

# STATE SIGNIFICANT DEVELOPMENT ASSESSMENT: Bettergrow Resource Recovery Facility, Wetherill Park SSD 7401



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

December 2017

Cover photo: 3D render of proposed organics receival and processing (source: Style Developments Pty Ltd)

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# **ABBREVIATIONS AND DEFINITIONS**

24 hours	Relating to one day, or happening only on one day
Applicant	Bettergrow Pty Ltd, or any other person(s) carrying out any development
Applicant	to which this consent applies
AHD	
AND	Australian Height Datum Australian Standard
-	
BCA	Building Code of Australia
CEMP	Construction Environmental Management Plan
Construction	The demolition of buildings or works, the carrying out of works, including
	bulk earthworks, and erection of buildings and other infrastructure
	permitted by this consent
Council	Fairfield City Council
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
EIS	Environmental Impact Statement titled Greenspot Wetherill Park,
	Resource Recovery and Recycling Facility, Environmental Impact
	Statement, SSD 7401, prepared by RPS, dated 11 April 2017
EPA	NSW Environment Protection Authority
EP&A Act	Environmental Planning and Assessment Act 1979
EP&A Regulation	Environmental Planning and Assessment Regulation 2000
EPL	Environment Protection Licence issued by the EPA under the POEO Act
Evening	The period from 6 pm to 10 pm
FGO	Food and Garden Organics
FLD	Food and Liquid Depackaging
FRNSW	Fire and Rescue NSW
General solid waste (putrescible)	As defined in Part 3 Schedule 1 of the POEO Act
General solid waste (non-putrescible)	As defined in Part 3 Schedule 1 of the POEO Act
Heavy vehicle	Any vehicle with a gross vehicle mass of five tonnes or more
Management & Mitigation Measures	The Applicant's management and mitigation measures contained in the
management a magater mededree	EIS/RTS
Minister	Minister for Planning (or delegate)
Mitigation	Activities associated with reducing the impacts of the development prior
Milgalon	to or during those impacts occurring
Night	The period from 10 pm to 7 am on Monday to Saturday, and 10 pm to 8
Night	am on Sundays and Public Holidays
OEMP	Operational Environmental Management Plan
Operation	The receipt, sorting, separating, processing and removal of waste
POEO Act	Protection of the Environment Operations Act 1997
POEO (Waste) Regulation	Protection of the Environment (Waste) Regulation 2014
RTS	Response to Submissions titled Greenspot Wetherill Park, Resource
	Recovery and Recycling Facility, Response to Submissions, SSD 7401,
	prepared by RPS, dated 4 September 2017
ENM	Excavated Natural Material
Secretary	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
TMP	Traffic Management Plan
tpa	Tonnes per annum
Waste	As defined in the Protection of the Environment Operations Act 1997
Weighbridge	A weighbridge that is verified in accordance with the National Measures
	Act 1960

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# **EXECUTIVE SUMMARY**

Bettergrow Pty Ltd (the Applicant) has lodged a Development Application (DA) and accompanying Environmental Impact Statement (EIS) seeking consent for the construction and operation of a new Resource Recovery Facility at 24 Davis Road, Wetherill Park in the Fairfield local government area (LGA).

This site comprises 2.29 hectares (ha) and is located in a large industrial estate, referred to as the Wetherill Park Industrial Estate. The site is surrounded by industrial land uses to the east, south and west. Low density residential zoned land at Wetherill Park is located 1.5 kilometres (km) from the site's southern boundary.

The proposal involves the construction and operation of a Resource Recovery Facility (RRF) to process up to:

- 70,000 tpa of food and garden organic waste from local Council's green bins
- 30,000 tpa of packaged food and liquid food waste from supermarkets and/or wholesalers who require product destruction of expired or spoiled packaged foods and liquids
- 60,000 tpa of hydro-excavation, drill muds and fluids from drilling activities.

In addition to the above, the Applicant proposes to operate a bulk landscape supplies facility which would store 40,000 tpa of bulk landscaping materials including soils, clays, sands, gravels, mulch, growing media and aggregates for direct sale to landscaping suppliers but not the general public. No processing of landscape materials would occur on the site.

