPA advised it was satisfied and advised the contamination component of the CEMP should be drafted by, or approved by, a certified contaminated land consultant.
- Noting the EPA's advice, the Department has included a condition to this
  effect and has also recommended an unexpected finds protocol which
  would ensure any material subsequently identified as contaminated is
  appropriately managed.
- The EPA also recommended a range of conditional requirements in case contamination is found. The Department does not consider these conditions to be necessary as the likelihood of contamination is low and

- ensure the contaminated land section of CEMP is prepared by certified contaminated land consultant
- prepare and implement an unexpected finds protocol.

Findings and conclusions	Recommended conditions
the unexpected finds procedure requires any identified contamination to be managed in accordance with the POEO Act and regulation.	
<ul> <li>The Department's assessment concludes that any identified contaminated soil would be managed appropriately subject to implementation of the recommended conditions.</li> </ul>	

## 7 Evaluation

- 191. The Department's assessment of the application has fully considered all relevant matters under section 4.15 of the EP&A Act, the objects of the EP&A Act and the principles of ESD.
- 192. The Department has considered the development on its merits, taking into consideration strategic plans that guide development in the area, the EPIs that apply to the development, advice received from the relevant public agencies, including Council, and submissions from the public. If approved, the project would address the need for plastic recycling infrastructure in NSW.
- 193. The Department acknowledges the Moss Vale community and Council have expressed their concerns regarding the inconsistency of the development with the character of the area, as well as the potential for social, visual, traffic, noise and air quality impacts. The Department notes the location of the development on the fringe of the SHIP and has carefully considered the development's potential impacts to ensure they are minimised, with residual impacts appropriately managed in line with best practice. With the aim to resolve the concerns raised and ensure the best outcome for the site, the Department has consulted extensively with government agencies, Council and the Applicant over the course of the assessment.
- 194. Over time, the Applicant amended the design of the development to alleviate some of the key impacts including:
  - moving the level crossing and changing the access route to the site to avoid traffic impacts along residential streets
  - · reducing height of the buildings
  - reducing water demand
  - additional stormwater infrastructure.
- 195. Visual, social and traffic impacts have been a key consideration in the Department's assessment, particularly in respect of site suitability. To this end, the Applicant has committed to the planting of landscaped mounds to screen views of the development from the south. To further ensure visual impacts are managed at the closest receivers, the Department has recommended the Applicant provide visual mitigation, if asked for, at 11 dwellings with views to the site. The Department has also recommended the preparation of a SIMP to manage the residual social impacts of the development both during construction and operation as well as formation of a CCC to keep the community informed and involved.
- 196. The Department's assessment has found there is potential for other impacts during operation, such as additional traffic on the local roads and water, noise and air emissions. Therefore, the Department has recommended several conditions to minimise these impacts, including:
  - detailed design of the stormwater management system in consultation with Water NSW
  - preparation of management plans to address potential residual noise, air, traffic, water, biodiversity impacts
  - preparation of a Fire Safety Study with consideration of the operational response capabilities of the local fire agencies
  - an independent Environmental Representative to oversee implementation of all environmental management measures
- 197. These conditions require the Applicant to consult with and consider the advice of Water NSW, FRNSW, TfNSW the EPA and Council when preparing the detailed design and management plans to manage the

environmental performance of the facility. Verification conditions would ensure the development is operating as predicted and ensure residual impacts are effectively managed.

- 198. The Department is satisfied the impacts of the development can be appropriately managed through implementation of the recommended conditions of consent. The Department has also recommended conditions for the payment of development contributions and the Applicant's contribution to infrastructure upgrades to service the development, including road and intersection works and drainage.
- 199. Overall, the Department's assessment has concluded the development would:
  - be consistent with the strategic planning directions of both State and local government
  - contribute to achieving the State's targets of recovering an average of 80% of all waste streams and tripling plastic recycling by 2030
  - aid NSW's transition to a circular economy by diverting waste from landfill and transforming it into a useable product
  - generate social and economic benefits through the provision of 140 operational jobs and a capital investment of over \$88 million

200. The Department considers that these benefits can be realised without significant amenity or environmental impacts and therefore, considers the development is in the public interest and could be approved, subject to conditions.

3/10/24

3/10/24

Joanna Bakopanos

A/Director

Industry Assessments

Kakopania.

