

STATE SIGNIFICANT DEVELOPMENT ASSESSMENT: Bingo Recycling Pty Ltd Mortdale Resource Recovery Facility SSD 7421



Environmental Assessment Report Section 89H of the Environmental Planning and Assessment Act 1979

November 2017

Cover photo: Aerial photograph of site location

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ABBREVIATIONS AND DEFINITIONS

ACM Asbestos-containing material
AHD Australian Height Datum
Applicant Bingo Recycling Pty Ltd
AS Australian Standard
BCA Building Code of Australia
C&D Construction and Demolition
C&I Commercial and Industrial

CEMP Construction Environmental Management Plan

CIV Capital Investment Value

Commission Planning Assessment Commission

Construction The demolition of buildings or works, carrying out of works, including earthworks,

erection of buildings and other infrastructure covered by this consent

Council Georges River Council

CWMP Construction Waste Management Plan

DA Development Application

Demolition The removal of buildings, sheds and other structures on the site

Department of Planning and Environment

Development The development as described in the EIS and RTS for the construction and operation

of the Mortdale Resource Recovery Facility

DPI Department of Primary Industries

EIS Environmental Impact Statement titled Environmental Impact Statement – Mortdale

Resource Recovery Facility prepared by AAP Corporation dated 29 June 2016

EP&A Act Environmental Planning and Assessment Act 1979

EP&A Regulation Environmental Planning and Assessment Regulation 2000

EPA Environment Protection Authority

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

ha Hectares

HLEP Hurstville Local Environment Plan

LGA Local Government Area
LPG Liquified petroleum gas

Minister for Planning (or delegate)

MNES Matter of National Environmental Significance

MRV Medium Rigid Vehicles NCW Non-conforming waste

OEH Office of Environment and Heritage

OEMP Operations Environmental Management Plan

RFS Rural Fire Service

RMS Roads and Maritime Services
RRF Resource Recovery Facility

RTS Response to Submissions titled Response to Submissions Report prepared by APP

dated 5 December 2016 and 6 April 2017

SEARs Secretary's Environmental Assessment Requirements

Secretary Secretary of the Department of Planning and Environment, or nominee

SEPP State Environmental Planning Policy

Sensitive receiver A location where people are likely to work or reside, this may include a dwelling,

school, hospital, office or public recreational area

SRD SEPP State Environmental Planning Policy (State and Regional Development) 2011

SSD State significant development

TCP Traffic Control Plan
TIA Traffic Impact Assessment
TMP Traffic Management Plan
Tpa Tonnes per annum

WARR Waste Avoidance and Resource Recovery Strategy

Waste As defined in the Protection of Environment Operations Act 1997

WMP Waste Management Plan

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EXECUTIVE SUMMARY

Bingo Recycling Pty Ltd (the Applicant) has lodged a Development Application (DA) and accompanying Environmental Impact Statement (EIS) seeking consent to demolish an existing waste transfer station and construct and operate a new resource recovery facility (RRF) at 20 Hearne Street, Mortdale (the site) in the Georges River local government area (LGA).

The site is located 22 kilometres (km) south-west of the Sydney city centre and 4.6 km west of the Hurstville town centre. The site covers approximately 0.76 hectares (ha) of IN2 Light Industrial zoned land. The site is currently used as a waste transfer station, which comprises a metal and concrete clad waste processing shed, an office and amenity building, weighbridge, bin storage area, wash bay and 6 car parking spaces. The nearest residential receivers are located to the south-east on Barry Avenue, as well as east of Boundary Road, being 200 metres and 250 metres away respectively. The M5 motorway is located approximately 5 km to the north of the site.

The Applicant proposes to increase the site's currently approved maximum waste processing capacity of 30,000 tonnes per annum (tpa) to 220,000 tpa. Waste streams to be processed at the new RRF would be dry non-putrescible construction and demolition (C&D), commercial and industrial (C&I) and domestic (council clean-up) waste. The waste processed would include metals, timber, paper, cardboard, green waste, glass, plastics, ceramics, asphalt, soils, bricks, concrete and rubber. The Applicant seeks to operate the RRF during the hours of 6 am—10 pm, Monday to Saturday.

The proposed development (the development) also includes the demolition of existing buildings and structures, site establishment works, construction of a new 2,534 m² waste processing shed, new office and staff amenities, ten output material bays, installation of plant and equipment, two weighbridges, drainage works and landscaping. All waste processing activities, including tipping of incoming waste, would occur indoors within the processing building.

The development is consistent with the NSW Government's direction in achieving the targets in the Waste and Avoidance and Resource Recovery Strategy 2014-2021. In particular, the development would assist in the recovery of C&D and C&I wastes.

The development has a capital investment value of \$3,745,020 and is expected to generate 15 full-time equivalent construction jobs and 25 additional operational jobs.

The development is classified as State significant development (SSD) under Part 4 of the *Environmental Planning and Assessment Act 1979* (EP&A Act) as it meets the criteria in Clause 23(3) of Schedule 1 in State Environmental Planning Policy (State and Regional Development) 2011 (SRD SEPP), being the construction and operation of a resource recovery or recycling facility that handles more than 100,000 tpa of waste. Consequently, the Minister for Planning is the consent authority for the development.

The Planning Assessment Commission will determine the SSD application in accordance with the Minister for Planning's delegation, as there were more than 25 public submissions objecting to the development.

The Department of Planning and Environment (the Department) exhibited the EIS for the development from Friday 22 July 2016 until Monday 22 August 2016. A total of 45 submissions were received, including 7 from government agencies and 38 from the general public. Of the 45 submissions received, 36 objected to the development.

The key concerns raised in the public submissions on the EIS related to the suitability of the site for the proposed volume of waste to be processed, traffic impacts, potential queuing in the street outside the site entrance, sleep disturbance from night time truck deliveries, and dust and odour impacts. Government agencies requested further assessment of noise from plant and truck movements during the evening and night time periods, further assessment of emissions based on projected daily throughput, and details of leachate and green waste management.

The Applicant submitted a Response to Submissions (RTS) on 5 December 2016 to address and clarify matters raised in the submissions. The Department reviewed the RTS in consultation with the agencies and deemed that further information and clarification was required regarding waste management, fire suppression, and traffic and noise issues. In particular, the Department and Council were concerned the site was too small to handle the volume of traffic and waste proposed. Subsequently, a revised RTS was requested to address these outstanding matters.

Amendments to the Development Application

Originally, the Applicant had proposed a waste processing capacity of up to 300,000 tpa over 24 hours a day, six days a week. In response to the public and government agency concerns, the Applicant amended the application, in accordance with Clause 55 of the Environmental Planning and Assessment Regulation 2000 and with the agreement of the Secretary. The amendments included:

- a reduction in processing capacity from 300,000 tpa to 220,000 tpa
- hours of operation (including delivery and removal of waste) reduced from 24 hours a day, six days a week to 6 am-10 pm only, six days a week
- prohibiting all vehicles accessing the site via Barry Avenue
- removal of bin storage on site to increase space available for vehicle maneuvering
- an increase in operational staff numbers from 12 to 13 per shift due to the addition of a traffic controller at the site entrance
- update of Capital Investment Value from \$2,466,000 to \$3,745,020.

These amendments were submitted in the form of a revised RTS on 6 April 2017. The government agencies considered these changes and were generally satisfied they presented reduced and acceptable impacts, in particular for traffic and noise.

The Department's assessment of the application has fully considered all relevant matters under Section 79C of the EP&A Act, the objects of the EP&A Act and the principles of ecologically sustainable development. The Department has identified the following key issues for assessment:

- traffic
- site and operational management
- noise and vibration.

The Department's assessment concluded 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. In summary, the development would:

- be capable of handling 220,000 tpa of waste from receipt through to dispatch
- satisfy the EPA's draft Standards for C&D recycling facilities
- positively contribute to the State's Waste Avoidance and Resource Recovery Strategy performance for both C&I and C&D waste
- meet the relevant air quality and noise criteria at sensitive receivers
- generate traffic, which could be accommodated on the local and regional road network without any significant impacts on safety, capacity or efficiency
- provide a range of environmental and economic benefits for the region, through resource recovery and the provision of 25 new long term operational jobs.

The Department considers the development is approvable, subject to any conditions of consent. This assessment report is therefore presented to the Planning Assessment Commission for determination.

1. BACKGROUND

1.1. The Department's Assessment

This report details the Department of Planning and Environment's (the Department) assessment of the State significant development (SSD 7421) for the Mortdale Resource Recovery Facility. The proposed development (the development) involves redevelopment and increase in processing capacity of an existing waste transfer station to establish a new resource recovery facility (RRF).

The Department's assessment considers all documentation submitted by Bingo Recycling Pty Ltd (the Applicant), including the Environmental Impact Statement (EIS) and two Response to Submissions (RTS) reports, as well as submissions received from government agencies and the public. The Department's assessment also considers the legislation and planning instruments relevant to the site and the development.

This report describes the development, surrounding environment, relevant strategic and statutory planning provisions and the issues raised in submissions. The report evaluates the key issues associated with the development and provides recommendations for managing any impacts during construction and operation. The Department's assessment of the development has concluded the development is approvable, subject to any conditions of consent.

1.2. Development Background

The Applicant is seeking development consent to construct and operate a RRF capable of processing up to 220,000 tpa of commercial and industrial (C&I), construction and demolition (C&D) and domestic (council clean-up) waste at a site in Mortdale in the Georges River Local Government Area (LGA) (see **Figure 1**). At the RRF, the incoming mixed waste streams would be separated into recyclable materials that would be transported offsite to other facilities for reuse or recycling. Any remaining, non-recyclable waste would be removed for disposal at an appropriately licensed landfill.

The development includes demolition of existing buildings, site establishment works, construction of a processing shed, office and staff amenities, ten output material bays, installation of plant and equipment, two weighbridges, drainage works and landscaping. Operational plant and equipment would include grab machinery, various waste screens, magnets, conveyors, drum separators, a de-stoner, air separation units, and excavators/front end loaders. The proposed hours of operation are 6 am-10 pm Monday to Saturday.

Originally, the Applicant had proposed a waste processing capacity of up to 300,000 tpa, with waste delivery and removal occurring 24 hours a day, six days a week. However, due to concerns with the site's capacity and with traffic and noise impacts raised by the Department, agencies and the general public, the Applicant amended the development application to comprise a reduced processing capacity of 220,000 tpa and reduced hours of operation (including delivery and removal of waste) from 6 am–10 pm only, six days a week. The amendment was made in accordance with Clause 55 of the *Environmental Planning and Assessment Regulation 2000*, and with the agreement of the Secretary.

The Applicant is a large waste management company that predominantly specialises in C&D and C&I waste processing. The Applicant has been operating RRFs throughout New South Wales for over 10 years, and currently operates eleven facilities in Sydney, the Hunter and Illawarra regions. The Applicant wishes to increase the site's processing capacity to cater for Sydney's recent growth in the construction industry and the resulting rise in need for C&D waste recycling.

1.3. Site Description

The site comprises 0.76 hectares (ha) of IN2 Light Industrial zoned land at 20 Hearne Street, Mortdale in southern Sydney (see **Figure 1**). The site is legally described as Lot 102 in DP 585775 and is owned by Bingo Property Pty Ltd.

The site is irregular in shape, with a 6.5 metre (m) driveway entrance/exit fronting a bend in Hearne Street. The land has been subject to cut and fill for drainage purposes and slopes approximately 3 m downward from the site entrance to the north-west boundary at the back of the site. While no remnant vegetation exists on the site, a number of established native and non-native trees grow along the site's boundaries, with one non-native tree adjacent to the administration building.

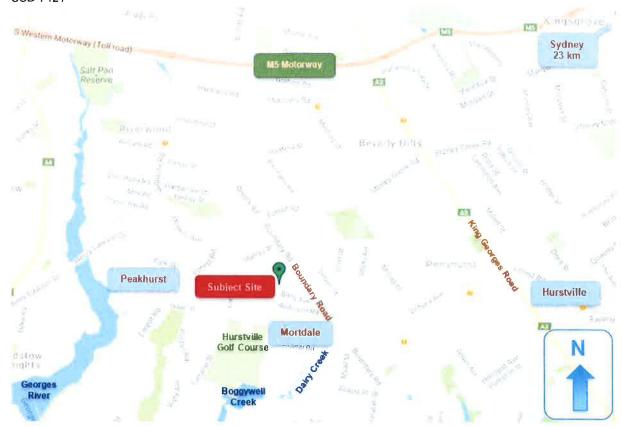


Figure 1: Site Location

From 1947-2010, the site was used to manufacture industrial machinery and glass. Since 2010, the site has been used as a waste transfer station under various owners. The site has an existing development consent granted by Hurstville City Council on 8 June 2011 to receive and process up to 30,000 tpa of general solid waste (non-putrescible), which is then removed for either further processing at a Bingo resource recovery facility or disposal at a licensed landfill. The existing facility comprises a 1,343 m² metal and concrete clad shed with a ridge height of 14.5 m, an office and amenity building, one weighbridge, bin storage area, wash bay and 6 car parking spaces (see **Figure 2**). Currently, 5 operational staff are employed at the facility.

1.4. Surrounding Land Uses

The site is located in the south-eastern portion of the Peakhurst industrial area. Approximately 800 metres south-east of the site is Dairy Creek, and 800 m south of the site is Boggywell Creek, which drains into Jewfish Bay and the Georges River. Hurstville Golf Course is situated directly south of the Peakhurst industrial area (see **Figure 1**).

Immediately surrounding land uses are industrial in nature, including a mix of warehouses, manufacturing and repair industries, automotive services industries, printing facilities, hardware and general supplies. A new industrial building for the manufacture of metal roofing products is currently being constructed directly opposite the development at the corner of Hearne Street and Barry Avenue, however the entrance and exit to this site will be on Barry Avenue.

Low density residential areas in the suburbs of Peakhurst and Mortdale surround the Peakhurst industrial area. The nearest residential receivers are located 200 m south-east of the site on Barry Avenue, and 250 m east of the site on Boundary Road. A dance school and children's play centre are located approximately 150 m to the south-east of the site on Barry Avenue (see **Figure 3**).

The road network surrounding the site includes Hearne Street (a 2 lane local road), Boundary Road (a 2 lane regional road), Barry Avenue (a 2 lane local road) and Forest Road (a 6 lane state road). Forest Road intersects with Boundary Road to the north of the site and provides connection to Sydney's arterial road network, including the M5, which is 2.5 km to the north.



Figure 2: Existing Site Layout

1.5. Other Development Approvals

The site currently operates under an existing development consent granted by Hurstville City Council (10/DA55), which was originally granted on 8 June 2011. The existing development consent permits a waste transfer station on the site receiving up to 30,000 tpa of general solid waste (non-putrescible). Minor modifications to the consent were granted by Council on 4 November 2015. The existing operations are also regulated under an Environment Protection Licence (EPL) issued by the Environment Protection Authority (EPA) (EPL 20622), which permits resource recovery, waste processing and waste storage of listed non-putrescible wastes.

2. PROPOSED DEVELOPMENT

2.1. Description of the Development

The Applicant proposes to demolish an existing waste transfer station and construct and operate an RRF at 20 Hearne Street, Mortdale. The major components of the development are summarised in **Table 1**, shown in **Figure 4** and **Figure 5**, and described in full in the Environmental Impact Statement (EIS) and the RTS documents, included in **Appendix D**.

Table 1: Main Development Components

Aspect	Description			
Development Summary	Demolition of buildings and construction and operation of a RRF with a processing capacity of up to 220,000 tpa of mixed non-putrescible waste. Operation of the RRF during the hours of 6 am–10 pm, Monday to Saturday.			
Site area and development footprint	the site is approximately 0.76 hectares in area			
Demolition	 demolish existing buildings and structures, including weighbridge, truck bay and wheel wash bay remove demolition waste, including concrete pavement in poor condition 			

Aspect	Description				
	remove existing landscaping and vegetation				
Earthworks, civil works and services extension	 removal of existing ramp and replacement of parts of existing slab to create a new ramp site entrance to be widened by removal of existing garden bed and trees to allow for an extended concrete hardstand area along the entire length of the driveway 				
Construction of site buildings	 a processing building with a fixed awning over storage bays of separated w materials (total area 2,534 m²) an office and staff amenities building (area 150 m²) with awning over workshop 				
Plant and equipment	 install processing equipment in the processing building including grab machinery, various waste screens, magnets, conveyors, drum separators, a de-stoner, and air separation units 				
Ancillary infrastructure	 10 material storage bays 2 x 20 metre weighbridges covered refueling point and diesel fuel storage tank (28,000 litres (L)) concrete ramps and retaining walls 45,000 L rainwater tank cool-fog dust suppression system external dust suppression sprinklers water pollution control equipment bunding leachate collection sumps 12 onsite carparking spaces 				
Waste storage	 unprocessed waste to be stored in Incoming Waste Receival (Stockpile) Area inside the processing shed separated waste to be stored in Processed Material Bays under the awning or in a skip bin inside the processing shed (plasterboard only) (see Figure 5) 				
Traffic	At full capacity, the site would generate up to 336 traffic movements (168 in, 168 out) per day				
Road and intersection works	No road or intersection works proposed.				
Landscaping	 removal of all existing trees on the site installation of 280 m² of soft landscaping and planting along eastern and northern boundaries 				
Construction timeframe	demolition and construction – 34 weeks				
Hours of operation	6 am–10 pm, Monday to Saturday No operations (waste processing or waste deliveries/removal) on Sundays or Public Holidays.				
Capital investment value	\$3,745,020				
Employment	15 full-time equivalent construction jobs and 30 operational jobs (25 new operational jobs) - 13 employees per shift.				

2.2. Process Description

The primary purpose of the RRF would be to receive incoming, non-putrescible waste material and separate it into:

- reusable outputs for further recycling offsite soil, brick and concrete, timber, scrap metal, plastic, paper and cardboard, plasterboard, and green waste
- residual waste requiring disposal.

A specialised plant and equipment line (see Section 2.1) would be utilised to separate the waste.

The majority of waste would arrive at the site as mixed loads of building, demolition, commercial/industrial or domestic materials, however single-material loads (e.g. loads of brick only or concrete only or soil only) would also be received. The sorted, recyclable output materials would be transported offsite to other facilities for reuse or recycling. Any remaining, non-recyclable waste would be removed for disposal at an appropriately licensed landfill. The target resource recovery rate for the site is 85%. A description of the waste separation process is provided below, while **Figure 6** presents a flow diagram of the process steps.

Arrival and Waste Acceptance

Waste materials would be delivered to the site using various Medium Rigid Vehicle (MRV) skip/hook trucks and larger trucks including truck-and-dog combinations, each carrying a maximum of 32.5 tonnes of waste. Incoming waste delivery vehicles would comprise customer, contractor and Bingo's own trucks. On arrival at the facility, paperwork would be examined and the load visually inspected and weighed at the weighbridge area to determine the weight, suitability and category of waste. Trucks containing acceptable waste only would then proceed and drive up the ramp to the rear portion of the processing building for unloading at the incoming waste receival (stockpile) area. Single-material loads would be tipped in a separate part of the receival area to the mixed waste to prevent cross contamination and assist with separation.

The incoming waste receival area is proposed to be approximately 574 m² in size, capable of storing up to 6,196 tonnes of incoming unprocessed waste at any one time. A breakdown of predicted incoming waste streams is provided in **Table 2**.

Table 2: Incoming Waste Streams

Waste material	Tonnes per annum	% of incoming stream
Wood waste	2,200	1%
Non-chemical manufacturing waste	2,200	1%
Asphalt waste	1,100	0.5%
Soils	44,000	20%
Paper and cardboard	1,100	0.5%
House-hold waste (municipal clean-up of 'hard' waste)	1,100	0.5%
Office and packaging waste	2,200	1%
Construction and demolition waste	165,000	75%
VENM	1,100	0.5%
TOTAL	220,000	100%



Figure 3: Surrounding Land Uses

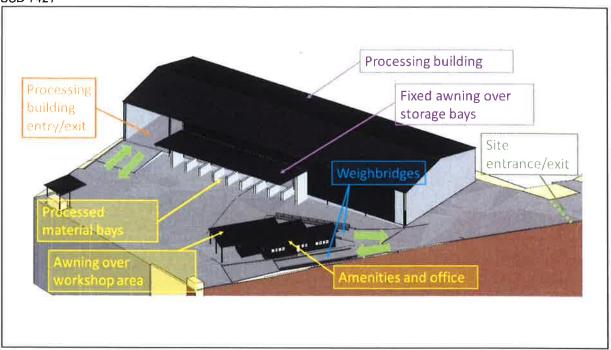


Figure 4: 3-Dimensional Representation of the Development

Waste Rejections

Staff would inspect the waste before, during and after unloading to determine waste acceptability. If any non-conforming waste (NCW), such as asbestos or gas bottles, is detected during unloading, the load would be rejected and immediately reloaded and removed from the site. Any NCW detected after unloading that cannot be returned to the consignor would be segregated from the receival area and dealt with according to the Applicant's relevant procedure. Asbestos would be handled according to the Bingo procedure SOP-YA020 Unexpected Asbestos Finds and stored in accordance with Bingo's OPL-YA030 Storage of Hazardous Waste — Special Waste until removed from the site within 24 hours.

Resource Recovery/Processing

The incoming waste material would be fed into the processing machinery line by grab machinery within 24-48 hours of arrival onsite. The proposed processing machinery has been specifically designed by SKALA Australasia Pty Ltd to process up to 70 tonnes of waste per hour and separate it into 8 recyclable waste streams (scrap metal, paper and cardboard, brick and concrete, plasterboard, green waste, timber, plastic, and soil) plus 3 separate points for removal of residual (non-recyclable) waste streams (see **Figure 6**).

A sequence of machinery (screens, magnets, conveyors and drums) as well as manual 'picking' would separate and size the waste before it is discharged via conveyor directly into the appropriate storage bay, according to its type. Separated plasterboard would be transferred from the processing line by front end loader into a skip bin within the processing shed.

Storage

Ten processed material storage bays would be located under a fixed awning at the south-western exterior side of the processing building. There would be separate processed material storage bays for each separated type of waste (7 recyclable waste, 3 residual waste), as shown in **Figure 5** and **Figure 6**. Each storage bay would be 3.5 m x 7 m in size, and stockpiles in the bays would have a maximum height of 6 m. The maximum tonnage that would be contained in each bay would vary depending on the type of material stored, but is estimated to range from 74 tonnes to 158 tonnes per bay. In addition, one 1.7 m x 3.5 m covered skip bin for storage of plasterboard would be located inside the processing building near the receival area. Used lead-acid batteries, fire extinguishers and gas bottles recovered from the waste stream would be stored in covered, self-bunded cages beside the storage bays until removed from the site. Asbestos would be stored in a covered skip bin adjacent to the storage cages (see **Figure 5**). All NCW would be removed from the site daily.