The proposed development would utilise the existing site structures including administration buildings, the storage shed, concrete bays, hardstand, internal roads and vehicle entry points. The existing awning on the upper level of the site is proposed to be demolished as part of this development application. Fairfield City Council (Council) previously granted consent for the demolition of existing office buildings, four ancillary buildings and a carport at the site in preparation for the RRF. The site has been remediated and a site audit statement has been issued by an EPA accredited site auditor which states the site is suitable for its intended use.

The Applicant has been operating since 1978 and operates a number of similar RRFs across New South Wales and Queensland. Bettergrow specialises in recycling drill mud, biosolids, garden organics, food organics, grease trap waste, liquid wastes and landscape materials which are converted into a range of home and garden products sold at nurseries including compost materials, fertilisers and landscaping materials.

The proposed development is consistent with the NSW Government's direction in achieving the targets in the *Waste and Avoidance and Resource Recovery Strategy 2014-2021*, notably it would assist in the recovery of wastes and divert waste from landfills. The proposed development is also in accordance with the Premier's Priorities as well as current strategic planning policies including *A Plan for Growing Sydney*.

The proposed development has a capital investment value of \$15,886,274 and is expected to generate 40-50 full-time equivalent construction jobs and 25 operational jobs.

The proposed 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 Clauses 23(3) and 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 application. As there were less than 25 public submissions in the nature of objections, Council did not object, and no political donations were made within the last 2 years, the Executive Director can determine the application under delegation.

The Department of Planning and Environment (the Department) exhibited the development application and accompanying EIS from Thursday 4 May 2017 to Friday 2 June 2017. A total of eight submissions were received all of which were from public authorities. No submissions from the public were received. The key concerns were raised by the Department, the Environment Protection Authority (EPA) and Council related to odour and traffic impacts.

The Applicant submitted a Response to Submissions (RTS) in September 2017 which included additional information on traffic impacts, contamination, dust impacts, odour and the specifications of the proposed

odour management system. In addition, to address Council's concerns in relation to dust the Applicant committed to sealing the bulk landscape supplies area. A number of management and mitigation measures from the EIS were also updated at this time.

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:

- odour
- traffic and site access.

In summary, the development would:

- positively contribute to the State's *Waste Avoidance and Resource Recovery Strategy* performance by diverting waste away from landfill
- be consistent with the strategic direction for waste management in NSW
- meet the relevant odour, air quality and noise criteria at sensitive and industrial receivers
- adequately manage odour as the proposed waste processing activities which generate odour would be fully enclosed, kept under negative pressure and include and odour management system
- generate traffic which could be accommodated on the site and local and regional roads without any significant impacts on the safety, capacity or efficiency of the road network
- provide a range of environmental and economic benefits for the region, through resource recovery and the provision of 25 new full-time jobs.

The Department's assessment concluded that 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. Nonetheless, the Department acknowledges the history of odour complaints in the Western Sydney area and has recommended stringent conditions in relation to odour, to ensure the development does not exacerbate the existing odour issues in Western Sydney. The Department considers the development is in the public interest and is recommended for approval, subject to conditions.

# 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 7401) for the Bettergrow Resource Recovery Facility (RRF), at 24 Davis Road, Wetherill Park. The proposal involves the construction and operation of a resource recovery facility to process up to 160,000 tonnes per annum (tpa) of food and garden organic waste, packaged food and liquid waste and hydro-excavation and drill muds. The facility also includes the operation of a bulk landscape supplies facility to store up to 40,000 tpa of landscaping materials. The Department's assessment considers all documentation submitted by the Applicant, including the Environmental Impact Statement (EIS) and Response to Submissions (RTS), and submissions received from government authorities, stakeholders 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 proposed 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 Bettergrow RRF has concluded that the development is in the public interest and should be approved, subject to conditions.