Chris Ritchie

A/Executive Director

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Energy, Resources and Industry Assessments

# Glossary

Abbreviation	Definition
ABR	Australian Bioresources Facility
AHD	Australian height datum
BCS of NSW DCCEEW	Biodiversity Conservation and Science group of the NSW Department of Climate Change, Energy, the Environment and Water
CIV	Capital investment value
Council	Wingecarribee Shire Council
Department	Department of Planning, Housing and Infrastructure
EIS	Environmental impact statement
ЕРА	NSW Environment Protection Authority
EP&A Act	Environmental Planning and Assessment Act 1979
EP&A Regulation	Environmental Planning and Assessment Regulation 2020
EPBC Act	Environment Protection and Biodiversity Conservation Act 1999
EPI	Environmental planning instrument
EPL	Environment protection licence
ESD	Ecologically sustainable development
FRNSW	Fire and Rescue NSW
Heritage	Heritage NSW, within the NSW Department of Climate Change, Energy, the Environment and Water
IPC	Independent Planning Commission
LEP	Local environmental plan
Minister	Minister for Planning and Public Spaces
Planning Systems SEPP	State Environmental Planning Policy (Planning Systems) 2021
SEARs	Planning Secretary's Environmental Assessment Requirements

Abbreviation	Definition	
Secretary	Secretary of the Department	
SEPP	State environmental planning policy	
SSD	State significant development	
TfNSW	Transport for NSW	

## **Appendices**

## Appendix A - Summary of Key Amendments to the Development

Since lodgement, some key aspects of the development have been amended at the request of the Department via an Amendment Report.

A summary of the key amendments is provided in **Table 10** below.

Table 10 | Summary of Amendments to the Development

Component	Original Application (in EIS)	Amended Application
Site approach	A new 'east-west' access road connecting Braddon Road with Lackey Road	A new 'north-south' access road connecting Braddon Road with Collins Road, including a relocated level crossing
Site access	Hume Highway, Medway Road, Taylor Avenue, Berrima Road, Douglas Road, Collins Road, Lackey Road and Braddon Road	Hume Highway, Medway Road, Taylor Avenue, Berrima Road, Douglas Road, Collins Road, the 'north-south' road and Braddon Road
Stormwater	Stormwater design includes: realignment of eastern stream, filling of the portion of the north-eastern dam within the site  construction of an eastern bioretention basin and water storage basin  construction of a western water storage basin and bio-retention swale	Stormwater design includes:  retention of the alignment of the eastern stream and changes to eastern stream riparian zones – no disturbance within 5 m, offsetting for disturbance within 5-10 m  retention of the north-eastern dam  relocation and increase in size of the eastern bioretention basin and a new western bioretention basin  bioretention swale
Water use	40.5 kilolitres (kL) per day	Between 5.5 and 15.5 kL per day
Discharge to sewer	15.8 kL per day	Between 2.52 and 12.5 kL per day
Building height	Up to 18 m	Up to 15.5 m

## Appendix B – List of referenced documents

### **Environmental Impact Statement**

• 'Moss Vale Plastics Recycling and Reprocessing Facility EIS Plasrefine Recycling Pty Ltd' prepared by GHD dated January 2022 and all attachments.

### **Submissions and Government Agency Advice**

• All submissions received from government agencies, community groups, private businesses, and the public during exhibitions of the original and the amended DA and EIS.

#### **Response to Submissions**

- 'Moss Vale Plastics Recycling and Reprocessing Facility Response to Submissions Report', prepared by GHD and dated 10 March 2023 and all attachments
- 'Moss Vale Plastics Recycling and Reprocessing Facility Amendment Report Response to Submissions Report' prepared by GHD and dated February 2024 and all attachments

#### **Amendment Report**

 'Moss Vale Plastics Recycling and Reprocessing Facility Amendment Report' prepared by GHD and dated September 2023

#### **Additional Information**

• 'Response to Requests for Additional Information from February and March 2024 (SSD-9409987)' prepared by GHD and dated 23 April 2024

## **Statutory Documents**

- Relevant considerations under section 4.15 of the EP&A Act (see Appendix D)
- Relevant environmental planning instruments, policies and guidelines (see Appendix E)

## **Independent Expert Review of Social Impact Assessment**

Moss Vale Plastics Recycling Facility | Planning Portal - Department of Planning and Environment (nsw.gov.au)

/ale Plastics Recycl			ay be viewed at <u>Mossent (nsw.gov.au)</u>

## Appendix C – Submissions and Government Agency Advice

All submissions and government authority advice can be found here: <u>Moss Vale Plastics Recycling Facility | Planning Portal - Department of Planning, Housing and Infrastructure (nsw.gov.au)</u>

A summary of government agency advice on the EIS is provided in **Table 11**.