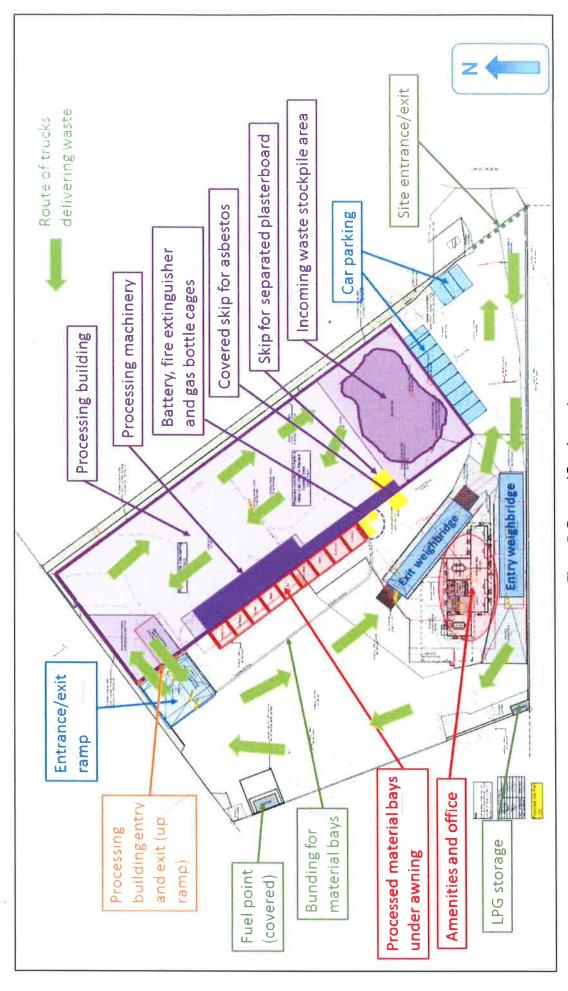


Figure 5: Proposed Development

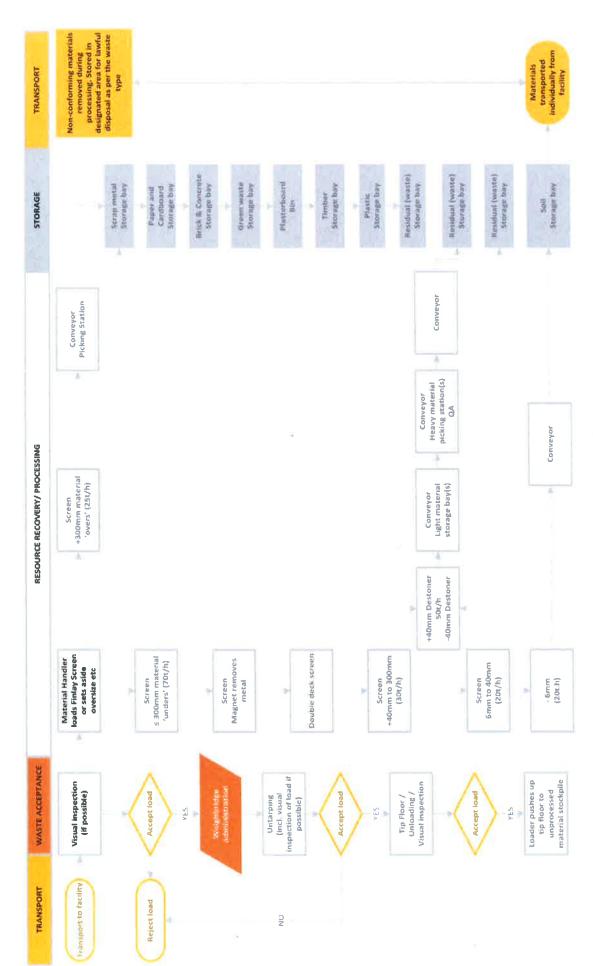


Figure 6: Process Flow Diagram

Based on calculations of the maximum potential storage capacity of the storage bays and the incoming waste area, the Applicant has advised it intends to apply for storage of up to 10,000 tonnes of waste at any one time to be permitted on its EPL (the Authorised Amount).

The awning would serve to prevent rainwater from coming into contact with stored, processed waste in the material storage bays. However, should any leachate be generated, it would drain to a leachate sump that would be pumped out to a truck for disposal at a licensed liquid waste facility. The materials storage bay area would be bunded to prevent leachate interaction with clean stormwater from outdoor areas.

Removal from the Site

Processed recyclable and residual waste material would be removed from the storage bays in separate loads according to its type. 19 m semi-trailer trucks and 19.6 m truck-and-dog combinations would be loaded by front-end loader with processed or residual waste and exit the site via the weighbridge. In order to reduce total site vehicle movements, some trucks that have delivered unprocessed waste may also be loaded with processed waste for removal. Removal of separated waste from each storage bay would be scheduled on average every 24-48 hours, or more frequently if required. The skip containing plasterboard would be removed from the site by skip truck when full. In order to minimise site congestion, the site operator would schedule removal of processed waste outside of the peak hours of delivery of incoming waste to the site (i.e. 6 pm–10 pm).

Destinations for processed waste outputs would vary depending on type. However, in all cases destinations would be licensed recycling facilities or landfills (for residual waste).

2.3. Applicant's Need and Justification for the Development

The Applicant has justified the need for the development by highlighting that it would assist in achieving the targets of the NSW Waste Avoidance and Resource Recovery Strategy 2014-2021 (WARR Strategy) through reduction of waste going to landfill. With a target recovery rate of 85%, the development would exceed the 2021-22 targets of the WARR strategy for both C&I (70%) and C&D (80%) waste. It is expected that the facility would reduce the percentage of waste diverted to landfill and cause a significant increase in the overall tonnes of waste diverted from landfill.

The Applicant indicates the site is well positioned to service approved demolition and construction projects in the region as well as those predicted to originate from the Sydenham to Bankstown Urban Renewal Project and Arncliffe and Banksia Priority Precincts. The development would be capable of receiving and processing waste products to enable resource recovery and subsequent reuse elsewhere.

The Applicant suggests the current processing capacity of 30,000 tpa under-utilises the site and fails to cater for Sydney's recent growth in construction and the resulting need for C&D waste recycling. In addition, the Applicant refers to the present lack of similar facilities in the Mortdale area to cater for local needs, as well as the shortage of C&D recycling facilities in the Sydney metropolitan area in general.

Provided environmental control measures are properly implemented and monitored, the Applicant maintains that the potential for environmental impacts from the development would be minimal.

3. STRATEGIC AND STATUTORY CONTEXT

3.1. Strategic Context

The NSW Government has announced the Premier's Priorities which cover 12 key areas including economic growth, provision of infrastructure, protection of vulnerable communities, improving education and environmental protection. One of the Premier's key priorities is 'Creating Jobs'. The NSW Government aims to provide 150,000 new jobs over the next four years.

The development would contribute toward 'Creating Jobs' by creating 15 new construction jobs and 25 new operational jobs in the Georges River LGA. The development also represents a \$3.7 million capital investment in industrial development.

The development is also consistent with the goals, directions and actions outlined in A Plan for Growing Sydney as it will:

- assist in the sustained growth and investment of the identified Hurstville and Kogarah strategic centres, which have good levels of accessibility to the state and regional road network (Action 1.7.1)
- provide for additional jobs closer to where people live (Direction 1.7)
- meet the industry demands in dealing with waste generated by key infrastructure projects in the locality, including the expansion of Sydney Rapid Transport to Hurstville (Action 1.11.1).

NSW 2021 and the Waste Avoidance and Resource Recovery Strategy

Reducing waste and keeping materials circulating within the economy are priorities for the NSW government, as set out in NSW 2021. To meet this important challenge, the government developed the state-wide WARR Strategy that sets waste recovery targets for C&D, C&I and municipal solid waste (MSW) material. By 2021–22, the WARR Strategy requires an increase in recycling rates as follows:

- C&I from 57% (in 2010–11) to 70%
- C&D from 75% (in 2010-11) to 80%
- MSW from 52% (in 2010–11) to 70%
- increase in the waste diverted from landfill from 63% (in 2010-11) to 75%.

The target recycling rate for the RRF is 85%, which exceeds the WARR Strategy targets for both C&D and C&I waste. The Department has reviewed the information and specifications for the SKALA machinery to be used to separate waste and is satisfied that the 85% target rate is achievable and realistic for the development. The development would therefore contribute to the State's recovery performance in both the C&I and C&D sectors.

Revised Draft South District Plan, 2017

To implement the broad aims of the Plan for Growing Sydney, the Minister has directed the preparation of Districts Plans for five geographical districts across Sydney. District Plans are currently being prepared, with the revised draft South District Plan released in October 2017 for public consultation. The revised draft South District Plan provides a link between the broad aims of a Plan for Growing Sydney and local environmental plans. It sets key priorities and actions for delivering productive, liveable and sustainable communities. The draft South District plan includes job and housing targets, strategies for improved housing choice and affordability and protection and enhancement of natural resources.

The Department considers the development is consistent with the priorities of improving productivity within the District by delivering jobs closer to home. The development would provide an additional 15 new construction jobs and 25 new operational jobs within the District. The proposed development would also assist in meeting Action 71 of the revised draft South District plan as it provides an expanded location for waste recycling and management.

3.2. State Significant Development

The development is State significant development pursuant to Section 89C of *Environmental Planning and Assessment Act 1979* (EP&A Act) because it involves development for the purpose of resource recovery or recycling facilities that handles more than 100,000 tpa of waste, which meets the criteria in Clause 23(3) of Schedule 1 in State Environmental Planning Policy (State and Regional Development) 2011 (SRD SEPP). Consequently, the Minister for Planning is the consent authority for the proposed development.

3.3. Permissibility

One land use zone applies to the site under the Hurstville Local Environment Plan 2012 (HLEP) (see Figure 7):

IN2 Light Industrial.

Resource recovery facilities are permissible with consent in the IN2 zone. Therefore, the Minister or a delegate may determine the carrying out of the development.

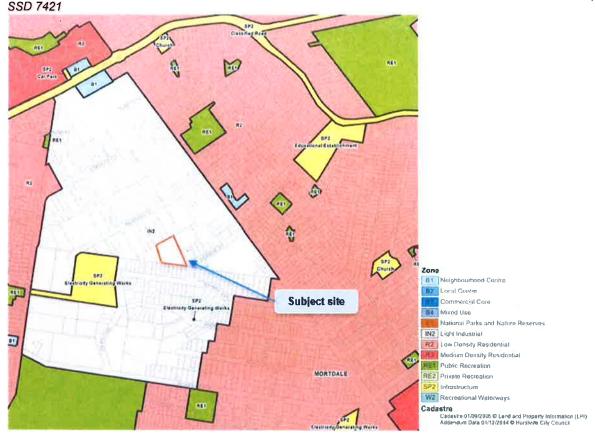


Figure 7: Hurstville LEP Land Use Zones

3.4. Consent Authority

On 14 September 2011, the Minister delegated the functions to determine SSD applications to the Planning Assessment Commission (the Commission) where more than 25 public submissions in the nature of objections were received.

Under the Ministerial Delegation, the Commission must determine the SSD application as 36 objections were received from the general public during the exhibition period of the development application and the accompanying EIS.

3.5. Other Approvals

Section 89K of the EP&A Act requires further approvals to be obtained, considered or determined in a manner that is consistent with any Part 4 approval for SSD projects under the EP&A Act. In the case of the development, an EPL will need to be applied for and issued by the EPA under the *Protection of the Environment Operations Act 1997*.

3.6. Considerations under Section 79C of the EP&A Act

Section 79C of the EP&A Act sets out matters to be considered by a consent authority when determining a development application. The Department's consideration of these matters is set out in Section 5 and **Appendix B**. In summary, the Department is satisfied the development is consistent with the requirements of Section 79C of the EP&A Act.

3.7. Environmental Planning Instruments

Under Section 79C of the EP&A Act, the consent authority, when determining a development application, must take into consideration the provisions of any environmental planning instrument (EPI) and draft EPI (that has been subject to public consultation and notified under the EP&A Act) that apply to the development.

The Department has considered the development against the relevant provisions of several key environmental planning instruments including:

- State Environmental Planning Policy (State and Regional Development) 2011 (SRD SEPP)
- State Environmental Planning Policy (Infrastructure) 2007 (ISEPP)
- State Environmental Planning Policy No. 33 Hazardous and Offensive Development (SEPP 33)

- State Environmental Planning Policy No. 55 Remediation of Land (SEPP 55)
- Greater Metropolitan Regional Environmental Plan No. 2 Georges River Catchment (REP 2)
- Hurstville Local Environmental Plan 2012 (HLEP)
- Hurstville Development Control Plan No.1.

The development seeks to exceed the 'height of buildings standard' under Clause 4.3 of the HELP that restricts building height to 10 m in this area. The Applicant has submitted a written request (Appendix M of the EIS) for an exception to the development standard under Clause 4.6 of the HLEP. Clause 4.6(4)(b) states the concurrence of the Secretary is required in considering a request to vary a development standard. However, Clause 79B(2A) of the EP&A Act states the Secretary's concurrence is not required for SSD, unless an EPI specifies that it applies to SSD. The HLEP does not specify that the Secretary's concurrence is required for SSD. The Department's assessment of the Applicant's Clause 4.6 request is provided in Section 5 of this report.

Development Control Plans (DCPs) do not apply to SSD under Clause 11 of the SRD SEPP. However, the Department has considered the relevant provisions of the Hurstville DCP 1 in its assessment of the development in Section 5 of this report.

Detailed consideration of the provisions of all EPIs that apply to the development is provided in **Appendix C**. The Department is satisfied the development generally complies with the relevant provisions of these EPIs.

3.8. Public Exhibition and Notification

Under Section 89F(1) of the EP&A Act, the Secretary is required to make the development application and any accompanying information of an SSD application publicly available for at least 30 days. The application was on public exhibition from 22 July 2016 until 22 August 2016. Details of the exhibition process and notifications are provided in Section 4.1.

3.9. Objects of the EP&A Act

In determining the application, the consent authority should consider whether the development is consistent with the relevant objects of the EP&A Act. These objects are detailed in Section 5 of the Act. The objects of relevance to the merit assessment of this application include:

- (a) to encourage:
 - (i) the proper management, development and conservation of natural and artificial resources, including agricultural land, natural areas, forests, minerals, water, cities, towns and villages for the purpose of promoting the social and economic welfare of the community and a better environment.
 - (ii) the promotion and co-ordination of the orderly and economic use and development of land,
 - (vi) the protection of the environment, including the protection and conservation of native animals and plants, including threatened species, populations and ecological communities, and their habitats, and
 - (vii) ecologically sustainable development, and
- (b) to promote the sharing of the responsibility for environmental planning between the different levels of government in the State, and
- (c) to provide increased opportunity for public involvement and participation in environmental planning and assessment.

The Department has fully considered the objects of the EP&A Act, including the encouragement of Ecologically Sustainable Development (ESD), in its assessment of the application (see **Table 3**).

Table 3: Considerations against the EP&A Act

Object	Consideration		
5(a)(i)	The development would enable the re-development of land to expand the capacity of the existing facility, permitting the facility to recycle and recover a greater volume of waste in a more efficient and cost-effective manner. This would assist in meeting the growing demands of local industries for waste recycling within the southern metropolitan area of Sydney. In addition, it would promote the economic welfare of the local community through the provision of 15 full time construction jobs and 30 ongoing operational jobs (25 new operational jobs).		
5(a)(ii)	The development would ensure the orderly and economic use of the land, which is zoned for industrial use, IN2 Light Industrial and which permits the proposed development with consent. The		

Object	Consideration			
	site is also strategically located with access to the major regional road network, including the M5 motorway.			
5(a)(vi)	The Department's assessment in Section 5 of this report demonstrates that, with the implementation of recommended conditions of consent, the impacts of the development can be mitigated and/or managed to ensure an acceptable level of environmental performance.			
5(a)(vii)	The development is consistent with the principles of ESD as it would provide a RRF on appropriately zoned industrial land.			
5(b)	The Department has assessed the development in consultation with, and giving due consideration to, the technical expertise and comments provided by Georges River Council (Council) and other Government authorities. This is consistent with the object of sharing the responsibility for environmental planning between the different levels of government in the State.			
5(c)	The Department provided the public with opportunity to comment on the development and considered all issues raised in public submissions during its assessment of the application (Section 4).			

3.10. Ecologically Sustainable Development

The EP&A Act adopts the definition of ESD found in the *Protection of the Environment Administration Act 1991*. Section 6(2) of that Act states that ESD requires the effective integration of economic and environmental considerations in decision-making processes and that ESD can be achieved through the implementation of:

- (a) the precautionary principle
- (b) inter-generational equity
- (c) conservation of biological diversity and ecological integrity
- (d) improved valuation, pricing and incentive mechanisms.

The potential environmental impacts of the development have been assessed and, where potential impacts have been identified, mitigation measures and environmental safeguards have been recommended.

As demonstrated by the Department's assessment in Section 5 of this report, the development is not anticipated to have any adverse impacts on native flora or fauna, including threatened species, populations and ecological communities, and their habitats. As such, the Department considers that the development would not adversely impact on the environment and is consistent with the objectives of the EP&A Act and the principles of ESD.

3.11. Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act)

Under the EPBC Act, assessment and approval is required from the Commonwealth Government if a development is likely to impact on a matter of national environmental significance (MNES), as it is considered to be a 'controlled action'. The Applicant undertook a preliminary assessment of the MNES in relation to the development and concluded the development would not impact on any of these matters, and is therefore not a 'controlled action'. As such, the Applicant determined a referral to the Commonwealth Government was not required.

4. CONSULTATION AND SUBMISSIONS

In the EIS, the Applicant applied for a processing capacity of up to 300,000 tpa of waste, with operations occurring 24 hours a day, six day a week. Therefore, initial consultation and comments on the EIS and first RTS were based on this proposal. However, due to concerns raised by the Department, agencies and the public, the Applicant later amended the development application as described in Section 4.3.

4.1. Consultation

The Applicant, as required by the Secretary's Environmental Assessment Requirements (SEARs), undertook consultation with relevant local and State authorities as well as the community and affected landowners. The Department undertook further consultation with these stakeholders during the exhibition of the EIS and throughout the assessment of the application. These consultation activities are described in detail in the following sections.

4.1.1. Consultation by the Applicant

The Applicant undertook a range of consultation activities throughout the preparation of the EIS including:

- a letter to adjoining owners and occupiers, as well as meetings and telephone discussions with owners who expressed an interest in the development
- a meeting on 11 February 2016 with Georges River Council (then Hurstville Council), including Council engineers and planners, to discuss potential impacts in relation to traffic, noise and vibration, dust, waste water impacts, hours of operation and permissibility
- a meeting with the EPA to discuss matters to be included in the EIS when assessing potential impacts regarding noise and vibration, dust, odour and wastewater impacts and controls for leachate management.

The Applicant also met with the Department onsite on 6 July 2017 to discuss outstanding issues regarding the assessment of the application.

4.1.2. Consultation by the Department

After accepting the DA and EIS for the application, the Department:

- made it publicly available from Friday 22 July 2016 until Monday 22 August 2016:
 - on the Department's website
 - at the Department's Information Centre (Bridge Street, Sydney)
 - at Georges River Council (at two offices: Dora & MacMahon Streets, Hurstville and 2 Belgrave Street, Kogarah)
- notified landowners in the vicinity of the site about the exhibition period by letter
- notified relevant State government authorities and Council by letter
- advertised the exhibition in the St George and Sutherland Shire Leader.

4.2. Submissions

The Department received 45 submissions during the exhibition period, including 7 submissions from public authorities and 38 submissions from the general public. A summary of the submissions received is provided in **Table 4**.

Table 4: Breakdown of Submissions by Classification and Respondent

Respondent	Support	Object	Comment	Total
Public authorities	0	0	7	7
Community Groups	0	0	0	0
Individuals	1	36	1	38
Total	1	36	8	45

A summary of the issues raised in submissions is provided within Section 4.2.1 and Section 4.2.2. Each submission is provided in full at Appendix E.

4.2.1. Public Authorities

The Department received 7 submissions from public authorities during the exhibition period, of which none were objections. The submissions received and the issues raised are discussed further below.

The **EPA** identified that insufficient information was provided in the EIS to allow for an adequate assessment of the development's impacts. In particular, the EPA requested further assessment and details regarding:

- impacts from plant and road noise in the evening and night time periods
- leachate, air quality and stormwater management
- emission estimates and proposed emission controls.

Council neither supported nor objected to the development, and requested further detail and assessment on the following matters:

- traffic impact, in particular the management of vehicle queuing to prevent impacts to traffic flow on Hearne Street and swept path diagrams for all required vehicle movements
- traffic and operational noise management
- dust management mitigation
- stormwater management
- compliance with the building height requirements under the HLEP.

Council concluded that generally the scale of the development is incompatible with the objectives of the IN2 Light Industrial zone under the HLEP.

NSW Fire and Rescue (FRNSW) requested further clarification regarding the provision of adequate water pressure to the site, the installation of fire hydrants and adequate stormwater controls to contain contaminated fire water run-off in the event of fire. Clarification and additional information was also requested with regard to the proposed storage of Dangerous Goods on the site. FRNSW provided recommendations regarding requirements for a Fire Safety Study.

NSW Roads and Maritime Services (RMS) advised it had no objections to the development and as such did not recommend any conditions of consent.

The **Office of Environment and Heritage (OEH)** advised it had no objections, as there were no heritage, biodiversity or natural hazard issues connected to the development, and did not recommend any conditions of consent.

Department of Primary Industries (DPI) Water and Agriculture Divisions advised it had no objections to the development and did not recommend any conditions of consent.

NSW Rural Fire Service (RFS) advised it had no comments on the development.

4.2.2. General Public

38 submissions were received from the general public, of which 36 objected to the development, one supported and one raised concerns. Issues raised in the submissions included:

- the suitability of the site's size and location to cater for an increase in processing capacity
- amenity impacts, particularly in relation to road congestion, safety and noise due to the additional traffic generated and impacts on the local road network
- pollution and safety impacts with regard to children, parents and workers at nearby children's play and learning facilities
- the 24-hour operation of the site, with the potential for residents to be impacted by noise during the night time period
- the reduction of air quality and associated health impacts of dust from processing activities in a not fully enclosed shed and uncovered stockpile areas.

Consideration of key issues raised in public submissions is provided in Section 5.5 of this report.

4.3. Response to Submissions and Supplementary Information

On 5 December 2016, the Applicant provided a response to the issues raised in submissions that was accompanied by revised specialist reports, including traffic, noise and vibration, air quality, as well as a Fire Safety Study (see **Appendix F**).