#### 1.2. Development Background

Bettergrow Pty Ltd (the Applicant) is seeking development consent to construct and operate a RRF at 24 Davis Road, Wetherill Park in the Fairfield Local Government Area (LGA) (see **Figure 1**). The RRF would recycle a variety of wastes including food and garden organic waste from Council's green bins, expired or spoiled packaged food and liquid waste from supermarkets and wholesalers, and hydro-excavation and drill muds from drilling activities. The recycled food and organic waste would be transported to Bettergrow's regional facility for further processing to produce compost products. The hydro-excavation and drill muds would be recycled to produce engineered fill which would be used in the construction industry.

As part of the proposed development, the Applicant proposes to process:

- 70,000 tpa of food and garden organic waste (general solid waste, putrescible)
- 30,000 tpa of packaged food and liquid waste (general solid waste, putrescible)
- 60,000 tpa of hydro-excavation and drill muds (general solid waste, non-putrescible).

In addition to the above, the Applicant proposes to operate a bulk landscape supplies facility which would store 40,000 tpa of bulk landscaping materials including soils, clays, sands, gravels, mulch, growing media and aggregates for direct sale to landscaping suppliers with no sales to the general public.

The site has three discrete areas including an upper level, mid-level and lower lever, to allow the different facilities to be managed separately (see **Figure 2**). The food and garden organic waste and the packaged food and liquid waste would be processed on the upper level. The mid-level would be dedicated to the bulk landscape supplies facility and hydro-excavation and drill mud receival area. The lower level would include the hydro-excavation and drill mud processing equipment and the wastewater management system.

The proposed development would include two weighbridges, a weighbridge office, a load inspection bay, storage shed, a 5,000 litre (L) diesel tank, bulk hydro-excavation and drill mud receival pit and associated processing equipment, a wastewater management system, rainwater storage tanks, internal roadways and hardstand areas, bulk landscape material storage bays, food and liquid waste de-packaging (FLD) building and a food and garden organics waste processing (FGO) building.

The proposed development would also consist of refurbishing the existing office  $(241 \text{ m}^2)$  and staff amenities  $(78 \text{ m}^2)$  on the lower level which would be used as the main site office and amenities. The proposal would utilise the existing concrete storage bays located on the mid-level for the storage of landscaping materials. A smaller office  $(113 \text{ m}^2)$  and amenities building is proposed to be constructed in the north-eastern corner of the site for staff working on the upper level. The upper level of the site currently contains a disused awning which is proposed to be demolished.

The Applicant has been operating since 1978 and operates a number of RRFs across New South Wales (NSW) and Queensland. The NSW operations include facilities at Bathurst, Parkes, Ravensworth, St Marys and Vineyard (see **Figure 3**). The existing facilities receive and process drill mud, biosolids, garden organics, food organics, grease trap waste, liquid wastes and landscape materials which is converted into a range of home and garden products which are sold at nurseries and include compost materials, fertilisers and landscaping materials.