**Table 11** | Summary of agency advice on EIS

Agency	Advice summary
EPA	Advised further information was required to be able to assess the environmental impacts of the development, including further information on odour and the diesel generator, additional site investigations to address data gaps in the Preliminary Site Investigation, and further details about the noise assessment.  Raised concerns over microplastics in the wastewater, storage requirements and the Air Quality Impact Assessment (AQIA) which was not in accordance with the Approved Methods for the Modelling and Assessment of Air Pollutants (Approved Methods).  Sought clarification around the status of the access road.
Biodiversity Conservation and Science Group (BCS of NSW DCCEEW)	Raised issues regarding flood impacts, including the adequacy of the flood assessment, consistency with SEARs and the Flood Plain Development Manual.  Recommended biodiversity conditions and raised concerns about the timing of the submission of the BDAR (which should have been submitted 14 days after certification).
Heritage NSW (HNSW)	Reviewed the Aboriginal Cultural Heritage Assessment Report (ACHAR) and provided a range of recommended conditions including the requirement to prepare an Aboriginal cultural heritage management plan.
NSW Fire and Rescue (FRNSW)	Advised waste facilities pose special problems of firefighting and special hazards exist that may require additional fire safety and management measures.  Recommended a range of conditions including that the Applicant develop a Fire Safety Study which considers operational capacity of local fire agencies, an Emergency Response Plan and an Emergency Services Information pack.  Advised the fire safety guideline for <i>Fire Safety in Waste Facilities</i> be consulted.
Transport for NSW (TfNSW)	Advised that an Australian Level Crossing Assessment Model be undertaken to identify potential risks and any required upgrade of the rail crossing.  Recommended conditions of consent including operational traffic numbers, type and maximum tonnage and prohibiting trucks travelling via the intersection of Argyle Street and Lackey Road and recommended a log must be kept of the quantities of plastic and associated truck movements.
DECCEW (former DPE Water)	Advised the Applicant should provide details on how the proposed water storage dams meet the requirements of the water regulatory framework.  Advised that a Water Access Licence (WAL) must be obtained for any aquifer interference activities unless the take is less than or equal to 3ML of water per year.

Agency	Advice summary
Water NSW	Advised the State Environmental Planning Policy (Biodiversity and Conservation) 2021 applies to the development.
	Sought information about the alternative options for wastewater management including how and where the wastewater would be stored, and the associated impacts on water quality.
	Provided advice about the neutral or beneficial effect on water quality assessment (NorBE) and requested details of consultation with the neighbouring property and details of operational maintenance of the proposed stormwater treatment measures.  Requested a range of post approval documents
	Requested a range of post approval documents.

A summary of government agency advice on the RTS is provided in **Table 12**.

Table 12 | Summary of Agency and SOC Advice on RTS (March 2023)

Agency	Advice summary
EPA	Advised it was uncertain about the status of the access road.  Raised issues with the noise assessment which it considered could be addressed by conditions including noise limits.  Requested further information and assessment on the potential combustion emissions from the proposed catalytic combustion stages of the air pollution control system, as well as information on potential impacts when processing ABS plastic and additional analysis of exceedances at the commercial receptor.  Advised that detailed design of the WTP would be required to manage microplastics.
BCS	Advised it considers the impact to Southern Highlands Shale Woodland Endangered Ecological Community would not be significant and that the identified biodiversity credits must be retired prior to any works that would impact on biodiversity values. Landscaping must incorporate Eucalyptus macarthurii.  Recommended that the conditions of consent require the carrying out of the proposed mitigation measures and that mitigation measures proposed during construction be extended to operation.
HNSW	Advised it supports the proposed harm avoidance and salvage mitigation strategy and the inclusion of procedures for unexpected finds and recovered object management in an Aboriginal Cultural Heritage Management Plan.  Recommended that development and implementation of mitigation measures be done in consultation with the Registered Aboriginal Parties.
TfNSW	Advised it had no objections to the development providing it is operated in accordance with the EIS and RTS and traffic does not access the site via the Argyle Street/Lackey Road intersection. Recommended conditions regarding the transporting of any Over Size Over Mass loads, the requirement for a Traffic and Transport assessment, traffic movements via the intersection of Argyle Street and Lackey Road and monitoring requirements.