The RTS provided some minor modifications to operational and traffic details, such as a change to the location of the liquefied petroleum gas (LPG) storage area, amendments to site layout to accommodate onsite traffic movements and stacked vehicles, plant area changes, and restriction on the use of Barry Avenue for heavy vehicles. The changes were reflected on updated architectural plans. A draft Construction Waste Management Plan (CWMP) was also provided.

The RTS was provided to key agencies to consider whether it adequately addressed the issues raised. A summary of the agencies' responses is provided below:

- EPA provided recommended conditions of approval for the development. In addition, it provided
 advice regarding the restriction of trucks accessing the facility via Barry Avenue
- Council expressed concerns about the queuing of trucks on the surrounding street network due
 to the vehicle stacking capacity of the site and its restricted size. In addition, Council opposed the
 potential for vehicle and operational noise during night-time hours and the health and amenity
 impacts on surrounding residents
- FRNSW had additional comments on the proposed fire suppression infrastructure and the lack of
 information provided regarding hydraulic design. FRNSW concluded there was not sufficient
 information provided to undertake a full review of the site's firefighting and water containment
 capabilities.

The Department also raised a number of unresolved issues regarding traffic controls, 24-hour waste delivery, leachate management, stockpile capacity and the waste separation process.

Amendments to the Development Application

Due to the concerns and issues raised by the general public and government agencies, the Applicant reconsidered and revised the scope of the application. On 6 April 2017, a second RTS report, including supporting noise and traffic studies and updated architectural plans, was provided to the Department that detailed a number of amendments to the development, including:

- a reduction in processing capacity from 300,000 tpa to 220,000 tpa
- hours of operation (including delivery and removal of waste) reduced from 24 hours a day, six days a week to 6 am-10 pm only, six days a week
- prohibiting all vehicles accessing the site via Barry Avenue
- removal of bin storage on site to increase space available for vehicle maneuvering
- an increase in operational staff numbers from 12 to 13 per shift due to the addition of a traffic controller at the site entrance
- update of Capital Investment Value from \$2,466,000 to \$3,745,020.

In accordance with Clause 55 of the Regulation, on 31 October 2017 the Applicant officially amended the development application to reflect the above changes.

The agencies reviewed the updated information and amendments to the development supplied with the 6 April 2017 RTS and provided the following comments:

- **Council** indicated support for the reduction in processing volume and hours of operation and provided some recommendations for conditions of consent pertaining to traffic and noise issues
- NSWFR provided recommended conditions of consent for the development.

The Department requested additional information regarding stockpile size, vehicle stacking, waste storage details and procedures, job creation, and MNES.

On 13 July 2017, additional information, including updated architectural plans and additional traffic information was submitted to the Department. This information was forwarded to the EPA for comment, which advised it was generally satisfied and provided amended recommended consent conditions.

The Department has considered the issues raised in submissions, the two RTS documents and the supplementary concerns raised, in its assessment of the development.

5. ASSESSMENT

The Department has considered the EIS, the issues raised in the submissions, the Applicant's three RTS documents and supplementary information in its assessment of the development. The Department considers the key assessment issues are:

- traffic
- site and operational management
- noise and vibration.

A number of other issues have also been considered. These issues are considered to be minor and are addressed in **Table 14** under Section 5.4.

5.1. Traffic

The expansion and increase in processing capacity of the RRF would generate additional truck movements to and from the site. These additional truck movements have the potential to impact on the safety, capacity and efficiency of the local road network.

The site is located on Hearne Street, which is a local road with a two-way, two lane configuration within a 12 m wide carriageway that connects to Boundary Road to the north-east and Barry Avenue to the south (see **Figure 8**). Boundary Road is a classified Regional Road with a two-way, two lane configuration which connects to Forest Road to the south of the Hearne Street intersection. Forest Road is a classified State Road with a two-way, six lane configuration that provides connection to the M5 Motorway via King Georges Road to the east. The M5 motorway is located approximately 4 km north of the site by road.

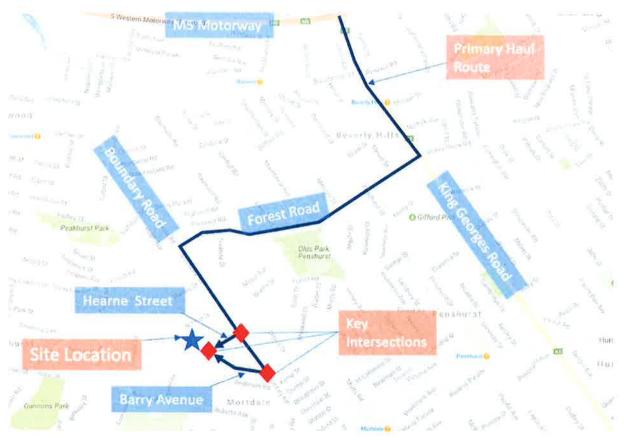


Figure 8: Haul Routes and Key Intersections

Access to the site is currently gained via a two-way driveway off Hearne Street at the point where Hearne Street bends to the south towards Barry Avenue. The Applicant has proposed to modify the design of the site's access to better accommodate the turning of trucks entering and exiting the site. This entails the removal and concreting of a small landscaped area to the south of the existing driveway thus increasing its width to 13.5 m.

Concern about traffic impacts was one of the major issues raised by residents objecting to the development. As discussed in Section 1.2, the original application requested a processing capacity of 300,000 tpa, with hours of operation (including delivery and removal of waste) 24 hours a day, six days a week. Therefore, the Traffic Impact Assessment (TIA) prepared by GTA Consultants provided in the EIS assessed operational traffic at that level. Additional revised information on operational traffic movements at the reduced level of 220,000 tpa of waste, with operations occurring 6 am–10 pm, six days a week was provided by the Applicant and its new traffic consultants, The Transport Planning Partnership (TTPP), in April and July 2017.

The TIA provided a quantitative analysis of the potential traffic impacts of increasing the existing production capacity of the facility. This included a SIDRA analysis of the performance of certain key intersections, swept path movement plans for some of the trucks proposed to access the site, including the maneuvering of trucks into and through the site. The TIA concluded the additional traffic generated by the proposed development would not be expected to compromise the safety and function of the road network in terms of intersection performance or queuing of trucks in Hearne Street.

The Department's assessment of the traffic impacts of the development has been separated into three main issues, namely, construction traffic and parking, operational traffic generation, and truck maneuvering and queuing.

Construction Traffic and Parking

Construction traffic was considered in the TIA and the Construction Waste Management Plan (CWMP) prepared by Dewcape, dated 11 November 2016. During the construction and demolition phase, the existing waste transfer facility would cease operations, with construction related vehicles being the only traffic accessing the site.

It is estimated there would be up to 40-60 construction staff onsite at any one time. The Applicant proposes to provide 20 off-street parking spaces for staff in the north-western corner of the site. Due to the limited availability of off-street parking, staff would be encouraged to carpool and use public transport to reach the site.

During the 34-week construction period, vehicle movements would be variable depending on the work being undertaken and would range between 14 and 46 vehicle movements per day. Of this, it is expected that a maximum of six vehicle movements per day would be trucks.

Vehicle or truck movements in the TIA have been assessed based on a two-way movement. A two-way movement consists of a vehicle entering the site (counted as one movement) and the same vehicle leaving the site (counted as one movement). As such, a vehicle attending and leaving the site is counted twice in a two-way movement analysis. The Department considers using a two-way movement is beneficial as it accounts for the actual traffic impact of the development on the surrounding road network.

Construction would occur during normal construction hours, with the peak periods for construction traffic caused by staff arriving and leaving the site at the beginning and end of each work day. The staff arrival and departure times would not fall within the road network peak periods for the Mortdale area.

None of the submissions received posed concerns with construction traffic and parking.

The Department accepts the Applicant's assertion that construction traffic volumes are low and represent a substantial reduction in the existing 204 traffic movements per day at the site (102 in, 102 out). Considering the facility will not be in operation, the Department does not believe the construction phase of the development would have a significant impact on the surrounding road network in terms of traffic volumes.

However, the Department is concerned that the provision of only 20 construction staff parking spaces on site for between 40 and 60 construction staff would saturate the off-street parking provision in the local road network, which could impact on other businesses in the area. To avoid this, it is imperative that all construction related vehicles are parked within the site. For this reason, the Department has recommended a condition of consent requiring the preparation of a Construction Traffic Management Plan (CTMP) which would designate an adequate parking area within the site for the projected number of staff required for each phase of construction. The CTMP would also be required to identify that construction haul routes would follow operational haul routes and identify traffic controls to avoid conflict with road users and the public. Furthermore, the Department has recommended a condition of consent which prohibits construction staff from parking within the local road network.

The Department's assessment of construction traffic and parking concludes that with adequate controls in place, the construction phase of the development would not impact the safety, capacity or efficiency of the local road network.

Operational Traffic Generation

Operational traffic impacts were addressed in the TIA prepared by GTA Consultants, with updated information supplied by TTPP. TTPP predicted the truck movements based on the throughput of 220,000 tonnes, with hours of operations limited to 6 am–10 pm, Monday to Saturday (see **Table 5**). The prediction used the proposed spread of truck types and their average load weight originally indicated by GTA (see **Table 6**).

Table 5: Predicated Truck Movements

Direction	Existing (30,000 tpa)	220,000 tpa
	Truck Movements	Truck Movements
Inbound waste	185	284 ¹
Outbound waste	19	52
TOTAL (per day)	204	336

The existing facility currently generates approximately 204 truck movements per day at a processing capacity of 30,000 tpa. The expanded operations at 220,000 tpa is predicted to generate 336 truck movements per day, an overall increase of 132 truck movements per day. The average truck

¹Note: some inbound trucks delivering waste would also collect outgoing waste.

movements per hour was predicted to be 24. The TIA predicts the operational peak hour for the proposed development to be between 11 am and 12 pm, resulting in 42 truck movements in the hour.

The TIA indicates the vast majority of trucks would access the site via the M5 motorway exiting onto King Georges Road, travelling south to Forest Road / Stoney Creek Road then west to Boundary Road and south to Hearne Street (see **Figure 8**). However, due to the nature of the facility accepting C&D waste from sites in various locations throughout the Georges River LGA and adjoining LGAs, a single haul route for waste deliveries cannot be identified. As such, the TIA focused on the key intersections in the immediate area which all truck movements would utilise, including Hearne Street and Boundary Avenue, Barry Avenue and Boundary Avenue and Hearne Street and the site entrance (see **Figure 8**).

To analyse the performance of the key intersections, SIDRA modelling was undertaken during the AM peak period of 9 am-10 am and the site peak period of 11 am-12 pm. The results found that all the key intersections are currently performing to a good standard (Level of Service (LoS) A, B and C) (see **Table 7**). The TIA suggested that based on the current high performance of the intersections, the additional traffic generated by the development would not cause these intersections to reach capacity. The TIA concluded the predicted number of trucks generated by the increase in processing capacity could not be expected to compromise the safety or function of the surrounding road network.

Council raised concerns regarding the potential impact the increase in truck movements generated by the development could have on the road network in the industrial area. In particular, Council was concerned with the increased traffic generated by the development on Boundary Road and the proposed use of Barry Avenue. The EPA were concerned with the use of Barry Avenue to access the site and the capacity of Boundary Road due to potential road noise impacts. Several public submissions also raised concerns regarding the potential impact of the increased truck movements on the safety, capacity and efficiency of the local road network. The RMS did not raise any concerns regarding operational traffic.

The Department questioned the Applicant's truck movement predications, as the development equates to around a 700% increase in the waste processing of the current facility, whereas the number of predicted truck movements only equates to an additional 132 movements or a 65% increase. The Department also raised concerns the TIA only undertook SIDRA modelling of the existing situation and did not include SIDRA modelling of the key intersections under the worst-case scenario traffic generation of the proposed development in full operation.

In a RTS, the Applicant provided confirmation that no trucks accessing or leaving the site would utilise Barry Avenue. This would be ensured through briefings provided to drivers during mandatory inductions, the installation of a 'left turn only' sign at the exit to the site and the use of a traffic controller to direct outbound trucks to use Hearne Street only. The Applicant also advised that in the unlikely scenario a truck utilises Barry Avenue, the traffic controller would inform them of the required route and record the vehicle registration. The Department has recommended a condition of consent prohibiting the use of Barry Avenue.

The RTS also contained a justification for the predicted truck movements provided in the TIA. The Applicant suggests the existing facility in its operations as a waste transfer station predominantly caters for small and medium rigid trucks with low tare weights (average of 5 tonnes) carrying lighter comingled wastes. The Applicant argues the predominant purpose of the increase in processing capacity is to carry out resource recovery of C&D waste from large construction and infrastructure projects. These projects would require the use of larger sized trucks, including semi-trailers and truck and dog combinations with average tare weights of 27.3 tonnes to carry heavier waste streams including soils, bricks and concrete. As such, the Applicant suggests the introduction of these trucks to transport heavier waste streams has the effect of limiting the overall truck movements required for the additional processing capacity. The Applicant also indicates several larger sized trucks delivering waste to the site would also be utilised to dispatch waste from the site in the same trip, which would further limit the number of trucks needed for the intended processing volume.

Table 6: Breakdown of Truck Types and Load Weight

Vehicle Weight Classification	Vehicle Type	Avg. Net Load	Proposed Split %	Average Daily No. of Vehicles
5 t - 12.5 t Tare		5 t	45%	152
12.5 t – 15 t Tare	Heavy	14.26 t	40%	134
>15 t Tare		27.3 t	15%	50
TOTAL				336

The RTS contained SIDRA modelling of the key intersections including the worst-case scenario traffic generation of the proposed development in full operation (220,000 tpa processing capacity). The SIDRA analysis illustrates the key intersections of Boundary Road and Hearne Street and the site access at Hearne Street would continue to operate at a good standard when the facility is in full operation (LoS A, B and C) (see **Table 8**).

Table 7: Existing Conditions SIDRA Modelling Results

Intersection	Peak Period	Degree of Saturation (DoS)	Average Delay	Level of Service (LoS)
Boundary Road / Hearne Street	am Road Network Peak Hour	0.43	35	С
	pm Road Network Peak Hour	0.45	28	В
Hearne Street / Site Access	Site Peak Hour	0.05	8	А

Table 8: Future Conditions SIDRA Modelling Results

Intersection	Peak Period	Degree of Saturation (DoS)	Average Delay	Level of Service (LoS)	
Boundary Road / Hearne Street	am Road Network Peak Hour	0.45	36	С	
	pm Road Network Peak Hour	0.46	29	С	
Hearne Street / Site Access	Site Peak Hour	0.06	8	A	

Lastly, the RTS contained tube counts for Boundary Road which showed that both the northbound and southbound traffic flows during peak periods are below the operational capacity for the road type in RMS's Guide to Traffic Generating Development, which is 900 vehicles per hour (see **Table 9**).

Table 9: Tube Counts for Boundary Road in Both Directions

Peak Period	Existing Traffic Flows on Boundary Road		
	Northbound (vehicles/hour)	Southbound (vehicles/hour)	
AM peak period (9 am-10 am)	703	658	
PM peak period (4 pm-5 pm)	742	794	

Council and the EPA were satisfied with the Applicant's response and did not pose any additional concerns regarding operational traffic generation.

The Department is satisfied with the rationale used by the Applicant to predict truck movements for the intended processing capacity, as it is based on trends evident at other facilities and the waste industry in general. However, the proposed development still represents a modest increase in heavy vehicle traffic to the site and on the surrounding local road network. Several public submissions raised concerns regarding the impact the proposed development would have on the traffic on Boundary Road during peak hours (9 am–10 am and 4 pm–5 pm). The Department notes that the site's operational peak (11 am–12 pm) occurs outside of the road network peak hours. The Department also notes that during the AM peak hour, the development would only add an additional 32 truck movements on Boundary Road which is presently operating at a level of 100-200 vehicles per hour below RMS's operating capacity for a two-way road. For these reasons, the Department is satisfied the performance of Boundary Road and the key intersections would not be adversely affected by the predicted increase in truck movements and no road infrastructure or other upgrades are needed in this case.

However, to ensure any impacts are effectively managed, some controls are recommended to manage the additional truck movements. The Department has recommended conditions of consent requiring the Applicant to prepare a Driver Code of Conduct to minimise traffic impacts on the local road, including requiring the use of the specified routes and prohibiting the use of Barry Avenue. Further, the Applicant will be required to prepare a Traffic Control Plan (TCP) which will detail the onsite measures to be implemented to control the movement of trucks out of the site including providing a 'left turn only' sign and traffic controller at the exit. Lastly, a Traffic Management Plan (TMP) would also to be prepared as a subcomponent of a wider Operational Environmental Management Plan (OEMP) for the site. The TMP must include measures that are to be implemented to ensure road safety and efficiency, including prioritising the removal of recycled products and residual waste outside of the road network peak hours (6 pm–10 pm).

Truck Maneuvering and Queuing

It is important that waste facilities are of a size and layout which allows for the unhindered and efficient maneuvering of all sizes of trucks through the site in a manner which avoids potential queuing within the road reserve. Also, access arrangements of waste facilities must be designed and road configurations capable of allowing all sizes of vehicles to enter and exit the site in a forward direction without affecting the safety and efficiency of the road.

The TIA, prepared by GTA Consultants, provided a swept path analysis for a 19 m semi-trailer maneuvering through the site. The TIA only contained broad statements regarding the appropriateness of the size and layout of the site to cater for the amount and type of heavy vehicles which would be contained on the site during peak periods.

Council raised concerns that in the absence of a robust assessment including a truck stacking plan and a detailed swept path analysis, it was unclear if the size and layout of the facility would cater for the number of trucks accessing the site during peak periods based on the proposed processing volumes. Council also raised concerns that internal vehicle stacking would conflict with the required maneuvering of trucks picking up processed waste.

The Department also raised concerns that the TIA did not provide enough information to justify the site as designed was suitable for the proposed truck volumes to avoid queuing within the road or delays in processing. In particular, the Department required the Applicant to provide:

- a revised swept path analysis of all types of proposed trucks maneuvering unhindered throughout the site
- a swept path analysis of all combinations of trucks entering and exiting the site from and into the appropriate lane within Hearne Street in a forward direction
- a time-step analysis showing the maximum number of trucks that will be onsite during peak periods
- a vehicle 'stacking plan' indicating the proposed areas for trucks to wait (stack) onsite and the number of trucks that could be stacked onsite at one time without impacting the maneuvering of vehicles
- proposed traffic controls to avoid conflicts at the access and through the site.

As previously discussed, the Applicant provided a RTS including a revised traffic analysis prepared by TTPP which responded to the above concerns raised in the submissions and by the Department. The traffic analysis prepared by TTPP included a more comprehensive swept path analysis, a time-step analysis, vehicle stacking plans showing the location of truck waiting areas outside maneuvering areas and a draft TCP.

The Applicant's revised swept path analysis showed a combination of trucks entering and exiting the site from and into Hearne Street in a forward direction. The swept path plans also included a proposed island separator to ensure vehicle movements could be carried out in accordance with the analysis (see **Figure 9**). The Applicant also provided a revised swept path analysis of vehicles maneuvering within the site (see **Figure 10**).

To accommodate the movements and stacking of trucks, the Applicant removed the 'bin storage' area previously proposed adjacent to the western fence and relocated the fuel point further to the north. The Applicant's stacking plans indicated the site could cater for the stacking of a maximum of 31 trucks on site at any given period without hindering the maneuvering of semi-trailers or truck-dog-combinations through the site (see **Figure 11**).

The results of the Applicant's time-step analysis were informed by the stacking plan. The analysis indicated that during typical operations a truck would spend on average 25 minutes on site between entry and exit. Based on this analysis, each stacking space would accommodate 2.4 vehicles in one hour. As such, the Applicant argues the proposed stacking plan could accommodate a maximum of 74 trucks in any hour (31 x 2.4). During typical operations, nine of the 31 stacking spaces would be occupied, leaving 22 spaces available. As the maximum number of vehicles expected during the peak operation of the facility is 21, the Applicant's suggests the stacking arrangements are more than sufficient under normal circumstances.

The Applicant also carried out an analysis of the saturation of stacking spaces during an a-typical or worst-case scenario in which a truck would spend an average of 50 minutes on site between entry and exit (see **Figure 12**). The analysis of the worst-case scenario indicated that 18 stacking spaces would be occupied, leaving 13 spaces available. Under this scenario, each stacking space would

accommodate 1.2 trucks in one hour, thereby accommodating a maximum of 37 trucks in any hour, which would also be sufficient for the 21 trucks expected during the peak operations hour.

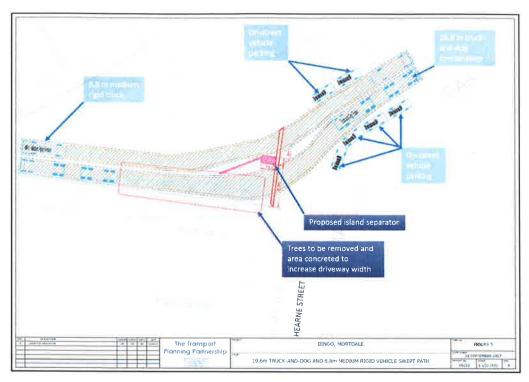


Figure 9: Swept Path Analysis - 19.6 m Truck-and-Dog Combination Entering and Medium Rigid Vehicle Exiting

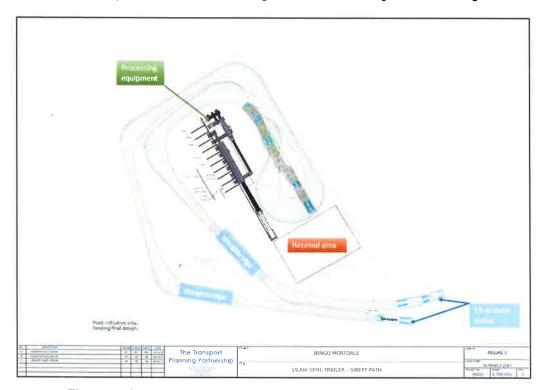


Figure 10: Swept Path Analysis - Semi-Trailer Manoeuvring Through the Site

The Applicant indicates the conservative assessment of truck stacking in the RTS demonstrates the site has sufficient capacity onsite to accept trucks at the facility in typical and a-typical operating conditions without causing an impact on Hearne Street, including the queuing of trucks.

However, to ensure the site operates in the manner which has been detailed in the RTS, the Applicant has proposed the following mitigation measures:

- incorporate the vehicle stacking plan and associated management protocols to allow for up to 31 vehicles to be held on site at any one time
- maintaining internal vehicle swept paths through line-marking to prevent encroachment
- implementation of a TCP.