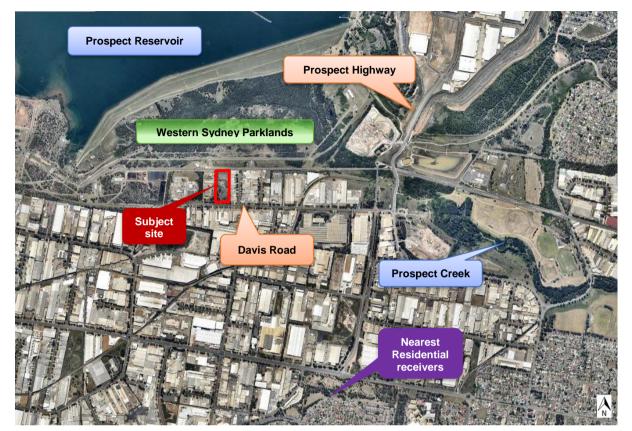


Figure 1: Site Location

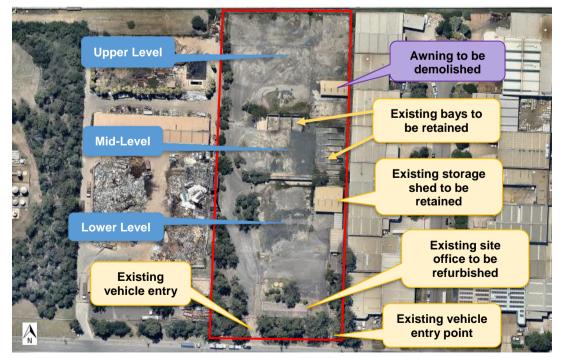


Figure 2: Site Layout

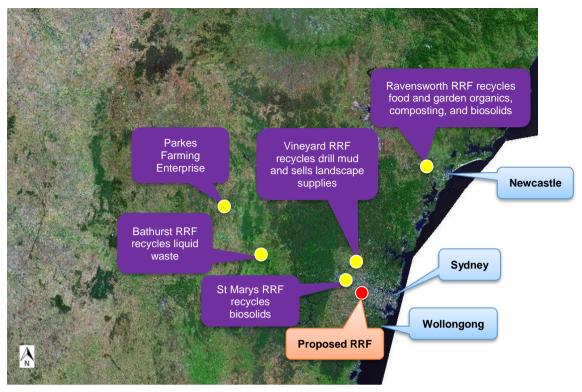


Figure 3: NSW Bettergrow Facility Locations

#### 1.3. Site Description

The site is currently unused and comprises of 2.29 hectares (ha) of IN1 General Industrial zoned land located at 24 Davis Road, Wetherill Park (see **Figure 1**). The site is legally described as Lot 18 DP 249417. The site is approximately 36 km west of the Sydney city centre and 7 km north-west of the Fairfield town centre.

Originally the site was used for pastoral purposes prior to being developed in 1966 for industrial use. In 1978, Allen Bros Asphalt Pty Ltd acquired the site and constructed and operated an asphalt batching plant. In 1995, the site was then transferred to Emoleum Australia (a subsidiary of Mobil Oil Australia Pty Ltd) where the asphalt batching activities continued. In 2004, the asphalt batching operations were decommissioned by Mobil and the site has since undergone remediation. The site has been determined to be suitable for its intended use by an EPA accredited site auditor (see **Table 4**). The proposed development would utilise the existing site facilities including administration buildings, concrete bays, hardstand, internal roads and vehicle entry points. The existing awning on the upper level of the site is proposed to be demolished (see **Figure 2**).

The site has an elevation ranging from 36 metre (m) to 48 m Australian Height Datum (AHD) with three levels which vary in elevation (see **Figure 2**). The site is primarily covered by concrete and bare soil, however, there is a strip of remnant Cumberland Plain Woodland across the site's frontage which provides screening to Davis Road, no clearing of this vegetation is proposed.

The site connects to Fairfield City Council's (Council) stormwater network which conveys stormwater towards the east along Davis Road, to an unnamed concrete lined channel which discharges to Prospect Creek near Widemere Road.

Vehicular access to the site is gained via Davis Road which connects to the industrial roads of Prospect Highway and Elizabeth Street which have access to the M7 and M4 Motorways via the major arterial roads of The Horsley Drive and Prospect Highway (respectively).

#### 1.4. Surrounding Land Uses

The site is zoned IN1 General Industrial under the Fairfield Local Environment Plan (LEP) and is located within the Wetherill Park industrial area, a key manufacturing and distribution hub in Greater Western Sydney. The industrial area, situated between the urban growth areas of north-west and south-west Sydney, contains more than 1,000 industrial businesses and employs over 20,000 people. A number of waste facilities are located in the general vicinity of the site including the SUEZ Waste Transfer Station (SSD 7267), ResourceCo Waste and Resource Management Facility (SSD 7256 which is under construction), Council's Sustainable Resource Centre and Boral's Construction and Demolition Resource Recovery Facility (SSD 6525) (see **Figure 4)**.