Agency	Advice summary
DECCEW	Noted the proposed design in the RTS shows the development would be near/in the top of the bank of the stream which is not recommended.
	Requested that prior to determination, the Applicant confirms that the site layout shows consideration to the <i>Guidelines for Controlled Activities on Waterfront Land</i> (DPE 2022) or provides a redesign.
Water NSW	Advised that Clauses 6.61 and 6.63 of State Environmental Planning Policy (Biodiversity and Conservation) 2021 apply. These clauses require developments within the Sydney Drinking Water Catchment, to have a neutral or beneficial effect on the water quality in the catchment.  Recommended conditions regarding consultation on the final design of the stormwater system and relevant management plans.
	Considers transporting the wastewater to the Berrima STP plant by tanker is not a viable option.

A summary of government agency advice on the Amendment Report is provided in **Table 13**.

Table 13 | Agency Advice on the Amendment Report

Agency	Advice summary
EPA	Advised the predicted incremental contributions of PM <sub>10</sub> and PM <sub>2.5</sub> when considering exposure times of 12 hours at the commercial receptors, are not considered insignificant however, the additional exceedances can be resolved through setting total particulate discharge limits of 10 mg/m <sup>3</sup> t.  Noted the development will require an EPL and provided recommended conditions.
Water NSW	Noted there have been no changes to the stormwater and wastewater strategies. However, previous concerns about tankering wastewater still apply.  Recommended conditions regarding consultation on the final design of the stormwater system and relevant management plans.
HNSW	Supports the implementation of the initial mitigation measures as outlined in the ACHAR (2021).
BCS	Advised it has provided conditions previously, however, it raised that the Amendment Report is inconsistent about the number of <i>Eucalyptus macarthurii</i> trees to be planted
FRNSW	Had no further comments or recommendations for consideration, nor any requirements beyond that specified by applicable legislation and its previous letter.
TfNSW	Advised it is unclear if concurrence is required for the new proposed level crossing, however, considered insufficient details have been provided on the proposed new rail crossing to enable a review and asked a range of specific questions.
NSW Health	Advised it had no comments on the proposal.

A summary of government agency advice on the Amendment Report RTS is provided in Table 14

Table 14 | Agency Advice on the Amendment RTS

Agency	Advice summary
EPA	Advised the recommended noise limits at one receiver had been decreased and the noise enhancing meteorological conditions had been updated in the recommended conditions. Included a complete copy of the proposed licence conditions.
DCCEEW	Advised the Applicant should demonstrate the streams will connect with watercourses both upstream and downstream as well as provide an updated landscape plan showing minimal encroachments. Also, the project description should be updated to ensure consistency with the current design.  Recommended a condition requiring works within waterfront land to be constructed in accordance with the guidelines.
TfNSW	Recommended conditions requiring the development operate as described, the transporting of any Over Size Over Mass loads to be undertaken on an approved route and with a permit, no traffic movements via the intersection of Argyle Street and Lackey Road and monitoring.  Advised that, in accordance with the Rail Safety National Law (NSW), the Rail Infrastructure Manager (Boral) and the Road Manager (Council) are responsible for managing risks at a level crossing.  Provided a range of questions that should be considered by Boral, Council and the Department in approving the new rail crossing.

# Appendix D – Statutory considerations

Table 15 | Mandatory Matters for Consideration

Object	Consideration
a) the provisions of: i.) any environmental planning instrument, and	The Department has considered the relevant environmental planning instruments in its assessment of the development (see Appendix E)
ii.) any proposed instrument that is or has been the subject of public consultation under this Act and that has been notified to the consent authority (unless the Planning Secretary has notified the consent authority that the making of the proposed instrument has been deferred indefinitely or has not been approved), and	There are no relevant draft EPIs
ii.) any development control plan, and	Under section 2.10 of the State Environmental Planning Policy (Planning Systems) 2011 (PS SEPP), development control plans do not apply to State significant development. Notwithstanding, the Department has had regard to the Moss Vale Enterprise Corridor DCP in its assessment of the development application.
iii) any planning agreement that has been entered into under section 7.4, or any draft planning agreement that a developer has offered to enter into under section 7.4, and	The Applicant has not entered into any planning agreement under section 7.4 of the EP&A Act.