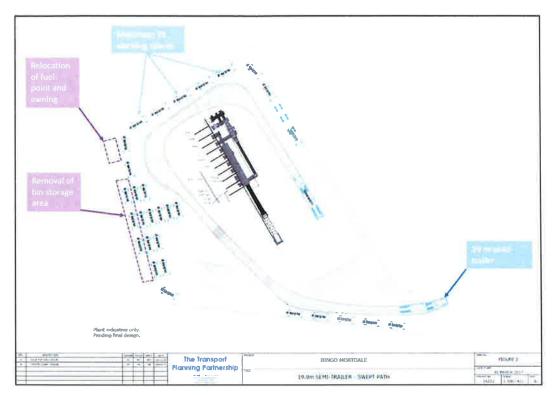


Figure 11: Truck Stacking Plan and Semi-Trailer Swept Path Analysis

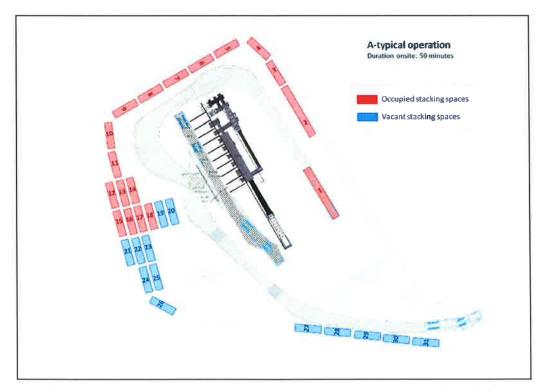


Figure 12: Saturation of Truck Stacking During A-Typical Operations (avg. truck duration of 50 mins on site)

Council was satisfied with the RTS, but raised concern regarding the ability of the site to handle the removal of materials via semi-trailers while maintaining sufficient stacking spaces. The Applicant responded by reiterating the transport of materials from the site would be scheduled outside peak operational hours, primarily between 6 pm and 10 pm, to avoid times when stacking spaces are needed.

Council noted that based on the information provided it appeared unlikely that queuing would occur and recommended a condition of consent which prohibits any vehicle accessing the site from queuing within Hearne Street. Council also recommended another condition requiring the preparation of a TMP, which would contain controls to ensure queuing in Hearne Street is avoided.

Although the Department raised concerns with the TIA submitted with the EIS and required several additional assessments and analysis to be carried out, the Department considers the Applicant has provided the necessary information to carry out a robust assessment of truck maneuvering and stacking.

The Applicant's swept path analysis appears to provide adequate justification that the largest size of trucks proposed to access the site can maneuver unhindered in the event that 31 other trucks are stacked within the site. However, a swept path analysis of two 19 m + trucks entering and exiting the site at the same time was not provided and the Applicant has conceded that this movement would not be possible given the narrowness of Hearne Street and the location of on-street parking. Although only 7% of the trucks accessing the site would be 19 m + and the majority of these trucks would be transporting waste outside of peak hours, there would remain a possibility of this conflict occurring. To avoid potential safety issues or queuing in Hearne Street should two 19 m + vehicles reach the access / exit at the same time, the Department has recommended a condition of consent requiring the TCP to include provisions for requiring the traffic controller to stop the exiting truck to allow the entering truck to maneuver into the site unhindered.

The time-step analysis and stacking plans appear to show that, even during a worst-case scenario in which trucks remain on the site for 50 minutes, there would be no queuing within Hearne Street. The Department agrees with Council that adequate measures and contingencies need to be in place to avoid queuing within Hearne Street during a number of situations. For instance, should a truck break down within the site or at the entrance, protocols must be in place to re-direct trucks to other facilities to avoid queuing. Such protocols would include contacting truck drivers remotely and traffic controllers directing trucks away from the facility. The Department has recommended a condition of consent requiring the preparation of a TMP and TCP detailing these and other measures to avoid any queuing within Hearne Street. A further condition has been recommended prohibiting any vehicles accessing the site from queuing or parking within Hearne Street. Should the facility operate within the confines of the mitigation measures provided by the Applicant and the recommended conditions of consent of the Department and Council, it is unlikely the development would compromise the safety and efficiency of Hearne Street.

Conclusion

Due to the Department's, Council's and the public's concerns regarding traffic generated by the development, particularly at night, the original application was amended, resulting in fewer traffic movements than originally proposed and no traffic between the hours of 10 pm and 6 am.

The Department's assessment concludes that, subject to the conditions recommended below and the Applicant's mitigation measures, site access and parking arrangements are satisfactory and traffic generated by the development can be accommodated on the local and regional road network without any significant impacts on safety or LoS. Maneuvering of vehicles onsite is satisfactory, subject to implementation of the stacking plan and direction from the site controller. Provisions for construction traffic management and parking are also considered to be adequate.

The Department notes RMS raised no objection to the development.

The Department has recommended conditions of consent to manage construction and operational traffic impacts, including the preparation of a detailed Construction Traffic Management Plan and Traffic Control Plan to ensure construction and operational traffic and parking is managed appropriately.

5.2. Site and Operational Management

A key concern raised by the Department and the EPA related to the ability of the site to handle a processing capacity of 300,000 tpa and its associated vehicle traffic, particularly given its size and proposed design. To alleviate a number of these concerns, the Applicant agreed to decrease the annual waste throughput to 220,000 tpa and reduce the hours of operation to exclude night-time hours. However, due to the relatively small size of the site, the narrowness of Hearne Street and the location of the accessway on a bend and the size and type of recycling equipment proposed, the suitability of

the site remains a key issue of the Department and the EPA, even at a reduced processing capacity. As such, the Department has rigorously assessed the development's capabilities and processes to handle 220,000 tpa of waste from receipt through to dispatch. This assessment is presented in Table 10 below.

The EIS and RTS provided information regarding the receiving, handling, separating and dispatching of incoming waste streams. This included details of waste composition, as well as where and how waste materials would be stored before and after processing. A summary of the waste processing operation and its outputs is provided in Section 2.2.

Aspect	Assessment
Ability to process proposed amount of waste	 Bingo's machinery manufacturer, SKALA, has advised the processing machinery would be configured to process up to 70 tonnes of waste per hour. The actual maximum processing capacity of the machinery is 100-150 tonnes per hour and the machinery would be brand new and purpose-built for its application. maintenance of the SKALA machinery would occur for one hour per day (30 minutes at the start of each shift). working 15 hours per day, six days a week, equates to 327,600 tpa maximum throughput, which represents a 49% time surplus above the time required to process 220,000 tpa. the Department considers this would be sufficient to absorb unexpected processing machinery breakdown time without compromising the ability to process all incoming waste. the Department is satisfied the processing capability of the RRF would be sufficient to
Unexpected processing machinery shutdown	 ensure efficient and timely processing of all incoming waste. breakdown or blockage of processing machinery has the potential to cause a build-up of unprocessed waste in the incoming waste receival area. based on a throughput of 220,000 tpa, an average of 4,230 tonnes per week, or 705 tonnes of unprocessed waste per day would be received. the incoming waste receival area is 574 m² and has a holding capacity of between 2,891 tonnes and 6,196 tonnes, depending on whether the type of waste received is 'light' or 'heavy'. Based on the composition of incoming waste from Table 2, the Department has conservatively assumed 70% of waste would be 'heavy', thereby the average holding capacity in the receival area would be 5,203 tonnes. This represents more than one week's worth of incoming waste. as the waste to be received is non-putrescible and would be stored under cover within the processing building, there is a low likelihood that odour issues would arise due to any waste build-up in the receival area (see Section 5.4). the Applicant controls its fleet of trucks via a real-time tracking system, which can instantly contact drivers and advise them to delay approach or divert their load to another facility. Due to its broad network of recycling facilities throughout Sydney (see Figure 13), Bingc can redirect waste material to other recycling facilities if one facility is unavailable for a period of time. This option to temporarily shut down the site to incoming waste would prevent waste build-up in the receival area as it approaches its maximum storage capacity there is also capacity to 'stack' up to 31 trucks on site (see Section 5.1). Conservatively assuming 10 tonnes is loaded on each truck, there would be capacity to store up to 310 tonnes of incoming waste in the trucks, however this is considered a very short-term measure and would represent a worst-case scenario. outgoing waste would be removed during processing machinery shutdown to ensure storage ba
Unexpected failure of removal of waste	 if trucks are unable to remove processed waste, there is the potential for waste to build up in the finished waste bunkers. due to the mixed nature of the incoming waste, when one bunker becomes full to capacity it would be necessary to stop processing waste until that bunker can be emptied to preven overflow. it is expected that any subsequent build-up of waste in the receival area due to processing stop would be dealt with as described above.
Unexpected finds of non-	 the Department is therefore satisfied this situation could be adequately managed. from time to time it can be expected that non-conforming items such as asbestos, batteries fire extinguishers, tyres and gas bottles may be encountered in incoming waste.

Aspect	Assessment		
Aspect conforming waste	 the Applicant has developed procedures to deal with unexpected finds of NCW and such items would be handled in accordance with these: SOP-YA018 Rejecting Loads of Non-Complying Waste / Prohibited Materials SOP-YA017 Visual Inspection of Inbound Waste SOP-YA020 Unexpected Asbestos Finds SOP-YA030 Asbestos at Recycling Centres OPL-YA029 Storage of Hazardous Chemicals – Waste OPL-YA030 Storage of Hazardous Chemicals – Special Waste storage of NCW would be in a covered skip or cage as described in Section 2.2, with removal every day. the Department is satisfied sufficient procedures and processes are in place to adequately manage unexpected finds of NCW. 		



Figure 13: Location of Bingo Recycling Facilities in the Sydney Basin

Inappropriate management of C&I and C&D waste material entering and leaving the RRF has the potential to cause adverse impacts on the surrounding area and the environment. Approximately 75% of waste accepted at the RRF would comprise C&D waste. The EPA's consultation paper Standards for Managing Construction and Demolition Waste in NSW (the draft Standards) outlines proposed waste industry reforms, including standards for licensed C&D waste facilities. Whilst the proposed Standards are currently in draft form, it is considered appropriate for facilities processing large quantities of C&D waste to address the proposed requirements, as they represent 'best practice' for the industry. The Department's assessment of compliance with the draft Standards considers the development would adequately address the EPA's C&D draft Standards and is presented in **Table 11**.

Table 11: Assessment of the Development Against Proposed EPA Draft C&D Waste Management Minimum Standards

Requirement	Assessment		
Standard 1: Inspection requirements	 the draft Standards requires three inspection points – at the weighbridge, at the receival area ('tip and spread'), and at the waste storage area. Staff must also be appropriately trained to undertake inspections. the Applicant's procedures SOP-YA018 Rejecting Loads of Non-Complying Waste / Prohibited Materials and SOP-YA017 Visual Inspection of Inbound Waste describe incoming waste inspection protocols at the site. These two procedures document steps undertaken by appropriately trained staff that conform with the inspection requirements of the minimum standards. 		
Standard 2: Sorting requirements	 as described in Section 2.2, conforming waste arriving at the facility would undergo sorting in SKALA machinery that has been designed to separate waste material and 		

Requirement	Assessment			
	discharge it into dedicated material storage bays before transport to a waste facility that can lawfully receive the waste.			
Standard 3: No mixing of waste	the RRF has been designed so that unprocessed and processed (inspected and sorted) waste would not come in contact with one another.			
Standard 4: Storage requirements	 the development provides separate, dedicated storage areas for the following waste materials: incoming waste – in designated incoming waste receival/stockpile area contaminants (non-conforming waste) – covered skip bin (asbestos) and covered and bunded cage (used batteries, gas bottles and fire extinguishers) separated soil, brick and concrete, timber, scrap metal, plastic, paper and cardboard, and green waste – storage bays on the south-western side of the processing building plasterboard – covered skip bin inside the processing building residual, separated waste – storage bays on the south-western side of the processing building storage bays and bins would be clearly labelled with their waste type. NCW would be removed every day to a facility lawfully permitted to accept that waste type. all waste stockpiled or stored on site would be stored under cover. 			
Standard 5: Transport requirements	 pursuant to implementation of all the requirements above, C&D waste would not be transported from the RRF unless it has been inspected, sorted and stored in accordance with the standards as described in Section 2.2, any load of waste transported from the RRF would be of a single waste type. 			

The Applicant has committed to a number of management measures to ensure efficient and effective handling of waste:

- scheduling and tracking of waste movements (in and out) to ensure smooth waste handling
- adopting appropriate procedures relating to the acceptance, handling and removal of operational waste
- implementing a proactive, planned machinery maintenance regime, regular inspections and good housekeeping practices to minimise unplanned facility downtime.

These commitments are noted and have been included as part of the Applicant's proposed management and mitigation measures.

The EPA had no comments on the general waste management aspects of the development, however provided recommended conditions of consent relating to waste types to be received and the permitted locations of waste storage and processing areas. One of the EPA's recommended conditions requires garden waste to be stored in a 35 m³ covered skip bin and this has been included as a condition of consent.

The Department's assessment in **Table 10** and **Table 11** was undertaken using a conservative approach to the RRF's capabilities to process waste in a timely and efficient manner. The Applicant's main contingency to ensure a back-up of waste does not occur is the redirection of incoming waste to other sites. The Department notes the Applicant is a large waste management company that predominantly specialises in C&D and C&I waste processing and has been operating RRFs throughout New South Wales for over 10 years. Currently, Bingo operates eleven facilities in Sydney, the Hunter and Illawarra regions, eight of which are in the Sydney basin (see **Figure 13**). Bingo is therefore in the unique position of having a network of RRFs throughout Sydney to which it can send waste that temporarily cannot be accommodated at the Mortdale RRF. The Department considers the Applicant has sufficient appropriate experience and capacity to manage the diversion of waste to other facilities from time to time if required, however will require the Applicant to develop a procedure for diversion of waste to other facilities during unexpected disruption, including receival area capacity triggers and timeframes.

Other important operational waste aspects of the development relate to the appropriate storage and transport of waste. The Department is satisfied the purpose-built storage bays, skips and cages proposed would be of an appropriate size and design and in appropriate locations to facilitate storage and removal of waste in an efficient manner. Combined with the onsite logistics described in Section 5.1, such as use of site controllers and limiting removal of outputs and residual waste to outside of the

RRF's peak times, the Department considers the proposed operational waste management regime to be appropriate.

Therefore, the development, subject to implementation of the proposed management and mitigation measures and adherence to the recommended conditions of consent, would manage waste appropriately on site. Recommended conditions of consent have been included requiring preparation of an ongoing Waste Management Plan (WMP) to the satisfaction of the Secretary.

The Department's assessment concludes the development:

- has robust and appropriate maintenance, waste handling and contingency procedures in place that are suitable to ensure the satisfactory functioning of the RRF
- complies with the draft Standards for managing construction and demolition waste in NSW
- satisfies the requirements of the WARR Strategy by contributing to and exceeding the target recycling rates of 70% and 80% for C&I and C&D waste respectively.

The Department has recommended a condition of consent which requires the preparation of an ongoing WMP. The WMP would include details of stockpile limits in the incoming waste receival area, adoption of procedures for diversion of waste during unexpected machinery breakdown, and requirements for NCW handling and removal.

5.3. Noise and Vibration

The development has the potential to emit noise and vibration impacts during both its construction and operational phases, which could impact on the amenity of the locality.

Construction Noise and Vibration

Construction noise and vibration were addressed in a Construction Noise and Vibration Management Plan (CNVMP) that was prepared by SLR in accordance with the Interim Construction Noise Guidelines (ICNG), Assessing Vibration: technical guideline, British Standard 7385: Part 2- 1993, and German Standard DIN 4150: Part 3 – 1999. No agencies or public submissions were concerned with potential construction noise impacts.

The CNVMP included a quantitative assessment of construction noise, noting construction noise would be generated by construction plant such as hand tools, trucks, saws and excavator/loader machinery. The recommended site-specific noise management level (NML) for the nearest residential receiver (R6) during construction hours (LA_{eq(15mins)}) is 51 dBA.

Using a SoundPLAN model, the NVIA predicted that, under a worst-case scenario of all construction machinery working simultaneously, noise levels at nearby residences (R1-R16) (see **Figure 14**) would comply with the construction NMLs.

Operational noise

The development has the potential to generate noise during its operational hours which could impact the amenity of the locality. The primary noise sources would be:

- heavy vehicle movements to, from and within the site
- staff vehicle trips
- unloading of received materials
- use of operational vehicles (front-end loaders, excavators, skid steers) for loading waste
- use of waste processing machinery (SKALA)
- loading of processed recyclable and residual waste material into trucks for removal.

Waste receival and processing would be undertaken inside the site's large industrial building, however loading of trucks with material for dispatch would occur outside in the yard.

A noise and vibration impact assessment (NVIA) for the development's operation was prepared by SLR in accordance with relevant NSW guidelines, including:

- noise Industrial Noise Policy (INP) and Road Noise Policy (RNP)
- vibration EPA Assessing Vibration: A Technical Guideline (AVTG).

Road traffic noise and operational noise were significant concerns of the public during the exhibition of the EIS. Council was also concerned about potential road traffic noise impacts on residents, particularly caused by heavy vehicles during night-time hours at the Hearne Street/Boundary Road intersection, on

Boundary Road approaching Forest Road, and on Barry Avenue. The EPA requested clarification regarding methodologies used in the noise model.

A revised NVIA was provided in April 2017 that assessed the noise and vibration impacts of the amended application. The Department's, agencies' and public's original concerns related to night-time (24-hour) operations and the number of trucks accessing the site. Therefore, the overall reduction in the operational hours and truck movements mitigated a number of the noise impact issues that were originally raised. Council confirmed it was satisfied that limiting the hours of operation and not using Barry Avenue would ensure that surrounding residential receivers would not be unreasonably impacted by traffic or operational noise. The EPA had no further comments regarding operational noise.

The Department's assessment below of operational noise and vibration considers the noise impacts of the amended application.

As part of the NVIA, background unattended noise monitoring was undertaken to determine the ambient noise environment at the nearest sensitive receiver, R6 (27 Barry Avenue) (see **Figure 14**). To identify noise sources contributing to the ambient noise environment, operator attended noise measurements and observations were taken at receivers R4 (106 Boundary Road) and R6.

Using the processed results of the unattended noise monitoring, project-specific noise criteria were developed, as prescribed in the INP. These criteria related to intrusiveness, amenity, amenity classification, sleep disturbance, traffic noise, and vibration (human comfort). As the RRF would commence processing operations at 6 am, the NVIA considered it to be overly stringent to expect such operation to be assessed against the night-time criteria. In accordance with Section 3.3 of the INP, a morning shoulder period of 6 am-7 am was included. For each assessment period, the lower, more stringent, of the amenity or intrusiveness criteria was adopted and carried forward to the rest of the assessment.

To predict noise levels at sensitive receivers, a SoundPLAN model was developed that generated noise emission levels considering the source sound power levels, distance to nearest receivers, ground absorption, air absorption and shielding from the processing building, as well as meteorological conditions. The model was based on a worst-case scenario where all processing machinery and plant were operating simultaneously. Three different operational scenarios were modelled over differing time periods (morning shoulder, daytime and evening) that incorporated the anticipated worst-case level of noise-generating activity. The predicted operational noise levels and noise criteria for each receiver shown in **Figure 14** is presented in **Table 12**.

Table 12: Predicted Operational Noise Levels (dBA) and Criteria

	Morning Shoulder 6 am–7 am	Day 7 am-6 pm	Evening 6 pm–10 pm	Sleep disturbance Morning Shoulder
Receiver	LA _{eq} (Criteria 44)	LA _{eq} (Criteria 47)	LA _{eq} (Criteria 43)	6 am–7 am LA _{max} (Criteria 54)
R1	30	37	34	36
R2	32	41	38	38
R3	38	47	41	44
R4	39	46	42	45
R5	36	43	40	41
R6	41	47	43	47
R7	39	46	42	45
R8	37	44	40	43
R9	33	40	38	39
R10	27	34	31	33

Receiver	Morning Shoulder 6 am–7 am LA _{eq} (Criteria 44)	Day 7 am–6 pm LA _{eq} (Criteria 47)	Evening 6 pm–10 pm LA _{eq} (Criteria 43)	Sleep disturbance Morning Shoulder 6 am-7 am LA _{max} (Criteria 54)
R11	40	46	41	46
R12	34	41	38	40
R13	32	39	36	38
R14	30	37	34	36
R15	28	35	31	34
R16	24	31	28	30.
R17 (Childcare Centre)	41 (Criteria 65)	47 (Criteria 65)	42 (Criteria 65)	N/A
R18 (Industrial Premises)	59 (Criteria 70-75)	65 (Criteria 70-75)	53 (Criteria 70-75)	N/A

These noise levels were compared to the most stringent noise criteria for each time period and receiver type. This concluded the development would comply with all project-specific noise criteria at all receivers and neighbouring industrial properties for all time periods. Three time-periods/locations (shaded above) show noise levels equal to the criteria, however the Department considers this to be acceptable due to the distance of the receivers from the facility and given the assessment was under a worst-case scenario.

The Department is satisfied the development would be capable of operating within the noise criteria above and recommended a condition of consent which requires this.

Operational vibration

The AVTG provides guideline values for continuous, transient and intermittent events that are based on a Vibration Dose Value (VDV) rather than a continuous vibration level. The VDV is dependent upon the level and duration of the short-term vibration event, as well as the number of events occurring during the daytime or night-time period. The recommended VDVs for vibration of an intermittent nature are preferred values of 0.8 m/s^{1,75} for workshops (i.e. nearest industrial receivers) and 0.13 m/s^{1,75} (during morning shoulder period) for residences.

SLR undertook a broad spectrum (1 Hz to 20 kHz) noise and vibration survey of a similar facility operating in Auburn, which is the same design proposed for the Mortdale facility. The survey found the processing screen to be operating in the dominant third octave band of 6.3 Hz with overall rms (root mean square) vibration levels of 0.09 mm/s (velocity) and 0.01 m/s² (acceleration) measured at 5 m. The corresponding vibration dose being 0.17 m/s¹.75, which is significantly lower than the preferred vibration dose value of 0.8 m/s¹.75 for the workshops associated with the neighbouring properties. Consequently, it is predicted there will be no vibration impact to the development's surrounding industrial receivers.

Notwithstanding, the NVIA recommended the external vibration emissions and location of vibration generating plant and activities be controlled so that the development does not adversely impact upon neighbouring receivers and site workers. It also recommended the loading and unloading of heavy materials be addressed within the OEMP with protocols to ensure that such products are handled through the use of appropriate plant to minimise vibration.

The Department is satisfied the development, with the recommended controls in place, would not impact on surrounding receivers and has recommended a condition of consent requiring vibration to be addressed in an Operational Nosie and Vibration Management Plan (ONVMP).