Object	Consideration
iv.) the regulations (to the extent that they prescribe matters for the purposes of this paragraph), that apply to the land to which the development application relates,	The Department has assessed the development in accordance with all relevant matters prescribed by the regulations, the findings of which are contained in this report
b) the likely impacts of that development, including environmental impacts on both the natural and built environments, and social and economic impacts in the locality,	The Department has considered the likely impacts of the development in detail in Section 6 of this report. The Department concludes that all environmental impacts can be appropriately managed and mitigated through the recommended conditions of consent
c) the suitability of the site for the development,	The development is a resource recovery facility located on E4 General Industrial zoned land which is permissible with development consent.
d) any submissions made in accordance with this Act or the regulations,	All matters raised in submissions have been summarised in Section 5 of this report and given due consideration as part of the assessment of the development in Section 6 of this report.
e) the public interest.	The development would generate 200 full-time equivalent construction jobs and 140 operational jobs and invest \$88,120,922 in the Wingecarribee Shire LGA. The development would provide for the recycling needs of NSW and beyond, contributing to a circular economy. The environmental impacts of the development would be appropriately managed via the recommended conditions. The Department considers the development is in the public interest.

# Objects of the EP&A Act

A summary of the Department's consideration of the relevant objects (found in section 1.3 of the EP&A Act) are provided in **Table 16** below.

Table 16 | Objects of the EP&A Act and how they have been considered

Object	Consideration
(a) to promote the social and economic welfare of the community and a better environment by the proper management, development and conservation of the State's natural and other resources,	The development has generated a high level of community interest due to its potential for impacts on surrounding residents. The Applicant has made amendments to the original development to address these concerns and, with the recommended conditions, the potential impacts of the development have been greatly reduced and are unlikely to impact on the social welfare of local residents. The development would increase waste recovery capacity and employment in the Southern Highlands. It would divert material from landfill and help meet the growing demand for recycling and reduce the use of natural resources to create new products. It would ensure the proper management and conservation of natural resources by securing and retiring the required credits from a third-party stewardship site or sites as per

Object	Consideration
	the "like-for-like" offset rules in Clause 6.2 of the Biodiversity Conservation Regulation 2017
(b) to facilitate ecologically sustainable development by integrating relevant economic, environmental and social considerations in decision-making about environmental planning and assessment,	The development is consistent with the principles of ESD as it would utilise industrial land for waste recycling reducing the need for natural resources to create new products.  The development incorporates environmental safeguards and would promote social and economic growth by providing infrastructure and jobs. The development also incorporates ESD measures to reduce energy and water consumption including installation of rainwater tanks and solar panels
(c) to promote the orderly and economic use and development of land,	The development is a permissible use, it would use the land for industrial purposes consistent with E4 zoning objectives. The development would provide 140 operational jobs and would have a CIV \$88,120,922 in thereby promoting economic growth within the Southern Highlands Region
(e) to protect the environment, including the conservation of threatened and other species of native animals and plants, ecological communities and their habitats,	The impacts on native flora and fauna would be offset through biodiversity credits. The Department's assessment in Section 6 of this report demonstrates that with the implementation of the recommended conditions of consent, the impacts of the development could be mitigated and/or managed to ensure an acceptable level of environmental performance
(f) to promote the sustainable management of built and cultural heritage (including Aboriginal cultural heritage),	The development would not significantly impact Aboriginal cultural heritage. Any identified artefacts would be managed appropriately in consultation with the RAPs and Heritage NSW. Any unexpected finds would be appropriately managed via conditions of consent. No built heritage was identified onsite
(g) to promote good design and amenity of the built environment,	The development is appropriately designed and landscaped and located in an area zoned for industrial purposes since 2010
(h) to promote the proper construction and maintenance of buildings, including the protection of the health and safety of their occupants,	The Department has recommended conditions of consent requiring the development be constructed in accordance with the Building Code of Australia
(i) to promote the sharing of the responsibility for environmental planning and assessment between the different levels of government in the State,	The Department has assessed the development in consultation with, and giving due consideration to, the technical expertise and comments provided by other Government agencies, thereby sharing the responsibility for environmental planning between the different levels of government in the State

Object			Consideration
			The development application was exhibited in accordance with

(j) to provide increased opportunity for community participation in environmental planning and assessment.