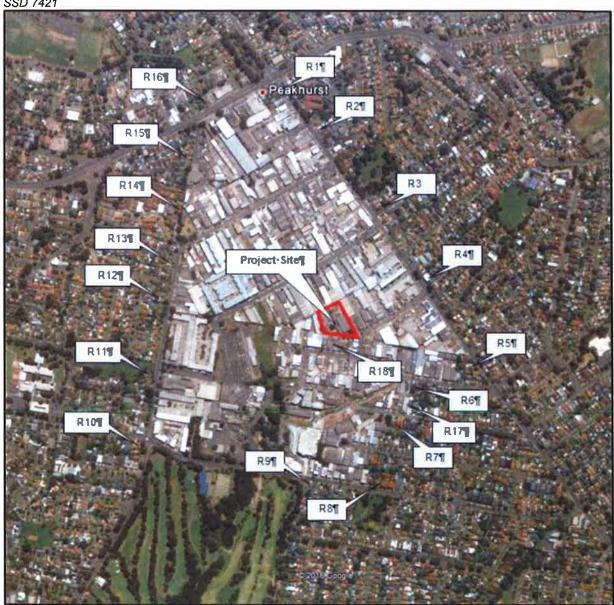


Figure 14: Noise Monitoring Locations

Road Traffic Noise

The assessment criteria from the RNP for residences potentially affected by additional traffic generated by land use developments are summarised in **Table 13**.

Table 13: NSW RNP Road Traffic Noise Assessment Criteria for Residences

		Assessment Criteria		
Road Category	Type of Project	Day 7 am – 10 pm	Night 10 pm – 7 am LA _{eq}	
Freeway/arterial/ sub-arterial Existing residences affected by additional traffic on existing freeway/arterial/sub-arterial roads generated by developments		LA _{eq(15 hour)} 60 dBA	LA _{eq(9 hour)} 55 dBA	
Local roads	Existing residences affected by additional traffic on existing local roads generated by developments	LA _{eq(1 hour)} 55 dBA	LA _{eq(1 hour)} 50 dBA	

Heavy vehicles accessing the site would travel via Boundary Road and Hearne Street, and would not be permitted to travel along Barry Avenue. The NVIA suggests the predicted maximum increases in

traffic flows caused by the development on Boundary Road would result in the traffic noise levels only increasing by 0.7 dBA and 0.4 dBA during the daytime and morning shoulder periods, respectively.

The RNP notes that an increase of up to 2 dB represents a minor impact that is considered barely perceptible to the average person. Where existing residences and other sensitive land uses are potentially affected by additional traffic on existing roads due to land use developments, any increase in the total traffic noise level should be limited to 2 dB above the corresponding 'no build option'. As the proposed development would only increase traffic noise levels by up to 0.7 dBa, it is not considered that residential receivers adjacent to the surrounding road network, including Boundary Road and Barry Avenue would be impacted.

Conclusion

The Department's assessment concludes that, based on the conclusions of the NVIA, noise from the operation of the development would comply with relevant guidelines, including the INP and RNP. Nevertheless, a condition of consent has been included that restricts noise generated by the development to predicted levels. The Department also requires the Applicant to minimise noise from the development utilising best practice noise management measures and prepare an ONVMP prior to the commencement of operation.

Construction noise would also comply with the relevant NMLs of the ICNG. The EPA provided recommended noise limits for construction noise in line with the ICNG and these have been included as conditions of consent.

5.4. Other Issues

The Department's assessment of other issues is provided in **Table 14**.

Table 14: Assessment of Other Issues Consideration **Recommended Conditions** Water Management The development has the potential to result in surface water impacts caused Require the Applicant to: by erosion and sedimentation during construction, leachate from waste, prepare and implement stormwater, and contaminated water from fire-fighting incidents (fire-water). an Erosion and Sediment The site is located within the Peakhurst Industrial Area surface water

catchment, which drains through the Hurstville Golf Course to the south before discharging into Lime Kiln Bay. The EIS included a Soil and Water Impact Assessment (SWIA) prepared in

accordance with the relevant legislation, policies and guidelines. The SWIA assessed the performance of the proposed stormwater management system, as well as the potential flooding, soil and water impacts of the development.

Construction

- To prevent surface water impacts, sediment and erosion controls would be installed during construction of the RRF and would include straw bales across the site during pavement construction, siltation socks around existing inlet pits, and installation of a silt fence around the work area.
- The Department concludes that construction sediment and erosion impacts can be adequately managed by the proposed control measures. The requirement to prepare and implement an Erosion and Sediment Control Plan prior to construction has been included in the conditions of consent to ensure appropriate management of this issue.

Stormwater

- As the site is already fully developed and sealed and no additional sealed areas are proposed, peak flow rates and stormwater runoff volumes would not increase as a result of the development. Misted water from the Coolfog system to control internal dust and yard sprinklers is not predicted to contribute to surface runoff, as is would evaporate or be absorbed by the waste material.
- The mean annual stormwater runoff volume generated for the development represents a reduction from existing site run-off by 1.1 ML per year due to the proposed capture and reuse of stormwater.
- The SWIA did not provide assessment of the capacity of the stormwater system to convey the 20 year ARI storm event.
- However, as required by the Department, additional information (DRAINS modelling) was provided that showed the proposed drainage system has the

- Control Plan prior to construction
- preparation of a Water Management Plan prior to commencement of operations
- final design of the onsite water management system to contain contaminated fire-water be developed in consultation with and to the satisfaction of **FRNSW**

Consideration

Recommended Conditions

capacity to accommodate the 20 year ARI storm event and in some areas is capable of conveying the runoff from a 100 year ARI storm event.

- The proposed stormwater treatment system includes the installation of Ecosols Litter Baskets in all drainage pits and use of a Hume Jellyfish gross pollutant trap (GPT) unit.
- The treatment methods were assessed using a MUSIC model which concluded the relevant target reductions for pollutant loads provided in the WSUD Guidelines would be achieved or exceeded for Total Suspended Solids, Total Phosphorus, Total Nitrogen and gross pollutants.

Flooding

- Based on a review of the 2004 Georges River Floodplain Risk Management Strategy and Plan, the site is not affected by mainstream flooding for the Probable Maximum Flood (PMF) event.
- The Draft Hurstville Overland Flood Study (2015) indicates that some minor overland flooding would occur on the site during the 1 in 100-year flood event, however the site is not located in the main overland flood flow path.
- Due to the very minor nature of the potential overland flood impacts, the
 Department considers the flood risk for the site to be extremely low,
 therefore, no conditions of consent are recommended with regard to
 flooding.

Wastewater and Leachate

- The Applicant advised no wastewater or leachate would be produced during
 waste processing operations, as all activities would occur in a fully enclosed
 building. Whilst water would be diffused through misters used for dust
 suppression, this water would either evaporate or be absorbed by the
 products.
- Should any wet loads be delivered to the site, leachate would be captured
 in dry sumps at the lowest point of the graded slab of the processing building.
 Any rainwater infiltrating the material stockpile bays under the awning would
 drain to the sump located in the bunded area around the bays.
- Sumps would be pumped out by vacuum pump trucks and the leachate removed from the site to an appropriate licensed disposal facility.
- Even though little leachate is anticipated to be produced, a condition of consent has been included requiring inclusion of protocols for the management of leachate within a Water Management Plan

Firewater

- FRNSW indicated insufficient information and calculations were provided in the EIS, RTS and accompanying documents to allow adequate assessment of the site's proposed fire-water containment capabilities.
- To ensure the overall containment strategy for firewater at the site is
 effective, FRNSW has recommended the final design of the onsite water
 management system to contain contaminated fire-water be developed as
 part of a pre-construction Fire Safety Study (FSS) in consultation with and
 to the satisfaction of FRNSW.
- The Department has incorporated FRNSW's recommended condition and is satisfied that with this control in place, firewater would be adequately managed.

Conclusion

 The Department's assessment concludes the development provides sufficient water quality, drainage control and firewater containment measures to ensure unacceptable water impacts are avoided, subject to adherence to the recommended conditions.

Air Quality and Odour

- The development has the potential to generate air quality impacts during construction and operation, primarily from dust emissions.
- The Department notes the primary dust control method is processing of waste inside the building, with storage under cover and that a Coolfog water suppression system would be installed inside to reduce dust emissions.
- The EIS included an Air Quality Impact Assessment (AQIA) undertaken in accordance with the NSW Approved Methods.
- The EPA sought clarification on emissions estimates and the parameters used and requested some remodelling relating to emission controls (processing inside building and limiting of onsite speed limit). This information was provided in an addendum to the AQIA in October 2016.
- The updated AQIA demonstrated the impact assessment criteria would be met at all residential and industrial receptors for TSP, PM2.5, PM10 and

Require the Applicant to:

- undertake all reasonable steps to minimise dust during all works
- prepare and implement an Air Quality
 Management Plan for the development to the satisfaction of the Department
- ensure the development does not cause or

Recommended Conditions

offensive odours.

permit the emission of

install a wheel wash at

the entrance to the site.

Consideration

- deposited dust. Due to the amendments to the development, the actual waste handling capacity would be lower than assessed in the AQIA. Therefore, it is considered the actual air impacts would also be lower.
- The AQIA did not provide an assessment of construction air quality impacts, however, the Department considers the potential for dust impacts during construction to be limited and is satisfied mitigation measures proposed in the Dewcape CWMP would adequately reduce these impacts.
- Details of all dust prevention, minimisation and control measures were provided in the draft OEMP submitted with the EIS. The Applicant has committed to incorporating comprehensive air quality management measures into the final versions of both the OEMP and the Construction Environmental Management Plan (CEMP).
- The EPA did not raise any concerns regarding air quality but did note that odour had not been assessed due to the low likelihood of occurrence. The EPA advised it would require the Applicant to undertake an odour impact assessment through an amendment to the EPL should odour impacts occur.
- The Department's assessment concluded that with appropriate measures in place, including a requirement to prepare and implement an Air Quality Management Plan, the proposal would have minimal air quality impacts on surrounding receivers and meet all NSW health and amenity criteria.
- Require the Applicant to: Prepare and submit a revised parking layout plan for 13 parking spaces in accordance with 2890:2009.

Operational Parking

- Providing insufficient parking on site would lead to employees parking within the surrounding road network which would decrease available parking for other businesses in the industrial estate.
- Nine parking spaces are required under the Hurstville DCP. As the proposed development includes 12 parking spaces, the TIA concluded that sufficient parking has been provided.
- None of the public submissions raised parking as a concern.
- The Department notes the DCP parking ratios used in the TIA were based on the site being used for general industry and office as opposed to a waste facility, so it is considered more appropriate to base the parking requirements on the number of employees working at the site during each
- Based on the maximum number of employees on site at any given time, a total of 13 parking spaces should be required, which is one more space than was proposed.
- An additional parking space could be located adjacent to parking space 10 depicted on the Site Plan for the development.
- As such, the Department has recommended a condition of consent requiring the preparation of a revised parking layout plan with one additional parking space.

Hazards and Risk

- A Preliminary Risk Screening Assessment (PRSA) in the EIS assessed the Require the Applicant to: proposed storage quantities and delivery frequencies of dangerous goods for use on site in accordance with SEPP 33.
- The PRSA confirmed the facility would not store or transport dangerous goods above the thresholds specified in SEPP 33, therefore it would not be considered potentially hazardous or offensive development.
- A Fire Safety Study (FSS) was undertaken in accordance with HIPAP No. 2 - Fire Safety Study Guidelines 2011 to identify fire hazards at the site and consequences of possible fire incidents.
- A 28,000 L diesel storage tank for refuelling by onsite vehicles would be located along the western site boundary within a bunded area with a capacity of 37,500 L (110% of tank capacity).
- The FSS identified potential onsite fire hazards, the consequences of these fires and the detailed strategies and measures to prevent fires, including details of the onsite fire safety measures to be implemented on site.
- FRNSW recommended a pre-construction FSS be developed in accordance with HIPAP No. 2 and be submitted for assessment and approval by FRNSW.
- The Department considers the Applicant has adequately addressed the provisions of SEPP 33 and that the proposed development is not considered a potentially hazardous industry or offensive industry.
- Conditions of consent are recommended by the Department and FRNSW to ensure the final design of the onsite fire safety system and the storage area

- - implement auditable procedures to handle and dispose of hazardous waste materials such as asbestos, sharps and chemical/biological materials
 - storage of combustible materials in accordance with Australian standards
 - develop a preconstruction FSS in accordance with HIPAP No. 2 and submit for assessment and approval by FRNSW
 - consult with FRNSW during the preliminary design of the fire safety system to ensure it

Consideration	Recommended Conditions	
for hazardous and combustible materials meet relevant Australian Standards.	meets FRNSW requirements.	
Clause 4.6 – Exceptions to Development Standards		
Clause 4.3 in the HLEP specifies buildings are not to exceed the height nominated in the Height of Buildings Map specified in the HLEP. The height of buildings standard for the subject site is 10 m. The proposed maximum height for the development is 14.5 m to the pitch of the roof, as measured from existing ground level, which represents a 45% exceedance of the development standard. The existing building to be demolished presently has a height of 14.5 m. The EIS includes a written request to vary the height of buildings standard applicable to the site in accordance with Clause 4.6(3) of the HELP. The Applicant's justification for the height variation addressed the provisions of Clause 4.6 of the HLEP as well as the principles of caselaw on this issue to argue the unreasonable and unnecessary nature of the standard. Council indicated it was also satisfied with the justification provided. Based on the requirements set out in Clause 4.6 (4)(a) of the HLEP, the Department is satisfied that development consent can be granted despite the contravention of the development standard as: the Applicant's written request has addressed the matters required to be demonstrated in 4.6(3) of the HLEP the proposed height is not out of keeping with the surrounding area the higher building level would facilitate the functioning of the development as an efficient resource recovery facility where processing can occur indoors to mitigate environmental impacts the proposed height matches that of the existing building the proposed development is in the public interest as it is consistent with the objectives of the standard and the objectives of the IN2 zone. The Department recommends the Commission grant development consent despite the contravention of the development standard.	Not applicable	

Construction Waste Management

- Construction waste would primarily originate from demolition of the existing shed, office and amenities during the 34-week demolition and construction period.
- The CWMP detailed the strategies to ensure building and demolition waste would be managed to maximise recycling and reuse and be disposed of
- An Asbestos Inspection and Register report prepared by Safe Environments on 12 August 2015 estimated the location of asbestos containing material at the site and the CWMP included asbestos control measures and a removal procedure.
- The Department's assessment concludes waste from the construction and demolition of the facility would be managed in an acceptable manner provided the CWMP is followed.

Require the Applicant to:

revise and submit a Construction Waste Management Plan as a component of the overall CEMP for the development.

Site Contamination

- Previous use of the site for industrial activities could have resulted in legacy Require the Applicant to: contamination.
- A Phase 1 Preliminary Contaminated Site Investigation (PCSI) was undertaken by SLR to identify any areas of environmental concern and associated contaminants of potential concern (COPC) on the site.
- The PCSI identified the likelihood of soil contamination to be low for current land use activities, with the risk of COPCs from historic activities rated as low to medium.
- Potential contaminant pathways and receptors were also examined, with onsite workers and visitors during the construction/demolition phase being the most likely receptors.
- A review of the Hurstville City Council Acid Sulfate Soils (ASS) Planning Map revealed that ASS is unlikely to be present on the site.
- The Department's assessment concludes the development site is suitable for its proposed use as the likelihood of discovering COPCs is relatively low and the amount of excavation required is minimal.
- The Department recommends the preparation of a protocol for unexpected discoveries of contamination prior to the commencement of construction.

prepare a protocol for unexpected finds to ensure any material identified as contaminated is disposed of appropriately and does not pose a risk to workers.

Consideration Recommended Conditions

Visual

- The construction of a new waste processing building and offices has the potential to visually impact the surrounding area.
- The EIS included an assessment of the visual impacts of the development.
- The development would be located within an established industrial area with limited possibility for views of the site from residential or public space areas due to the presence of surrounding industrial buildings.
- It would be possible to view the buildings from the site entrance at Hearne Street. However, from this position there would be no discernible change in scale or height from the existing building and would be consistent with the established built form of the area.
- The proposed landscaping would soften the built form and, despite the removal of some existing trees, is considered an improved outcome.
- The proposed schedule of colours consists of external walls in Colorbond cladding with colours Windspray (grey) and Stone Crop (brown), and roof and accessories in Surfmist (beige). These colours are from a neutral palette and are considered appropriate and in keeping with the industrial locality. No signage has been proposed as part of the development.
- Light pollution from the development is not expected to impact on road users or neighbouring businesses, a condition is recommended requiring external lighting to comply with relevant Australian Standards.
- The Department's assessment concludes the development is not visually intrusive, complements the surrounding industrial land uses, and would have minimal visual impact on surrounding receivers.

Require the Applicant to:

 ensure the lighting associated with the development complies with the latest version of AS 4282 (INT) - Control of Obtrusive Effects of Outdoor Lighting.

Developer Contributions

- The Department notes that the Hurstville Section 94 Development Contributions Plan 2012 (Update 2 2017) (Contributions Plan) is applicable in the former Hurstville LGA.
- The Contributions Plan, however, does not apply to industrial development.
- Not applicable

Greenhouse Gas

- The EIS included a Greenhouse Gas Assessment to assess the contribution
 of the development to the emission of greenhouse gases (GHG) carbon
 dioxide, methane, nitrous oxide, synthetic gases and hydro fluorocarbons to the atmosphere.
- The GHG assessment considered Scope 1 Direct Emissions and Scope 2 and Scope 3 – Indirect Emissions.
- The total estimated annual operational GHG emissions for the development are 1,312 tCO2-e, which accounts for approximately 0.0006% of total current NSW emissions.
- Scope 1 emissions represent 37% of the predicted emissions, which can be reduced by good maintenance and management practices of plant and equipment. The Applicant has committed to including such measures in the facility's OEMP.
- The GHG assessment was based on the original waste input of 300,000 tpa, and the Department notes the actual impact would be less than predicted.
- The Department's assessment concludes that the impact of the development on GHG emissions is negligible.

Not applicable

5.5. Consideration of Key Issues Raised in Public Submissions

Table 15 presents the key issues raised in the public submissions and how the Department has considered each issue.

Table 15: Department's Response to Issues Raised in Submissions from the General Public

Concerns raised	Department Comments
Traffic Increased number of vehicles in the area Heavy vehicle use of residential streets	 Since the public exhibition period, the Applicant has reduced both the overall capacity of the site and the proposed hours of operation. An updated TIA was submitted. The TIA demonstrated there is sufficient capacity within the local road network to accommodate additional traffic caused by the development. In its RTS, the Applicant confirmed no trucks would access or leave the site via Barry Avenue and this would be ensured through staff induction, installation of a 'left turn only' at the site exit and a traffic controller. The Department has recommended conditions of consent prohibiting on-street parking by site workers during construction, and requiring the

SSD 7421	
	preparation and implementation of a Driver Code of Conduct, TCP and TMP to mitigate and manage impacts to the local road network.
Noise Night-time noise generated by heavy vehicles	 In its RTS, the Applicant reduced the proposed hours of operation, which effectively eliminates the potential for noise impacts from operations and trucks between 10 pm and 6 am. An updated NVIA was submitted demonstrating compliance with the RNP.
Location Zoning Site suitability Proximity to residential development	 The development is a permissible form of development with consent in the IN2 zone, pursuant to the HLEP 2012. In Section 5.2, the Department assessed the site's suitability for the proposed use and concluded it is capable of processing 220,000 tpa of non-putrescible waste with negligible environmental impacts, including
A .	 impacts on the amenity of residential areas. The Department has assessed the proposal and is satisfied that, subject to the imposition of conditions of consent, the impacts of the development can be appropriately managed to avoid unacceptable impacts on residents.
Safety Heavy vehicles on residential streets, particularly Barry Avenue Heavy vehicle driver behaviour There are several childcare centres, educational establishments and children's recreation facilities in the local area	 The Applicant has proposed mitigation measures to prevent trucks from using Barry Avenue and to facilitate road safety throughout the local road network. The Department has recommended conditions of consent: requiring the preparation and implementation of a Driver Code of Conduct for all truck drivers associated with the development prohibiting the use of Barry Avenue by trucks associated with the development prohibiting on-street parking during construction.
Hours of Operation	 The proposed hours of operation have been reduced. No operations are proposed between 10 pm and 6 am. The technical reports submitted with the Applicant's RTS demonstrate the proposed reduced hours of operation would ensure the development complies with the relevant criteria and guidelines, such as the INP.
Air Quality • Dust	 The Applicant's AQIA concluded the development would not cause dust impacts in the locality based on a processing capacity of 300,000 tpa due to the processing of waste inside a building, installation of a Coolfog dust suppression system, and waste storage under cover. Since the pubic exhibition period, the Applicant has reduced the overall capacity of the proposal by 27%, therefore it can be assumed the operational air impacts would be lower than predicted in the AQIA. In its RTS, the Applicant submitted an updated Statement of Commitments which includes air quality mitigation and management measures.
	 The Department's assessment recommends the preparation and implementation of an Air Quality Management Plan and the implementation of measures to minimise dust during construction and operation.
Health Long term impacts of noise on mental health Sleep deprivation Attraction of rodents to the area	 In its RTS, the Applicant reduced the proposed hours of operation, reducing the number of trucks on local roads and eliminating the potential for additional noise between 10 pm and 6 am. An updated NVIA was submitted demonstrating compliance with the INP and ICNG. Construction and operational noise limits will be imposed by conditions of consent. The development would not accept putrescible wastes that would attract vermin. Effective measures would be in place to manage pests and vermin that may arise.

6. CONCLUSION

The Department's assessment of the application has fully considered all relevant matters under Section 79C of the EP&A Act, the objects of the EP&A Act and the principles of ecologically sustainable development.

The development would focus on the conversion of waste into reusable products via recycling. It would also assist in diverting C&D and C&I material from landfill and as a result would help to extend the life of existing landfill facilities and minimise their environmental impacts. In economic terms, recycling also reduces waste disposal costs for both government and industry.

Through its assessment of the application and in response to issues raised by the public, the EPA, and Council, the Department has required the Applicant to make changes to the development. In response to community concern regarding potential traffic congestion and night-time noise issues, the Applicant reduced the site's waste throughput and operating hours, and also prohibited the use of Barry Avenue by trucks. To assure mitigation of any residual impacts, the Department has developed and recommended a stringent set of conditions which it is confident would ensure the level of noise and traffic congestion experienced by the surrounding community would not have an adverse impact on existing amenity.