The development application was exhibited in accordance with section 9 of Schedule 1 of the EP&A Act to provide public involvement and participation in the environmental planning and assessment process. The Department publicly exhibited the application as outlined in Section 5 of this report, which included notifying adjoining landowners and displaying the application on the Department's website and at the local Council offices and the Moss Vale public library

# Appendix E – Environmental Planning Instruments (EPIs)

To satisfy the requirements of section 4.15(1) of the EP&A Act, the following EPIs were considered as part of the Department's Assessment

### State Environmental Planning Policy (Planning Systems) 2021 (Planning Systems SEPP)

The Planning Systems SEPP identifies certain classes of development as SSD. The development is classified as State significant pursuant to Section 4.36 of the EP&A Act because it involves construction and operation of a waste or resource facility that handles more than 100,000 tonnes per year of waste which meets the criteria in section 23(3) of Schedule 1 of the Planning Systems SEPP. It is also a plastics reprocessing facility with a CIV of more than \$30 million which meets the criteria in section 10(1)(g) of Schedule 1 of the Planning Systems SEPP.

## State Environmental Planning Policy (Industry and Employment) 2021

Chapter 3 of the Industry and Employment SEPP aims to ensure that outdoor signage is compatible with the desired amenity and visual character of an area, provides effective communication in suitable locations, and is of a high-quality design and finish. The development includes erection of business identification wall-mounted signs at the southwest corner of Building 2 and the northwest corner of Building 1, as well as wayfinding signs. The Department has considered the proposed signage against the relevant provisions of Chapter 3 of the Industry and Employment SEPP (see **Table 17**). The proposed signage is consistent with the SEPP. The Department has recommended the Applicant prepare a signage strategy for the Planning Secretary's approval prior to operation.

Table 17 | Consideration of Industry and Employment SEPP - Schedule 5 Assessment criteria

Object	Consideration
1. Character of the area	The building identification signage would be 6 m by 4 m in size and located 10 m above ground level.
	The signs would be used to identify Plasrefine as the owner and are considered to be in keeping with the future industrial nature of the area.
2. Special areas	The sign may be viewed from rural landscapes initially, however as the landscaping matures the signs would not be visible from the majority of the rural residential dwellings
3. Views and vistas	The signage would be located at approximately 10m high on a 15.5 m tall and a 14.5 m high warehouse building respectively. These buildings would be obscured by the proposed landscaping after time and, as such, the Department does not consider the proposal signage would obscure or dominate views or vistas.
4. Streetscape, setting or landscape	There would be minimal signage area, with one 24m² sign on a 1,116 m² face and another 24 m² sign on a 2,436 m² face.  Given the large size of site, it is considered the amount and form of signage is appropriate for the site and will not detract from the streetscape.

Object	Consideration
5. Site and building	The 24 m² signs would be substantially smaller than the warehouse buildings. As such, it is considered to be subordinate, compatible and proportional to the warehouse building.
6. Associated devices and logos with advertisements and advertising structures	There are no safety devices or platforms, however, the signage comprises a logo with integrated lighting.
7. Illumination	The signage would include a diffused light. The illumination is adjustable and would not be of a size that is distracting to drivers. The closest residential property is located 220 m away from the signage and view of the signage would be obscured by the proposed vegetation. As such, it is considered the illumination is acceptable.
8. Safety	The scale of the signs would not reduce the visibility of the road network or obscure sightlines. As such, it is not expected that the signage would cause safety risk.

#### State Environmental Planning Policy (Biodiversity and Conservation) 2021

The Biodiversity and Conservation SEPP aims to protect biodiversity, regulate vegetation clearing and protect water catchments. The project area is within the Sydney Drinking Water Catchment. Chapter 6 of the Biodiversity and Conservation SEPP provides that a consent authority must not grant consent to the carrying out of development on land in the catchment unless it is satisfied the carrying out of the proposed development would have a neutral or beneficial effect (NorBE) on water quality The Department has undertaken an assessment of the development's impacts on water quality in consultation with WaterNSW in Section 6 of this report. The assessment concluded the development would have a neutral effect on water quality.

#### State Environmental Planning Policy (Transport and Infrastructure) 2021

Chapter 2 of the Transport and Infrastructure SEPP aims to facilitate the effective delivery of infrastructure across the State by improving regulatory certainty and efficiency, identifying matters to be considered in the assessment of development adjacent to certain types of infrastructure development, and providing for consultation with relevant public authorities about certain types of development during the assessment process.