The key issues associated with the development relate to site and operational management and the traffic impacts associated with delivery and removal of the waste. Overall, the Department's assessment concluded:

- the development would be capable of handling 220,000 tpa of waste from receipt through to dispatch and have the required procedures and control processes in place to satisfy the EPA's draft Standards for C&D recycling facilities
- the development would positively contribute to the State's performance in regard to the WARR Strategy in both the C&I and C&D sectors
- the development would meet the relevant air quality and noise criteria at sensitive receivers
- traffic generated by the development could be accommodated on the local and regional road network without any significant impacts on safety or LoS
- it is satisfied of the matters in Clause 4.6(4)(a) of the Hurstville LEP to vary the height of buildings standard
- the development would provide a range of environmental and economic benefits for the region, through resource recovery and the provision of 25 new long term operational jobs.

The Department has recommended a number of conditions to manage any potential impacts as a result of the development, including:

- restricting waste receipt and processing to 220,000 tpa
- prohibiting use of Barry Avenue by heavy vehicles and requiring left turn only out of the development onto Hearne Street
- development of an Operational Traffic Management Plan, Traffic Control Plan and Driver Code of Conduct to manage operational traffic impacts
- preparation and implementation of management plans for waste, noise and vibration, water and air quality.

The Department concludes the impacts of the development can be appropriately managed through implementation of the recommended conditions of consent. Consequently, the Department considers the development is in the public interest and should be approved, subject to conditions.

The Department recommends the Planning Assessment Commission agree to varying the height of building development standard as set out in Clause 4.3 of the HLEP, as the Department considers:

- the Applicant's written request adequately addresses matters required to be demonstrated by Clause 4.6(3) of the HLEP
- the development will be in the public interest, because it is consistent with the objectives of the development standard and the objectives for development within the IN2 zone, in which the development is proposed to be carried out.

The Department considers the development is approvable, subject to any conditions of consent. This assessment report is therefore presented to the Planning Assessment Commission for determination.

Prepared by:

Sheelagh Laguna Industry Assessments

Endorsed by:

Chris Ritchie

Director

16/11/17. **Industry Assessments**

Endorsed by:

Anthea Sargeant **Executive Director**

Key Sites and Industry Assessments

16/11/17

APPENDIX A: DEVELOPMENT CONSENT

Development Consent

Section 89E of the Environmental Planning and Assessment Act 1979

As delegate for the Minister for Planning under delegation executed on 14 September 2011, the Planning Assessment Commission (the Commission) of New South Wales, approves the Development Application referred to in Schedule 1, subject to the conditions in Schedule 2.

These conditions are required to:

- prevent, minimise, and/or offset adverse environmental impacts;
- set standards and performance measures for acceptable environmental performance;
- require regular monitoring and reporting; and
- provide for the ongoing environmental management of the Development.

Member of the Commission

Member of the Commission

Sydney

2017

SCHEDULE 1

Application No:

SSD 7421

Applicant:

Bingo Recycling Pty Ltd

Consent Authority:

Minister for Planning

Site:

Lot 102 in DP 585775

20 Hearne Street, Mortdale, NSW

Development:

Demolition of buildings and construction and operation of a resource

recovery facility to process up to 220,000 tpa of general solid waste (non-

putrescible).

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DEFINITIONS

Applicant Bingo Recycling Pty Ltd, or any other person(s) authorised to carry out any

development to which this consent applies

BCA Building Code of Australia

CEMP Construction Environmental Management Plan

Certifying Authority A person who is authorised by or under section 109D of the EP&A Act to

issue Part 4A certificates

Construction The demolition of buildings or works, the carrying out of works, including

earthworks, and erection of buildings and other infrastructure permitted by

this consent

Council Georges River Council

CTMP Construction Traffic Management Plan

Day The period from 7 am to 6 pm on Monday to Saturday, and 8 am to 6 pm

on Sundays and Public Holidays

Demolition The removal of buildings, sheds and other structures on the site

Department Department of Planning and Environment

Development The development as described in the EIS and RTS, and as generally

depicted in Appendix A

Earthworks Bulk earthworks, site levelling, import and compaction of fill material,

excavation for installation of drainage and services, to prepare the site for

construction

EIS Environmental Impact Statement titled Environmental Impact Statement –

Mortdale Resource Recovery Facility prepared by AAP Corporation dated

29 June 2016

EPA NSW Environment Protection Authority

EP&A Act Environmental Planning and Assessment Act 1979
EP&A Regulation Environmental Planning and Assessment Regulation 2000

Environment Protection Licence issued by the EPA under the POEO Act

Evening The period from 6 pm to 10 pm

FRNSW Fire and Rescue NSW

General solid waste (non-putrescible) As defined in the Protection of the Environment Operations Act 1997

Heavy vehicle Any vehicle with a gross vehicle mass of 4.5 tonnes or more

Incident A set of circumstances causing or threatening material harm to the

environment, and/or an exceedance of the limits or performance criteria in

this consent

Land In general, the definition of land is consistent with the definition in the

EP&A Act

Management & Mitigation Measures The Applicant's management and mitigation measures included in

Appendix B

Material harm to the environment Harm to the environment is material if it involves actual or potential harm

to the health or safety of human beings or to ecosystems that is not trivial

Minister Minister for Planning (or delegate)

Mitigation Activities associated with reducing the impacts of the development prior to

or during those impacts occurring

Night The period from 10 pm to 7 am on Monday to Saturday, and 10 pm to 8

am on Sundays and Public Holidays

NCC National Construction Code

OEMP Operational Environmental Management Plan
Operation The receipt, removal or processing of waste

PCA Principal Certifying Authority authorised under section 109D of the EP&A

Act

POEO Act Protection of the Environment Operations Act 1997

Reasonable Relates to the application of judgment in arriving at a decision, taking into

account: mitigation benefits, costs of mitigation versus benefits provided, community views, and the nature and extent of potential improvements Response to Submissions titled Response to Submissions Report

prepared by APP dated 5 December 2016 and 6 April 2017

Secretary of the Department (or nominee)

Sensitive Receivers A location where people are likely to work or reside, this may include a

dwelling, school, hospital, office or public recreational area

Site The land listed in Schedule 1

Site Auditor

Site Audit Report

As defined in the Contaminated Land Management Act 1997

As defined in the Contaminated Land Management Act 1997

As defined in the Contaminated Land Management Act 1997

As defined in the Contaminated Land Management Act 1997

SSD 7421 The development as described in Schedule 1, the EIS and the RTS

RTS

Waste WSUD Guideline Year Has the same definition of the term in the Dictionary to the POEO Act Water Sensitive Urban Design Guideline
A period of 12 consecutive months

SCHEDULE 2

PART A: ADMINISTRATIVE CONDITIONS

OBLIGATION TO MINIMISE HARM TO THE ENVIRONMENT

A1. In addition to meeting the specific performance criteria established under this consent, the Applicant must implement all reasonable and feasible measures to prevent and/or minimise any harm to the environment that may result from the Development.

TERMS OF CONSENT

- A2. The Development may only be carried out in:
 - (a) in compliance with the conditions of this consent;
 - (b) in accordance with the directions of the Secretary;
 - (c) in accordance with the EIS and RTS;
 - (d) in accordance with development layout plans and drawings in the EIS (see Appendix A); and
 - (e) in accordance with the Management and Mitigation Measures (see Appendix B).
- A3. If there is any inconsistency between the above documents, the most recent document shall prevail to the extent of the inconsistency. However, the conditions of this consent shall prevail to the extent of any inconsistency.
- A4. The Applicant must comply with all written requirement(s) of the Secretary arising from the Department's assessment of:
 - (a) any strategies, plans, programs, reviews, audits, reports or correspondence that are submitted in accordance with this consent (including any stages of these documents); and
 - (b) the implementation of any actions or measures contained within these documents.

LIMITS OF CONSENT

- A5. This consent lapses five years after the date from which it was granted, unless the Development has physically commenced on the land to which the consent applies before the date on which the consent would otherwise lapse under section 95 of the EP&A Act.
- A6. The Applicant must not receive or process on site more than 220,000 tonnes of waste per year.
- A7. The only type of waste permitted to be received or processed on the premises is waste classified as general solid waste (non-putrescible).
- A8. The Applicant must not exceed the following maximum stockpile volumes detailed in **Table 1** in any one stockpile at any one time, unless otherwise agreed in writing by the Secretary.

Table 1: Maximum stockpile volumes

Stockpile	Waste Type	Maximum Volume (m³)
Incoming waste receival/stockpile area	Unprocessed material	4,131
Storage bay	Residual waste	105
Storage bay	Residual waste	105
Storage bay	Residual waste	105
Storage bay	Soil	105
Storage bay	Plastic	105
Storage bay	Timber	105
Covered skip	Green Waste	35
Storage bay	Brick and concrete	105
Storage bay	Paper and cardboard	105
Storage bay	Metal	105
Covered skip	Plasterboard	15
Covered skip	Asbestos	15

Stockpile	Waste Type	Maximum Volume (m³)
Cage	Gas bottles	2.5
Cage	Fire extinguishers	2.5
Cage	Batteries	2.5
Total		5,148.5 m ³

- A9. The maximum height of all structures and buildings on site must be no more than 14.5 metres from natural ground level.
- A10. Heavy vehicles associated with the development are prohibited from using Barry Avenue and must exit the site by turn left only.
- A11. The Applicant must ensure that no more than 13 employees are permitted to work on the site at any one time.

STAGED SUBMISSION OF PLANS OR PROGRAMS

- A12. With the approval of the Secretary, the Applicant may:
 - (a) submit any strategy, plan or program required by this consent on a progressive basis; and/or
 - (b) combine any strategy, plan or program required by this consent.
- A13. If the submission of any strategy, plan or program is to be staged, then the relevant strategy, plan or program must clearly describe the specific stage to which the strategy, plan or program applies, the relationship of the stage to any future stages and the trigger for updating the strategy, plan or program. A clear relationship between the strategy, plan or program that is to be combined must be demonstrated.

REQUEST FOR INFORMATION

- A14. The Applicant must retain all weighbridge records as required by the POEO (Waste) Regulation and for the life of the development. The weighbridge records must be made immediately available on request by the Secretary and/or the EPA.
- A15. The Applicant must retain waste classification records for all wastes received on the site and waste disposed from the site for the life of the development. The waste classification records must be made immediately available on request by the EPA and/or the Secretary.

EVIDENCE OF CONSULTATION

- A16. Where consultation with any public authority is required by the conditions of this consent, the Applicant must:
 - (a) consult with the relevant public authority prior to submitting the required documentation to the Secretary or the PCA for approval;
 - submit evidence of such consultation as part of the relevant documentation required by the conditions of this consent;
 - (c) describe how matters raised by the public authority have been addressed and identify matters that have not been resolved; and
 - (d) include the details of any outstanding issues raised by the relevant public authority and an explanation of disagreement between any public authority and the Applicant.

STATUTORY REQUIREMENTS

A17. The Applicant must ensure that all licences, permits and approval/consents are obtained as required by law and maintained as required throughout the life of the Development. No condition of this consent removes the obligation for the Applicant to obtain, renew or comply with such licences, permits or approval/consents.

DEMOLITION

A18. The Applicant must ensure that all demolition associated with the Development is carried out in accordance with Australian Standard AS 2601:2001: The Demolition of Structures, or its latest version and the requirements of the Work Health and Safety Regulation, 2011.

STRUCTURAL ADEQUACY AND CERTIFICATION

- A19. The Applicant must ensure all new buildings and structures, and any alterations or additions to existing buildings and structures are constructed in accordance with the relevant requirements of the BCA.
- A20. Prior to the commencement of construction, the final design of the development must be finalised in consultation with and to the satisfaction of Fire and Rescue NSW (FRNSW) and include suitable additional provisions for special hazards by specifically addressing Clauses E1.10 and E2.3 of Volume One of the National Construction Code (NCC) Series.

EXTERNAL WALLS AND CLADDING FLAMMABILITY

- A21. The external walls of the building including attachments must comply with the relevant requirements of the NCC. Prior to the issue of a Construction Certificate and Occupation Certificate the Certifying Authority must:
 - (a) be satisfied that suitable evidence is provided to demonstrate that the products and systems proposed for use or used in the construction of external walls including finishes and claddings such as synthetic or aluminium composite panels comply with the relevant requirements of the NCC; and
 - (b) ensure that the documentation relied upon in the approval processes include an appropriate level of detail to demonstrate compliance with the NCC as proposed and as built.

A copy of the documentation required under (b) must be provided to the Secretary within 7 days of being accepted by the Certifying Authority.

UTILITIES AND SERVICES

- A22. Prior to the construction of any utility works associated with the Development, the Applicant must obtain relevant approvals from service providers.
- A23. Prior to the commencement of construction, all approved plans must be submitted to the Sydney Water "*Tap In*" service to determine if the development will have any impacts on Sydney Water assets.
- A24. Prior to operation of the Development, the Applicant must obtain a Compliance Certificate for water and sewerage infrastructure servicing of the site under section 73 of the *Sydney Water Act* 1994

PROTECTION OF PUBLIC INFRASTRUCTURE

- A25. Prior to the commencement of construction, the Applicant must:
 - consult with the relevant owner and/or provider of services that are likely to be affected by the Development to make suitable arrangements for access to, diversion, protection, and/or support of the affected infrastructure;
 - (b) prepare a dilapidation report identifying the condition of all public infrastructure in the vicinity of the site (including roads, gutters and footpaths); and
 - (c) submit a copy of this report to the Secretary and Council.
- A26. Unless the Applicant and the applicable authority agree otherwise, the Applicant must:
 - (a) repair, or pay the full costs associated with repairing any public infrastructure that is damaged by the Development; and
 - (b) relocate, or pay the full costs associated with relocating any infrastructure that needs to be relocated as a result of the Development.

COMPLIANCE

A27. The Applicant must ensure that employees, contractors and sub-contractors are aware of, and comply with, the conditions of this consent relevant to their respective activities.

WORKS-AS-EXECUTED PLANS

A28. Prior to the issue of the final Occupation Certificate, works-as-executed drawings signed by a registered surveyor demonstrating that the stormwater drainage and finished ground levels have been constructed as approved, must be submitted to the PCA.

OPERATION OF PLANT AND EQUIPMENT

- A29. The Applicant must ensure that only the plant and equipment listed in Table 6 and Table 9 of the Noise and Vibration Impact Assessment report dated 16 March 2017 provided with the EIS is used on site during operation and construction respectively.
- A30. The Applicant must ensure that all plant and equipment used for the Development is:
 - (a) maintained in a proper and efficient condition; and
 - (b) operated in a proper and efficient manner.

SURRENDER OF CONSENTS

A31. Within 12 months of the date of commencement of development to which this consent applies, or within another timeframe agreed by the Secretary, the Applicant must surrender the existing development consents dated 8 June 2011 and 4 November 2015 described in **Table 2** in accordance with the EP&A Regulation.

Following commencement of development to which this consent applies, and before the surrender of existing development consent or project approvals required under condition A31, the conditions of this consent prevail to the extent of any inconsistency with the conditions of those consents or approvals.

Table 2: Consents to be Surrendered

Determination Date	DA Number	Details
8 June 2011	10/DA55	Use of premises as a waste transfer facility
4 November 2015	MOD2015/0063 (10/DA55)	Modification to Approved Waste Transfer Facility – Modification to Conditions Relating to Capacity, Loading and Sorting and Storage of Bins

Notes:

- Any existing management and monitoring plans/strategies/programs/protocols/committees under the
 existing consents or approvals for the development will continue to apply until the comparable
 plan/strategy/program/protocol/committee is approved under this consent.
- This requirement does not extend to the surrender of construction and occupation certificates for existing
 and proposed building works under Part 4A of the EP&A Act. Surrender of a consent or approval should
 not be understood as implying that works legally constructed under a valid consent or approval can no
 longer be legally maintained or used.

PART B: ENVIRONMENTAL PERFORMANCE AND MANAGEMENT

TRAFFIC AND ACCESS

Construction Traffic Management Plan

- B1. Prior to the commencement of construction, the Applicant must prepare a Construction Traffic Management Plan (CTMP) for the Development to the satisfaction of the Secretary. The CTMP must form part of the CEMP required by Condition C1. The CTMP must:
 - (a) be prepared by a suitably qualified and experienced person(s) in consultation with Council;
 - detail the measures that are to be implemented to ensure road safety and network efficiency during construction;
 - (c) detail heavy vehicle routes that are the same as operational haul routes
 - (d) detail traffic controls to avoid conflict with road users and the public:
 - (e) detail adequate parking arrangements for the projected number of staff in each phase of construction;
 - (f) not proposed to utilise public and residential streets or public parking facilities;
 - (g) include a Driver Code of Conduct to:
 - (i) minimise the impacts of earthworks and construction on the local and regional road network;
 - (ii) minimise conflicts with other road users;
 - (iii) minimise road traffic noise; and
 - (iv) ensure truck drivers use specified haul routes and do not use Barry Avenue;
 - (h) include a program to monitor the effectiveness of these measures; and
 - if necessary, detail procedures for notifying residents and the community (including local schools), of any potential disruptions to routes.
- B2. The Applicant must:
 - (a) not commence construction until the Construction Traffic Management Plan required by Condition B1 is approved by the Secretary; and
 - (b) implement the most recent version of the Construction Traffic Management Plan approved by the Secretary for the duration of construction.

Parking

B3. Prior to the commencement of operation, the Applicant must prepare and submit to the Department a revised parking layout plan providing 13 parking spaces on site in accordance with the latest version of AS 2890.

Operating Conditions

- B4. The Applicant must ensure:
 - (a) internal roads, driveways and parking (including grades, turn paths, sight distance requirements, aisle widths, aisle lengths and parking bay dimensions) associated with the Development are constructed and maintained in accordance with the latest version of AS 2890.1 and AS 2890.2;
 - (b) the swept path of the longest vehicle entering and exiting the site, as well as manoeuvrability through the site, is in accordance with the relevant AUSTROADS guidelines;
 - (c) the Development does not result in any vehicles queuing on the public road network, including Hearne Street:
 - (d) heavy vehicles and bins associated with the Development are not parked on local roads or footpaths in the vicinity of the site;
 - (e) all vehicles are wholly contained on site before being required to stop;
 - (f) all loading and unloading of materials is carried out on-site;
 - (g) all trucks entering or leaving the site with loads have their loads covered and do not track dirt onto the public road network; and
 - (h) the proposed turning areas are kept clear of any obstacles, including parked cars, at all times.

Operational Traffic Management Plan

- B5. Prior to the commencement of operation, the Applicant must prepare an Operational Traffic Management Plan (OTMP) for the Development to the satisfaction of the Secretary. The plan must form part of the OEMP required by Condition C4 and be prepared in accordance with Condition C6. The OTMP must:
 - (a) be prepared by a suitably qualified and experienced person(s);
 - (b) be prepared in consultation with Council;
 - (c) detail the measures that are to be implemented to ensure road safety and network efficiency including:
 - (i) ensuring no queuing or parking of vehicles occur on Hearne Street or the surrounding road network;
 - (ii) redirecting incoming trucks to other facilities to prevent traffic build-up; and

- (iii) prioritising the removal of recycled products and residual waste outside of the road network peak hours:
- (d) detail heavy vehicle routes, access and parking arrangements;
- (e) include a Driver Code of Conduct to:
 - (i) minimise the impacts on the local and regional road network;
 - (ii) minimise conflicts with other road users:
 - (iii) minimise road traffic noise:
 - (iv) ensure truck drivers use specified haul routes and do not use Barry Avenue; and
 - (v) include a program to monitor the effectiveness of these measures.
- (f) include a Traffic Control Plan (TCP) detailing:
 - (i) the on-site measures to be implemented to control the manoeuvring of vehicles in designated areas:
 - (ii) installation of way-finding signage, including a 'left turn only' sign at the exit; and
 - (iii) use of a traffic controller at entry/exit to prioritise the entry of vehicles to the site to prevent queuing in Hearne Street.
- B6. The Applicant must:
 - (a) not commence operation until the OTMP required by Condition B5 is approved by the Secretary; and
 - (b) The Applicant must ensure the OTMP (as required and approved by the Secretary from time to time) is implemented for the operational life of the Development.

WASTE MANAGEMENT

- B7. All waste materials removed from the site must only be directed to a waste management facility or premises lawfully permitted to accept the materials.
- B8. Waste generated outside the site must not be received at the site for storage, treatment, processing, reprocessing, or disposal, except as expressly permitted by an EPL.
- B9. The Applicant must record the amount of waste (in tonnes) received at the site on a daily basis.
- B10. The Applicant must retain all sampling and waste classification data for the life of the Development in accordance with the requirements of the EPA.

Receipt, Storage & Handling of Waste

- B11. The Applicant shall only receive waste on site that is authorised for receipt by an EPL. No putrescible waste may be received, stored or processed on site.
- B12. The Applicant shall ensure any waste generated on the site during construction is classified in accordance with the EPA's *Waste Classification Guidelines*, 2014 or its latest version, and disposed of to a facility that may lawfully accept the waste.
- B13. The Applicant shall:
 - (a) implement auditable procedures to:
 - (i) ensure the site does not accept wastes that are prohibited;
 - (ii) screen incoming waste loads; and
 - (b) ensure that:
 - all waste types that are controlled under a tracking system have the appropriate documentation prior to acceptance at the site;
 - (ii) all waste received at the site is recorded in accordance with clause 27 of the POEO (Waste) Regulation;
 - (iii) details of the quantity, type and source of wastes received on the site are provided to the EPA and the Secretary when requested; and
 - (iv) staff receive adequate training to recognise and handle any hazardous or other prohibited waste.
- B14. The Applicant must assess and classify all liquid and non-liquid wastes to be taken off site in accordance with the EPA's *Waste Classification Guidelines Part 1: Classifying Waste, November 2014*, or its latest version and dispose of all wastes to a facility that may lawfully accept the waste.
- B15. All waste must be stored wholly within the designated waste storage areas.
- B16. All waste must be loaded and unloaded within the designated loading and unloading areas.
- B17. No crushing or grinding works are permitted on site at any time.

B18. Garden waste may only be stored in one 35 m³ sealed and covered skip bin and must be removed from site within 72 hours of receipt.

Waste Monitoring Program

- B19. From the commencement of operation, the Applicant must implement a Waste Monitoring Program for the Development. The program must:
 - (a) be prepared by a suitably qualified and experienced person(s) prior to the commencement of operation;
 - (b) include suitable provision to monitor the:
 - (i) quantity, type and source of waste received on site; and
 - (ii) quantity, type and quality of the outputs produced on site; and
 - (c) ensure that:
 - all waste that is controlled under a tracking system has the appropriate documentation prior to acceptance at the site; and
 - (ii) staff receive adequate training in order to be able to recognise and handle any hazardous or other prohibited waste, including asbestos.