The Department consulted with TfNSW as part of its assessment of the application. TfNSW's comments are detailed in **Section 5**. The Department has considered the comments from TfNSW and where applicable, has included TfNSW's requirements in the recommended conditions of consent.

## State Environmental Planning Policy (Resilience and Hazards) 2021

Chapter 3 of the Resilience and Hazards SEPP aims to identify developments with the potential for significant offsite impacts, in terms of risk and/or offence. A development is defined as potentially hazardous and/or potentially offensive if, without mitigating measures in place, the development would have significant risk and/or adverse impact on offsite receptors.

The EIS did not identify any potentially hazardous or potentially offensive development. As such, the Department has not recommended any specific hazard related conditions, other than standard requirements to ensure the Applicant complies with all relevant requirements in relation to the storage of chemicals, fuels or

oils used onsite and that should any dangerous goods be brought onto the site, they are stored below the thresholds in the Applying SEPP 33 guidelines.

Notwithstanding, as a facility that would store combustible waste, there is risk of fire. The EIS provided an assessment against the FRNSW guidelines *Fire Safety in Waste Facilities* (waste fire safety) and included a range of measures that would be put in place to ensure compliance with the guidelines. The Department is satisfied the Applicant has demonstrated that the design of the facility would be in accordance with the guidelines and as such fire risk has been managed to ensure there is a low risk of a large fire. However, to ensure the final details are suitable, the Department recommends a FSS be prepared in consultation with FRNSW.

Chapter 4 of the Resilience and Hazards SEPP aims to provide a State-wide approach to the remediation of contaminated land. In particular, it aims to promote the remediation of contaminated land to reduce the risk of harm to human health and the environment by specifying:

- under what circumstances consent is required
- the relevant considerations for consent to carry out remediation work
- the remediation works undertaken meet certain standards and notification requirements.

The development is located on former agricultural land which has not been previously developed. A PSI determined that it is unlikely any contaminating activity took place onsite, nor has fill been deposited and as such and contamination risk is low. To ensure that any unidentified contamination is managed appropriately, the Department has recommended an unexpected finds protocol. The development would not impact on contaminated land and is considered consistent with the aims, objectives and provisions of Chapter 4 of the Resilience and Hazards SEPP.

#### Wingecarribee Local Environmental Management Plan 2010 (WLEP)

The WLEP aims to encourage the orderly development of housing, employment, infrastructure and community services to meet the needs of the existing and future residents of the Wingecarribee LGA. The WLEP also aims to conserve and protect natural resources and foster economic, environmental and social well-being.

The Department has consulted with Wingecarribee Shire Council throughout the course of assessment and has considered the relevant provisions of the WLEP and those matters raised by Council in its assessment of the development (Section 6).

#### Moss Vale Enterprise Corridor Development Control Plan

Under section 2.10 of the Planning Systems SEPP, DCPs do not apply to SSD. However, where appropriate, consideration has been given to the relevant DCP provisions.

The MVEC DCP envisions the Moss Vale Enterprise Corridor to be developed as a sustainable employment area catering for light and general industrial development. The aims of the DCP include to facilitate the development of the MVEC for employment purposes, to ensure the orderly and proper development of the area and to protect the scenic amenity of the Moss Vale Area. The development would be located within the Enterprise Precinct, a part of the transitional interface between rural residential areas and the heavier industrial areas of the corridor. This precinct is intended to accommodate a mix of light industrial and commercial office uses.

The DCP contains objectives with corresponding rules to manage the impact of development across the MVEC. The development complies with the majority of the land use rules in the DCP in terms of height, minimum lot size, site coverage and measures to reduce water and energy use. The bulk and

scale of the buildings would be appropriately managed through landscaping using mounding and mature trees. The building would not be visible from the public viewpoint identified in the DCP, and would be designed to reduce water, energy, noise and air emissions. On a few points the development does not strictly comply with objectives and associated rules, however these have been satisfactorily addressed, for example the landscaped setback has been addressed via off site landscaping.

In addition, while the development would be located on a site identified as a potential constraint area due to potential water inundation, a detailed flood study submitted as part of the RTS, identified the development would be flood free in a PMF.

Although it does not strictly comply with all the objectives and rules of the DCP, the Department's assessment determined that development is appropriate in the Enterprise Precinct outlined in the MVEC DCP.

Appendix F – Recommended instrument of consent
Moss Vale Plastics Recycling Facility   Planning Portal - Department of Planning and Environment
(nsw.gov.au)