Waste Management Plan

- B20. Prior to the commencement of operation, the Applicant must prepare a Waste Management Plan (WMP) for the Development to the satisfaction of the Secretary. The WMP must form part of the OEMP required by Condition C4 and be prepared in accordance with Condition C6. The WMP must:
 - (a) detail the type and quantity of waste to be received during operation of the Development;
 - (b) include details of stockpile limits in the incoming waste receival area and waste storage bunkers;
 - (c) include procedures for ensuring no build-up of waste will occur in the incoming waste receival area during unexpected machinery breakdown; and
 - (d) details the requirements for non-conforming waste handling and removal.
- B21. The Applicant must:
 - (a) not commence operation until the Waste Management Plan is approved by the Secretary; and
 - (b) implement the most recent version of the Waste Management Plan approved by the Secretary.

Construction Waste Management

- B22. Prior to the commencement of construction, the Applicant must prepare a Construction and Demolition Waste Management Plan (CDWMP) for the Development to the satisfaction of the Secretary. The plan must form part of the CEMP required by Condition C1. The CDWMP must:
 - (a) detail the quantities of each waste type generated during construction and the proposed reuse, recycling and disposal locations; and
 - (b) be implemented for the duration of construction works.
- B23. The Applicant must:
 - (a) retain disposal records for all waste disposed of under the CDWMP for 4 years and provide these to the EPA as requested;
 - (b) not commence construction until the CDWMP is approved by the Secretary, and
 - (c) implement the most recent version of the Construction and Demolition Waste Management Plan approved by the Secretary.

Pests, Vermin and Noxious Weed Management

- B24. The Applicant must:
 - (a) implement suitable measures to manage pests, vermin and declared noxious weeds on the site; and
 - (b) inspect the site on a regular basis to ensure that these measures are working effectively, and that pests, vermin or noxious weeds are not present on site in sufficient numbers to pose an environmental hazard, or cause the loss of amenity in the surrounding area.

Note: For the purposes of this condition, noxious weeds are those species subject to an order declared under the Noxious Weed Act 1993.

NOISE AND VIBRATION

Hours of Work

B25. The hours of work detailed in Table 3 must be complied with.

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Activity	Day	Time
Earthworks and construction	Monday – Friday Saturday	7 am to 6 pm 8 am to 1 pm
Operation	Monday – Saturday Sunday and Public Holidays	6 am to 10 pm No operation permitted

- B26. Works outside of the hours identified in Condition B25 may be undertaken in the following circumstances:
 - (a) works that are inaudible at the nearest sensitive receivers;
 - (b) for the delivery of materials required outside these hours by the NSW Police Force or other authorities for safety reasons; or
 - (c) where it is required in an emergency to avoid the loss of lives, property and/or to prevent environmental harm.

Construction Noise Limits

B27. The Development must be constructed to achieve the construction noise management levels detailed in the *Interim Construction Noise Guideline (Department of Environment and Climate Change, 2009.* All feasible and reasonable noise mitigation measures must be implemented and any activities that could exceed the construction noise management levels must be identified and managed in accordance with the management and mitigation measures in the EIS.

Operational Noise Limits

B28. Noise generated by the operation of the development must not exceed the noise limits in Table 4.

Table 4: Noise Limits dB(A)

Location	Morning Shoulder (6 am-7am) LAeq(15 minute)		Evening LAeq(15 minute)	
All residential receivers	44	47	43	

Note: Noise generated by the Development is to be measured in accordance with the relevant procedures and exemptions (including certain meteorological conditions) of the NSW Industrial Noise Policy. Refer to the plan in Appendix A for the location of residential sensitive receivers.

Post-Commissioning Noise Verification Report

- B29. A noise verification report must be submitted to the satisfaction of the Secretary within three months of the completion of commissioning. The report must be prepared by a suitably qualified and experienced acoustical consultant and include:
 - (a) an analysis of compliance with noise limits specified in Condition B28;
 - (b) an outline of management actions to be taken to address any exceedances of the limits specified in Condition B28; and
 - (c) a description of contingency measures in the event management actions are not effective in reducing noise levels to an acceptable level.

Operational Noise and Vibration Management Plan

- B30. Prior to the commencement of operation, the Applicant must prepare an Operational Noise and Vibration Management Plan (ONVMP) for the Development to the satisfaction of the Secretary. The ONVMP must form part of the OEMP required by Condition C4 and be prepared in accordance with Condition C6. The ONVMP must:
 - (a) be prepared by a suitably qualified and experienced noise expert;
 - (b) describe all noise and vibration sources from the Development;
 - (c) describe the measures, in line with best practice, that will be implemented to minimise the noise and vibration emissions in the area including:
 - (i) the management and mitigation measures to be employed on site;
 - (ii) how the noise impacts of the development will be minimised during any adverse meteorological conditions or extraordinary events;
 - (iii) identification of high emission generating construction and operational activities, including proposed times when these works will be carried out (including respite periods if required) and mitigation measures to minimise adverse impacts from these activities; and

- (d) Until the Secretary directs otherwise, include a quarterly monitoring program over a 12-month period that evaluates and reports on:
 - (i) compliance with the noise criteria specified in Condition B28 and vibration criteria specified in Condition B33;
 - (ii) the management actions to be taken to address any exceedances of the criteria specified in Conditions B28 and B33; and
 - (iii) the contingency measures that will be implemented in the event management actions are not effective in reducing noise levels to an acceptable level;
- (e) identify the control measures that that will be implemented for each emission source, and
- (f) defines what constitutes a noise and vibration incident, and includes a protocol for identifying noise incidents and notifying the Department and relevant stakeholders of any such incident.

B31. The Applicant must:

- (a) not commence operation until the ONVMP required by Condition B30 is approved by the Secretary; and
- (b) The Applicant must ensure the ONVMP (as required and approved by the Secretary from time to time) is implemented for the operational life of the Development.

Road Traffic Noise

B32. Prior to the commencement of construction, the Applicant must prepare a Driver Code of Conduct and induction training for the Development to minimise road traffic noise. The Applicant must update the Driver Code of Conduct and induction training for construction and operation and must implement the Code of Conduct for the life of the Development.

Vibration Criteria

- B33. Vibration caused by construction at any residence or structure outside the site must be limited to:
 - for structural damage, German Standard DIN 4150 Part 3 Structural Vibration in Buildings. Effects on Structures; and
 - (b) for human exposure, the acceptable vibration values set out in the *Environmental Noise Management Assessing Vibration: a technical guideline* (Department of Environment and Conservation, 2006).

SOILS, WATER QUALITY AND HYDROLOGY

Erosion and Sediment Control

B34. Prior to the commencement of construction, the Applicant must install and maintain suitable erosion and sediment control measures on-site, in accordance with the relevant requirements in the latest version of the Managing Urban Stormwater: Soils and Construction Guideline and the Erosion and Sediment Control Plan included in the CEMP required by Condition C1.

Stormwater Management System

- B35. Prior to the commencement of operation, the Applicant must design and install a stormwater management system for the Development. The system must:
 - (a) be designed by a suitably qualified and experienced person(s) whose appointment has been endorsed by the Secretary;
 - (b) include a system to capture leachate generated within the processing shed and the bund under the awning for offsite disposal and treatment;
 - include a system to capture, contain and dispose of contaminated firewater, prepared in consultation with and to the satisfaction of Fire and Rescue NSW;
 - (d) be generally in accordance with the conceptual design in the EIS;
 - (e) be in accordance with applicable Australian Standards;
 - (f) demonstrate that discharge limits can meet those in Landcom's WSUD Guideline;
 - (g) ensure that the system capacity has been designed in accordance with Australian Rainfall and Runoff (Engineers Australia, 2016) and Managing Urban Stormwater: Council Handbook (EPA, 1997) guidelines (as may be updated or replaced from time to time);
 - (h) divert existing clean surface water around operational areas of the site;
 - (i) direct all sediment laden water in overland flow away from the leachate management system; and
 - (j) prevent cross-contamination of clean and sediment or leachate laden water.
- B36. Prior to the issue of a Construction Certificate, a certificate must be submitted to the Certifying Authority certifying that:
 - (a) satisfactory arrangements have been made for the disposal of stormwater;

- (b) the proposed development will not impede or divert natural surface water runoff so as to cause a nuisance to adjoining properties; and
- (c) the piped drainage system has been designed to Council's Stormwater Drainage Policy.
- B37. Prior to the issue of the Final Occupation Certificate, Works-As-Executed drawings signed by a registered surveyor demonstrating that the stormwater drainage and finished ground levels have been constructed as approved must be submitted to the Certifying Authority.
- B38. The stormwater management system must be operated and maintained for the duration of the Development.

Water Management Plan

- B39. Prior to the commencement of operation, the Applicant must prepare a Water Management Plan (Water MP) to the satisfaction of the Secretary. The Water MP must form part of the OEMP required by Condition C4 and be prepared in accordance with Condition C6. The Water MP must:
 - (a) detail water use, metering, disposal and management on-site;
 - (b) detail the management of wastewater streams on-site, including leachate;
 - (c) contain a Surface Water Management Plan, including;
 - (i) a program to monitor:
 - surface water flows and quality;
 - surface water storage and use; and
 - sediment basin operation;
 - (ii) sediment and erosion control plans;
 - surface water impact assessment criteria, including trigger levels for investigating and potential adverse surface water impacts; and
 - (iv) a protocol for the investigation and mitigation of identified exceedances of the surface water impact assessment criteria.

B40. The Applicant must:

- not commence operation until the Water MP required by Condition B39 is approved by the Secretary;
 and
- (b) implement the most recent version of the Water MP approved by the Secretary for the duration of the Development.

AIR QUALITY

Dust Minimisation

- B41. All reasonable steps must be taken to minimise dust generated during all works authorised by the consent.
- B42. The Applicant must install a truck wheel wash immediately after the exit weighbridge to clean truck wheels prior to exiting the site.
- B43. The processing building must be fitted with a dust suppression system, as described in the EIS.
- B44. During construction, the Applicant must ensure that:
 - (a) exposed surfaces and stockpiles are suppressed by regular watering;
 - (b) all trucks entering or leaving the site with loads have their loads covered;
 - (c) trucks associated with the Development do not track dirt onto the public road network;
 - (d) public roads used by these trucks are kept clean; and
 - (e) land stabilisation works are carried out progressively on site to minimise exposed surfaces.

Air Quality Discharges

B45. The Applicant must install and operate equipment in line with best practice to ensure that the Development complies with all load limits, air quality criteria and air quality monitoring requirements as specified in the EPL for the site.

Operational Air Quality Management Plan

- B46. Prior to the commencement of operation, the Applicant must prepare an Air Quality Management Plan (AQMP) to the satisfaction of the Secretary. The AQMP must form part of the OEMP required by Condition C4 and be prepared in accordance with Condition C6. The AQMP must:
 - (a) be prepared by a suitably qualified and experienced person(s);

- (b) detail and rank all emissions from all sources of the Development, including particulate emissions;
- (c) provide information on the following:
 - (v) proactive and reactive management strategies;
 - (vi) key performance indicators;
 - (vii) monitoring methods and location frequency and duration of monitoring;
 - (viii) record keeping;
 - (ix) response mechanisms;
 - (x) complaints handling protocol; and
 - (xi) reporting.
- (d) describe measures to be implemented to minimise the potential risks to air quality in the area including:
 - (i) management and mitigation measures to be employed on site;
 - (ii) plant and equipment being maintained to ensure that it is in good order;
 - (iii) how the air quality impacts of the development will be minimised during any adverse meteorological conditions or extraordinary events;
 - (iv) identification of high emission generating construction and operational activities, including proposed times when these works will be carried out (including respite periods if required) and mitigation measures to minimise adverse impacts from these activities; and
 - (v) compliance with the relevant conditions of this consent including Condition B48.
- (e) identify the control measures that that will be implemented for each emission source;
- (f) defines what constitutes an air quality incident, and includes a protocol for identifying and notifying the Department and relevant stakeholders of any air quality incidents.

B47. The Applicant must:

- (a) not commence operation until the AQMP required by Condition B46 is approved by the Secretary; and
- (b) implement the most recent version of the AQMP approved by the Secretary for the duration of the Development.

Odour Management

B48. The Applicant must ensure the Development does not cause or permit the emission of any offensive odour (as defined in the POEO Act).

HAZARDS AND RISK

Hazardous Waste

B49. The Applicant must implement auditable procedures to handle and dispose of hazardous waste materials such as asbestos, sharps and chemical/biological materials that have been received on site.

Dangerous Goods

- B50. The quantities of dangerous goods stored and handled at the site must be below the threshold quantities listed in the Department of Planning's *Hazardous and Offensive Development Application Guidelines Applying SEPP 33* at all times.
- B51. Dangerous goods, as defined by the *Australian Dangerous Goods Code*, must be stored and handled strictly in accordance with:
 - (a) all relevant Australian Standards;
 - (b) for liquids, a minimum bund volume requirement of 110% of the volume of the largest single stored volume within the bund; and
 - (c) the Environment Protection Manual for Authorised Officers: Bunding and Spill Management, technical bulletin (EPA,1997).

In the event of an inconsistency between the requirements listed from a) to c) above, the most stringent requirement must prevail to the extent of the inconsistency

Bunding

B52. The Applicant must store all chemicals, fuels and oils used on-site in appropriately bunded areas in accordance with the requirements of all relevant Australian Standards, and/or the EPA's Storing and Handling of Liquids: Environmental Protection – Participants Handbook.

FIRE SAFETY

Fire Safety System

- B53. The Applicant must consult with FRNSW during preliminary design of fire safety measures to ensure the fire systems and strategies are adequate and meet FRNSW operational requirements.
- B54. Prior to the commencement of construction, the Applicant must develop a Fire Safety Study, including firewater containment system, in accordance with HIPAP No. 2 and submit it for assessment and approval by FRNSW.

CONTAMINATION

B55. Prior to the commencement of construction, the Applicant must prepare an unexpected finds protocol to ensure that potentially contaminated material is appropriately managed. The protocol must form part of the CEMP required by Condition C1 and must ensure any material identified as contaminated must be disposed off-site, with the disposal location and results of testing submitted to the Secretary, prior to its removal from the site.

VISUAL AMENITY

Landscaping

- B56. Prior to the commencement of operation, the Applicant must prepare a Landscape Management Plan to manage the revegetation and landscaping works on-site, to the satisfaction of the Secretary. The plan must form part of the OEMP in Condition C4 and be prepared in accordance with Condition C6. The plan must:
 - (a) detail the species to be planted on-site;
 - describe the monitoring and maintenance measures to manage revegetation and landscaping works;
 and
 - (c) be consistent with the Applicant's Management and Mitigation Measures at Appendix B.

B57. The Applicant must:

- (a) not commence operation until the Landscape Management Plan is approved by the Secretary;
- (b) implement the most recent version of the Landscape Management Plan approved by the Secretary, and
- (c) maintain the landscaping and vegetation on the site in accordance with the approved Landscape Management Plan required by condition B56 for the duration of the development.

Lighting

- B58. The Applicant must ensure the lighting associated with the Development:
 - (a) complies with the latest version of AS 4282 (INT) Control of Obtrusive Effects of Outdoor Lighting; and
 - (b) is mounted, screened and directed in such a manner that it does not create a nuisance to surrounding properties or the public road network.

PART C: ENVIRONMENTAL MANAGEMENT, REPORTING AND AUDITING

CONSTRUCTION ENVIRONMENTAL MANAGEMENT PLAN

- C1. The Applicant must prepare a Construction Environmental Management Plan (CEMP) to the satisfaction of the Secretary. The CEMP must:
 - (a) be approved by the Secretary prior to the commencement of construction;
 - (b) identify the statutory approvals that apply to the Development;
 - outline all environmental management practices and procedures to be followed during construction works associated with the Development;
 - (d) describe all activities to be undertaken on the site during construction of the Development, including a clear indication of construction stages:
 - (e) detail how the environmental performance of the construction works will be monitored, and what actions will be taken to address identified adverse environmental impacts;
 - describe the roles and responsibilities for all relevant employees involved in construction works associated with the Development; and
 - (g) include the management plans required under Condition C2 of this consent.
- C2. As part of the CEMP required under Condition C1 of this consent, the Applicant must include the following:
 - (a) Construction Traffic Management Plan (see Condition B1);
 - (b) Erosion and Sediment Control Plan: and
 - (c) Construction and Demolition Waste Management Plan (see Condition B22).
- C3. The Applicant must:
 - (a) not commence construction of the Development until the CEMP is approved by the Secretary; and
 - (b) carry out the construction of the Development in accordance with the CEMP approved by the Secretary (and as revised and approved by the Secretary from time to time).

OPERATIONAL ENVIRONMENTAL MANAGEMENT PLAN

- C4. The Applicant must prepare an Operational Environmental Management Plan (OEMP) to the satisfaction of the Secretary. The OEMP must:
 - (a) be submitted to the Secretary and the EPA for approval prior to the commencement of operation;
 - (b) be prepared by a suitably qualified and experienced expert;
 - (c) provide the strategic framework for environmental management of the Development;
 - (d) identify the statutory approvals that apply to the Development;
 - (e) describe the role, responsibility, authority and accountability of all key personnel involved in the environmental management of the Development;
 - (f) describe the procedures that would be implemented to:
 - keep the local community and relevant agencies informed about the operation and environmental performance of the Development;
 - (ii) receive, handle, respond to, and record complaints;
 - (iii) resolve any disputes that may arise;
 - (iv) respond to any non-compliance;
 - (v) respond to emergencies; and
 - (g) include the following environmental management plans:
 - (i) Traffic;
 - (ii) Noise and Vibration;
 - (iii) Air Quality (see Condition B46);
 - (iv) Waste (see Condition B19); and
 - (v) Water (see Condition B39).
- C5... The Applicant must:
 - (a) not commence operation until the OEMP is approved by the Secretary; and
 - (b) operate the Development in accordance with the OEMP approved by the Secretary (and as revised and approved by the Secretary from time to time).

MANAGEMENT PLAN REQUIREMENTS

- C6. The Applicant must ensure that the environmental management plans required under Condition C4 of this consent are prepared by a suitably qualified person or persons in accordance with best practice and include:
 - (a) detailed baseline data;
 - (b) a description of:
 - (i) the relevant statutory requirements (including any relevant approval, licence or lease conditions);
 - (ii) any relevant limits or performance measures/criteria; and

- the specific performance indicators that are proposed to be used to judge the performance of, or guide the implementation of, the Development or any management measures;
- (c) a description of the management measures that would be implemented to comply with the relevant statutory requirements, limits or performance measures/criteria;
- (d) a program to monitor and report on the:
 - (i) impacts and environmental performance of the Development; and
 - (ii) effectiveness of any management measures (see (c) above);
- (e) a contingency plan to manage any unpredicted impacts and their consequences;
- a program to investigate and implement ways to improve the environmental performance of the Development over time;
- (g) a protocol for managing and reporting any:
 - (i) incidents;
 - (ii) complaints;
 - (iii) non-compliances with statutory requirements; and
 - (iv) exceedances of the impact assessment criteria and/or performance criteria; and
- (h) a protocol for periodic review of the plan.

Revision of Strategies, Plans and Programs

- C7. Within three months of:
 - (a) approval of a modification;
 - (b) approval of an annual review under Condition C8;
 - (c) submission of an incident report under Condition C9; or
 - (d) completion of an audit under Condition C12,

the Applicant must review, and if necessary revise, the strategies, plans, and programs required under this consent to the satisfaction of the Secretary.

Note: This is to ensure the strategies, plans and programs are updated on a regular basis, and incorporate any recommended measures to improve the environmental performance of the Development.

ANNUAL REVIEW

- C8. Within 12 months from the commencement of operation, and each year thereafter, unless otherwise agreed by the Secretary, the Applicant must review the environmental performance of the Development to the satisfaction of the Secretary. This review must:
 - (a) describe the development that was carried out in the previous reporting period, and the Development that is proposed to be carried out over the next reporting period;
 - (b) include a comprehensive review of the monitoring results and complaints records of the Development over the previous reporting period, which includes a comparison of these results against the:
 - (i) the relevant statutory requirements, limits or performance measures/criteria;
 - (ii) requirements of any plan or program required under this consent;
 - (iii) the monitoring results of previous reporting periods; and
 - (iv) the relevant predictions in the EIS;
 - (c) identify any non-compliance over the last reporting period, and describe what actions were (or are being) taken to ensure compliance;
 - (d) identify any trends in the monitoring data over the life of the Development;
 - (e) identify any discrepancies between the predicted and actual impacts of the Development, and analyse the potential cause of any significant discrepancies; and
 - (f) describe what measures will be implemented over the next reporting period to improve the environmental performance of the Development.

REPORTING

Incident Reporting

- C9. Within 24 hours of any incident or potential incident with actual or potential significant off-site impacts on people or the biophysical environment, a report must be supplied to the Department outlining the basic facts. A further detailed report must be prepared and submitted following investigations of the causes and identification of necessary additional preventive measures. That report must be submitted to the Secretary no later than 14 days after the incident or potential incident.
- C10. The Applicant must maintain a register of accidents, incidents and potential incidents. The register must be made available for inspection at any time by the independent Hazard Auditor and the Department.

Regular Reporting

C11. The Applicant must provide regular reporting on the environmental performance of the Development on its website, in accordance with the reporting arrangements in any plans or programs approved under the conditions of this consent.

AUDITING

Independent Environmental Audit

- C12. Within one year of the commencement of operation, and every three years thereafter, unless the Secretary directs otherwise, the Applicant must commission and pay the full cost of an Independent Environmental Audit (audit) of the Development. Division 2B of Part 6 of the EP&A Act applies to these audits, which are for the purposes of ascertaining information in relation to the environmental performance of the Development and the adequacy of strategies, plans and programs. Audits must:
 - (a) be conducted by a suitably qualified, experienced and independent team of experts whose appointment has been endorsed by the Secretary;
 - (b) include consultation with the relevant agencies;
 - (c) assess the environmental performance of the Development and assess whether it is complying with the requirements in this consent, and any other relevant approvals, relevant EPL(s) (including any assessment, plan or program required under these approvals);
 - (d) review the adequacy of any approved strategy, plan or program required under the abovementioned consents; and
 - (e) recommend measures or actions to improve the environmental performance of the Development, and/or any strategy, plan or program required under these consents.

Note: This audit team must be led by a suitably qualified auditor, and include relevant experts in any other fields specified by the Secretary.

C13. Within three months of commissioning this audit, or as otherwise agreed by the Secretary, the Applicant must submit a copy of the audit report to the Secretary, together with its response to any recommendations contained in the audit report, and a timetable for the implementation of the recommendations. The Applicant must implement these recommendations to the satisfaction of the Secretary.

ACCESS TO INFORMATION

- C14. Prior to the commencement of construction and for the duration of the Development, the Applicant must:
 - (a) make copies of the following publicly available on its website:
 - (i) the documents referred to in Condition A2;
 - (ii) all current statutory approvals for the Development;
 - (iii) all approved strategies, plans and programs required under the conditions of this consent;
 - (iv) a comprehensive summary of the monitoring results of the Development, reported in accordance with the specifications in any conditions of this consent, or any approved plans and programs:
 - (v) a complaints register updated on a monthly basis;
 - (vi) the annual reviews of the Development;
 - (vii) any independent environmental audit of the Development and the Applicant's response to the recommendations in any audit;
 - (viii) any other matter required by the Secretary; and
 - (b) keep this information up to date, to the satisfaction of the Secretary.

APPENDIX A DEVELOPMENT LAYOUT PLANS

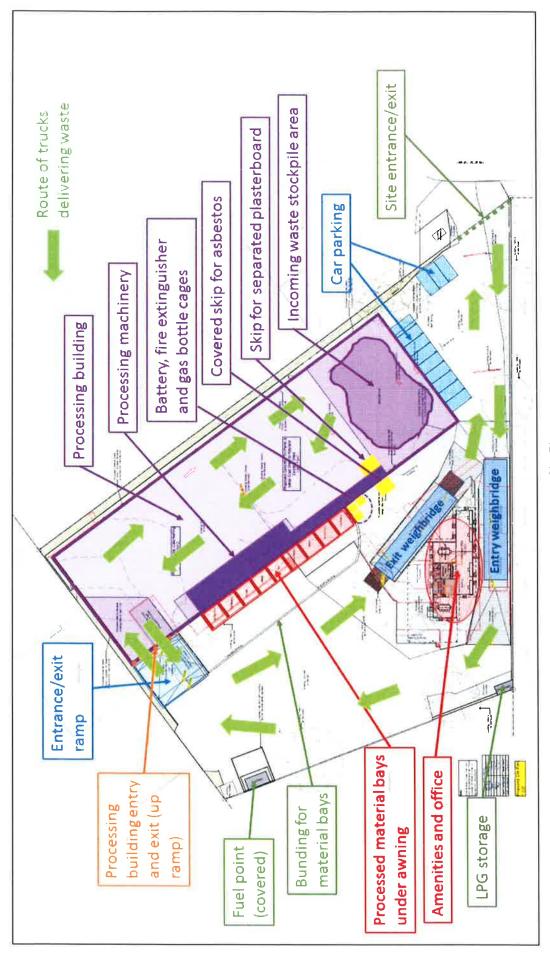


Figure 1: Site Plan

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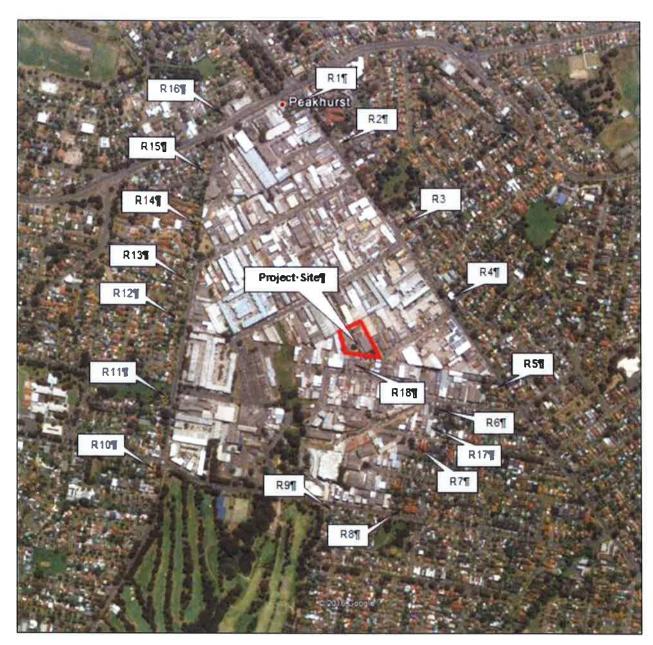


Figure 2: Sensitive Receivers

APPENDIX B APPLICANT'S MANAGEMENT AND MITIGATION MEASURES

1. Updated Statement of Commitments

The proposed commitments are made to ensure any impacts arising from the construction and operation of the resource recovery facility are minimised and summarised in Table 11 below.

Table 11: Project Commitments and mitigation measures	
Issue	Proposed Mitigation Measure
Annual Throughput and storage limits	The proponent is committed to limiting waste processed on site to 220,000 tonnes per annum. The proponent will maintain and monitor weighbridge records (inbound and outbound) to ensure limits are not exceeded.
	The proponent will make weighbridge records available at the request of DPE or the EPA to verify compliance.
	The proponent will ensure storage does not exceed the amount prescribed in the EPL
Hours of Operation	Operating hours will be limited to 6:00am to 10:00pm Monday to Saturday.
Noise	Operations A Noise Management Plan (NMP) is to be incorporated into the OEMP. The NMP would address matters such as:
	 Limiting site hours of operation to align with the NVA (SLR, March 2016). Implementation of a general vehicle speed limit of 5 km/hr. Vibration management – handling of heavy materials; Inclusion of site access limitations and restrictions to encourage all access to the site via Boundary Road and Hearne Street; Requirements for ongoing maintenance of fixed and mobile plant in accordance with manufactures specifications; Development of protocols to ensure processing operations are undertaken wholly within the processing building; and Procedures to handle complaints assessment of risk and impacts and corrective actions if required.
	Detailed Design Detailed design plans will: Remove the proposed speed humps with alternate measures to limit speed within the site incorporated into the final design and site specific TMP.

- site incorporated into the final design and site specific TMP.
- Ensure the design of the slab and footings associated with the finger screen shall be prepared to take into account and accommodate vibration from dynamic loads associated with the operation of this plant.

Construction

A comprehensive Construction Environmental Management Plan (CEMP) would include:

 Mitigation measures to ensure Construction Noise and Vibration are minimised and the measures are implemented and managed for the duration of the construction programme.

Traffic and Access

Operations:

An Operational Traffic Management Plan (OTMP) will be incorporated into the OEMP to prescribe traffic management procedures for the development including:

- Identification of preferred routes to minimise noise impacts on the surrounding community;
- Incorporate the vehicle stacking plan (TTPP, March 2017) and associated management protocols to allow for up to 31 vehicles to be held on site at any one time;
- Physical and operational measures (including signage) to mitigate impacts of vehicles accessing and leaving the site;
- Maintaining internal vehicle swept paths through appropriate line marking to identify and prevent encroachment on parking areas;
- Driver education and information to promote driver habits to minimise noise and awareness of preferred heavy vehicle routes; and
- Provision for a traffic controller to be stationed at the site entry to:
 - o Direct traffic to make a left hand turn when exiting to Hearne Street;
 - o Record details of any vehicles approaching from Barry Avenue; and
 - Advise management of any observed breaches to the OEMP.
- Timetabling, scheduling and details of vehicle booking systems.

Detailed Design:

Ensure vehicle swept paths are not compromised in the detailed design phase. The minimum proposed site entry of 16.2m is to be maintained.

Detailed design plans are to include appropriate 'left out only' signage to guide heavy vehicles when departing the site.

Construction:

The CEMP would include measures to mitigate impacts associated with construction traffic including but not limited to:

- Hours of operations;
- Temporary parking arrangements;
- Access and manoeuvring arrangements;
- Traffic control requirements; and
- Oversize Vehicle Permits and arrangements (e.g. floating of plant and equipment).

Air Quality and Greenhouse Gas

Air Quality

Operations:

An Air Quality Management Plan (AQMP) would be prepared to form part of a comprehensive OEMP. The AQMP would be prepared with regard given to the AQIA and address matters such as:

- The installation and regular maintenance of an operator-activated overhead dust suppression system;
- Use of a street sweeper over external hardstand areas;
- Use of hand held hoses to supplement overhead dust suppression system;
- Use of hand held hoses within any areas not covered by the overhead dust suppression system;
- Procedures to cease operations if weather conditions have a major negative impact on the operation.
- Implementation of a general vehicle speed limit of 5 km/hr will be imposed across all areas of the site.
- Procedure to check all vehicles are checked for mud and soil on tyres prior to leaving
 the site and where mud or soil is detected on the entrance road (i.e. "track out"), staff
 will be deployed to sweep the road.
- Maintenance requirements for all on-site, fixed and mobile diesel powered plant (excluding road vehicles) (e.g. manufactures specifications).
- Maintenance requirements of rumble grid and stormwater pits to prevent build up of dust / sediment.
- Assignment of roles and responsibilities for the management of air quality issues such as dust suppression, and outlining the mitigation measures to be implemented to minimise the generation of air pollutants.
- Procedures to handle potentially odour generating wastes such as green waste or hidden putrescible wastes.
- Procedures to handle complaints.

Design

Detailed design plans are to document the location and coverage of dust suppression measures including:

- The fogging system;
- Overhead dust suppression sprinklers;
- Hand held hoses; and
- Location of rumble grid and all stormwater pits.

Construction

The CEMP would include measures to mitigate impacts associated with air quality (dust) associated with construction. This would include but not be limited to:

 Deployment of dust suppression measures (sprinklers / watercart / hand held hoses) during construction;

- Protocols for restricting construction activities during adverse weather conditions (wind generated dust);
- Use of street sweepers; and
- Regular checking and maintenance of soil erosion and sediment control measures.

Greenhouse Gases

The following mitigation and management measures will be implemented at the site to minimise greenhouse gas emissions during operations:

- Fixed plant maintenance requirements and practices will be incorporated into the OEMP to ensure all plant is operating in an efficient manner.
- Prior to the release of a Construction Certificate issued pursuant to Section 109C of the EP & A Act, a report addressing the energy efficiency requirements contained in Section J of the National Construction Code (BCA) will be prepared and submitted to the appointed Principal Certifying Authority. This report will document and assess the suitability of lighting and appliances proposed for the site office space.
- Garden waste materials received on site (i.e. low volumes contained in skip bins from household clean up or demolition sites) are picked and stored separately, then transported off site to a local facility for recycling (e.g. mulched, chipped and/or composted). The final OEMP will include details relating to the identification, handling and diversion of greenwaste.

Contamination

A Construction Environmental Management Plan (CEMP) will be prepared prior to the commencement of demolition works or the approval of a Construction Certificate under section 109C of the Act.

The CEMP will further report on the results of subsurface materials testing and will provide protocols to ensure the health and safety of construction workers when handling or working within disturbed areas and will include protocols for managing groundwater should it be encountered. Any testing of material will be undertaken in accordance with the relevant guidelines made under the Contaminated Land Management Act 1997. Should further approvals be required to undertake construction or remediation work, they will be sought and secured prior to the commencement of any works.

The PIRMP will be reviewed and updated to reflect the operations and activities on site. The updated PIRMP will be submitted to the NSW EPA as part of any application to modify the EPL for the site.

Water Cycle Management

Operations

A Water Cycle Management Plan (WCMP) will be incorporated into the OEMP. The OEMP will address matters such as:

- The installation and regular maintenance of a control measures including:
 - o Rocla First Defense treatment device;
 - Rocla Water Level Controller;
 - Litter baskets;

- Rainwater tank;
- Gutters and downpipes;
- Sweeping of internal and external hardstand areas;
- Cleaning and removal of leachate from blind sumps;
- o Fogging system; and
- Leachate sump and alarm system.
- Procedures to ensure all wastes are stored in an enclosed environment.
- Implementation of a general vehicle speed limit of 5 km/hr will be imposed across all areas of the site.
- Procedure to ensure all vehicles are checked for mud and soil on tyres prior to leaving site and where mud or soil is detected on the entrance road (i.e. "track out"), staff will be deployed to sweep the road.
- Procedures for monitoring any water quality limits as specified in the EPL.
- The Final OEMP will be developed in consultation with the EPA prior to commencement of operations and will include:
 - o leachate management and disposal; and
 - maintenance triggers and actions for the stormwater management system.

Detailed Design

Detailed stormwater management plans document and confirm the suitability of proposed measures including:

- · Rocla First Defense treatment device;
- Litter baskets;
- Sweeping of internal and external hardstand areas;
- · Cleaning and removal of leachate from blind sumps;
- Leachate sump and alarm system
- · Fogging system;
- Rainwater tank; and
- Bunding arrangements to fuel store and under awning material storage area.

Construction

The CEMP would include measures to mitigate impacts with water quality associated with construction. This would include but not be limited to:

- Regular checking and maintenance of soil erosion and sediment control measures;
- Procedures for monitoring water quality during the construction phase; and
- Procedures for managing groundwater should it be encountered.

Hazardous and Dangerous

Goods

Operations

To ensure the risks associated with the storage of potentially dangerous goods are not increased, the following measures area proposed:

 Storage of diesel fuel and LPG will be limited to the quantities contained in this EIS and the SEPP 33 Risk Screening Assessment;

 Diesel fuel will be stored within a bunded area with sufficient capacity in isolation of any other flammable liquids.

Detailed Design

- Fire safety measures recommended in the SLR Fire Safety Study (25/10/2016) are to be incorporated into the detailed design documents.
- The diesel storage tank area and bund will be designed and constructed to satisfy the requirements of AS1940-2004 - The storage and handling of flammable and combustible liquids;
- Storage locations are to be documented in accordance with AS1940-2004 will be incorporated into the OEMP and submitted to the PCA prior to the release of a certificate issued under section 109C of the Act.
- The design, construction and installation of the aboveground diesel storage tank in the context of any relevant Australian Standards will be submitted to the PCA prior to the release of a final occupation certificate issued under section 109C of the Act.
- The design recommendations for the Fire Protection Systems, as contained in the SLR Fire Safety Study (March 2017) are to be incorporated in to the detailed design. This is to include the recommended fire safety measures and details relating to the containment of firefighting water.

Visual Impact

Prior to the issue of a final occupation certificate:

- Landscaping works will be completed in accordance with a Landscape Plan at the completion of the building works; and
- The proposed colour schedule will be documented in the construction documents and be in place at the completion of the construction works.

Operational Waste Management

General

The following commitments are made to ensure the efficient handling of waste and movement of vehicles across the site:

- Provision of upgraded sorting and processing machinery to ensure processing efficiency;
- Scheduling and tracking of waste deliveries (in and out) by the operators dedicated scheduling team;
- Utilising dedicated site traffic controllers during peak periods and enforcement of driver protocols will enhance vehicle operations onsite; and

These commitments will be embodied in the Operations Environmental Management Plan (OEMP) and adopted to control the day to day handling of waste both on and off site. The OEMP will include protocols and procedures relating to:

- Waste acceptance;
- Waste source control;
- On site storage requirements;
- Resource recovery requirements;
- Green waste management;
- Operational noise management;
- Dust and air quality management;
- Leachate Management;

Issue Proposed Mitigation Measure		
	 Management and maintenance of stormwater infrastructure; Transport and Disposal (Waste Tracking); and Stockpile Management; Special Waste Management (Asbestos and Tyres); Third party material sampling; Weighbridge operation (including calibration); Emergency management procedures as contained in the SLR Fire Safety Study (25/10/2016). 	
	A final OEMP will be reviewed by the EPA prior to the variation of the EPL. Commencement of operations or the release of an occupation certificate under Section 109C of the Act. The OEMP will be reviewed biennially or following risk assessments review of procedures and other aspects and impacts that affect or are affected by conditions on the site.	
Construction Environmental Management	A CEMP will be submitted to the PCA prior to the issue of relevant certificate under section 109R of the Act. The plan will address: proposed demolition and construction hours; the requirements of the DEWCAPE Construction Waste Management Plan (Rev 3 dated 11/11/2016) pedestrian and traffic management during demolition and construction; stormwater and waste management; noise management; and contamination;	
Stockpiles	Reduction in volume of each storage bay by approximately 30%.	
Traffic	Updated swept path diagram to account for additional safety measures to create separation and delineation of inbound and outbound traffic including: i. Widening of the driveway at the entrance ii. Construction of island to separate inbound and outbound traffic	
Storage	Updated architectural drawings to allocate storage areas for gas bottles, fire extinguishers, batteries and asbestos.	

APPENDIX B: CONSIDERATIONS UNDER SECTION 79C

Section 79C of the EP&A Act requires that the consent authority, when determining a development application, must take into consideration the following matters:

(a) the n	rovisions of:	
(i) (ii)	any environmental planning instrument, and 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 Director-General has notified the consent authority that the making of the proposed instrument has been deferred indefinitely or has not been approved), and	Detailed consideration of the provisions of all environmental planning instruments (including draft instruments subject to public consultation under this Act) that apply to the proposed development is provided in Appendix C of this report.
(iii) (iiia)	any development control plan, and any planning agreement that has been entered into under Section 93F, or any draft planning agreement that a developer has offered to enter into under Section 93F, and	The Applicant has not entered into any planning agreement under Section 93F.
(iv) (v)	the regulations (to the extent that they prescribe matters for the purposes of this paragraph), and	The Department has undertaken its assessment of the development in accordance with all relevant matters as prescribed by the regulations, the findings of which are contained within this report.
		The site is not located within a coastal zone and no coastal zone management plan applies to the development.
environm environm locality,	likely impacts of that development, including tental impacts on bottle the natural and built tents, and social and economic impacts in the	The Department has considered the likely impacts of the development in detail in Section 5 of this report. The Department concludes that all environmental impacts can be appropriately managed and mitigated through the recommended conditions of consent.
(c) the su	uitability of the site for the development,	The development is a resource recovery facility located on IN2 Light Industrial zoned land which is permissible with development consent.
(d) any s the regul	submissions made in accordance with this Act or ations,	All matters raised in submissions have been summarised in Section 4 of this report and given due consideration as part of the assessment of the proposed development in Section 5 of this report.
(e) the public interest.		The development would generate up to 15 jobs during construction and 13 jobs during operation. The development is a considerable capital investment in the Mortdale area that would contribute to the provision of local jobs.
		The environmental impacts of the development would be appropriately managed via the recommended conditions. On balance, the Department considers the development is in the public interest.

APPENDIX C: CONSIDERATION OF ENVIRONMENTAL PLANNING INSTRUMENTS

State Environmental Planning Policy (State and Regional Development) 2011 (SRD SEPP)

The SRD SEPP identifies certain classes of development as SSD. In particular, construction and operation of a resource recovery or recycling facility that meets the criteria in Clause 23(3) of Schedule 1 of the SRD SEPP is classified as State significant development. The development satisfies the criteria in Clause 23(3) of Schedule 1 as it involves a resource recovery or recycling facility that handles more than 100,000 tonnes per year of waste.

State Environmental Planning Policy (Infrastructure) 2007 (ISEPP)

The ISEPP aims to facilitate the effective delivery of infrastructure across the State and lists the type of development defined as Traffic Generating Development.

The development constitutes traffic generating development in accordance with the ISEPP as it involves a waste recycling facility with access to a road. Consequently, it requires referral to RMS for comment and consideration of accessibility and traffic impacts.

The development was referred to RMS for consideration. RMS advised it had no objections to the development and as such did not recommend any conditions of consent.

The proposed site layout and design would allow the efficient movement of people and waste to and from the site, and is not anticipated to result in any traffic safety, road congestion or parking issues. The development is therefore considered consistent with the ISEPP.

State Environmental Planning Policy 33 – Hazardous and Offensive Development (SEPP 33)

SEPP 33 outlines the items that a consent authority must consider to assess whether a development is hazardous or offensive.

The Applicant reviewed the development in accordance with SEPP 33 and advised the development would not store dangerous goods above the threshold limits specified in SEPP 33, therefore it would not be considered potentially hazardous or offensive development.

State Environmental Planning Policy 55 – Remediation of Land (SEPP 55)

SEPP 55 aims to ensure that potential contamination issues are considered in the determination of a development application. The EIS included a contamination assessment for the site which confirmed that a remedial action plan is not required. The Department has included specific conditions for managing any unexpected finds.

State Environmental Planning Policy No. 64 - Advertising and Signage (SEPP 64)

SEPP 64 aims to ensure that outdoor signage is compatible with the desired amenity and visual character of an area, and provides effective communication in suitable locations, that is of high quality design and finish.

As the development does not include signage at the site, signage has been excluded from the assessment and consideration of SEPP 64 is not applicable in this case.

Greater Metropolitan Regional Environmental Plan No. 2 – Georges River Catchment (REP 2)

REP 2 aims to protect the water quality of the Georges River and its tributaries and the environmental quality of the whole catchment through coordinated land use planning and development control. The site is located within the area covered by REP 2. The Department considers that the development is consistent with the aims and objectives of REP 2 as it would have no impacts on water quality in the Georges River Catchment.

Hurstville Local Environmental Plan 2012 (HLEP)

The HLEP aims to encourage the development of housing, employment, infrastructure and community services to meet the needs of the existing and future residents of the Georges River LGA (formerly Hurstville). The HLEP also aims to conserve and protect natural resources and foster economic, environmental and social well-being.

The development is located on IN2 Light Industrial zoned land and the area immediately surrounding the site is utilised for industrial uses. The proposed development is consistent with the objectives of the IN2 zoning identified in the HLEP.

The Department has consulted with Council throughout the assessment process and has considered all relevant provisions of the HLEP and those matters raised by Council in its assessment of the development (see Section 5 of this report). The Department concludes that the development is consistent with the relevant provisions of the HLEP, however the Applicant has lodged a request to vary a development standard under Clause 4.6. The Department's assessment of this request has been carried out in Section 5.4 of this report. Based on this assessment, the Department has recommended the grant of development consent despite the contravention of the height of buildings development standard as set out in Clause 4.3 of the HLEP.

Hurstville Development Control Plan No. 1 (DCP)

The DCP includes specific development controls for the Georges River LGA. The relevant provisions for the development include Chapter 3.7 – Stormwater, Chapter 3.1 – Vehicle Access, Parking and Maneuvering, and Chapter 5.2 – Light Industrial Areas. Where relevant, the provisions of the Hurstville DCP have been considered, as described in Section 5. The proposed built form, site layout and design features of the development are compatible with the character of existing development in the surrounding area and development is generally consistent with the relevant provisions of the Hurstville DCP.

The Department has consulted with Council throughout the assessment process and has considered all relevant provisions of the DCP and those matters raised by Council in its assessment of the development (see Section 5 of this report).

APPENDIX D: ENVIRONMENTAL IMPACT STATEMENT

See link: http://majorprojects.planning.nsw.gov.au/index.pl?action=view_job&job_id=7421

APPENDIX E: SUBMISSIONS

See link: http://majorprojects.planning.nsw.gov.au/index.pl?action=view_job&job_id=7421

APPENDIX F: RESPONSE TO SUBMISSIONS

See link: http://majorprojects.planning.nsw.gov.au/index.pl?action=view_job&job_id=7421