The surrounding land uses are generally industrial in nature. Adjoining the site to the east and south are several industrial units with various industrial, commercial and warehousing uses. Immediately adjoining the site to the west is the existing One-Steel Recycling scrap metal facility. To the north of the site is a Sydney Water pipeline, Western Sydney Parklands and Prospect Reservoir. To the south is Davis Road which connects to Elizabeth Street and the Prospect Highway.

Further east of the site is Prospect Creek, a watercourse running between Prospect Reservoir and the Georges River (south). Prospect Creek drains south away from Prospect Reservoir.

The nearest existing residential receiver is located approximately 1.5 km to the south-east of the site, within an established low density residential area predominantly characterised by single detached dwellings (see **Figure 4**).

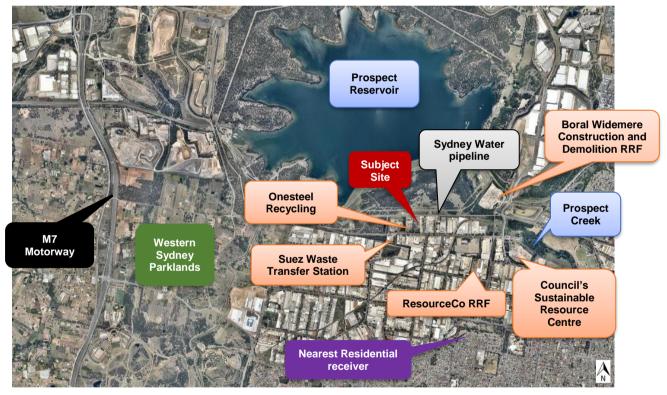


Figure 4: Site Location and Surrounding Landuses

#### 1.5. Other Development Approvals

Previously the site was used for the purposes of an asphalt batching plant which was decommissioned in 2004. Remediation works have since taken place and the site has been deemed suitable for its intended use. The site has remained unused since it has been remediated. On 14 August 2015, Council (delegated authority) granted consent (493.1/2015) for the demolition of office buildings, four ancillary buildings and a carport at the site in preparation for the RRF.

# 2. PROPOSED DEVELOPMENT

### 2.1. Description of the Development

The Applicant proposes to construct and operate a RRF and a bulk landscape supplies facility at 24 Davis Road, Wetherill Park. The proposed development includes four operational activities across three areas on the site. The four operations include:

- a hydro-excavation and drill mud processing facility
- a bulk landscape supplies facility
- a FGO processing facility
- a FLD processing facility.

The major components of the proposed development are summarised in **Table 1**, shown in **Figure 5**, and described in full in the Environmental Impact Statement (EIS), included in **Appendix D**.

Aspect Description			
Development Summary	<ul> <li>Construction and operation of a RRF to process up to:</li> <li>60,000 tpa of hydro-excavation and drill muds</li> <li>70,000 tpa of food and garden organic waste</li> <li>30,000 tpa of packaged food and liquid waste</li> <li>Operation of a 40,000 tpa of bulk landscape supplies facility.</li> </ul>		
Site Area	• The site and development footprint is approximately 2.29 ha in area.		
Demolition Works	<ul> <li>Demolition of the majority of the sites structures has already been approved under Council's development consent DA 493.1/2015.</li> <li>The proposed development would require the demolition of the metal awning located on the upper level of the site. All other structures would be utilised and/or refurbished by the proposed development.</li> </ul>		
Earthworks, civil works and services extension	<ul> <li>No bulk earthworks are proposed, however some minor excavations would be required to construct the FGO and FLD building.</li> <li>Water and sewer services are available at the site. However, an amplification or extension to these mains may be required to service the site.</li> </ul>		
Construction	<ul> <li>Construction is anticipated to be staged over a two to three year period. Works are expected to be staged as follows:         <ul> <li>Stage 1: Site preparation including construction of all necessary infrastructure (12 months).</li> </ul> </li> <li>Stage 2: Construction and installation of drill/mud hydro-excavation processing equipment.</li> <li>Stage 3: Construction of FGO waste processing building.</li> <li>Stage 4: Construction of the FLD processing building.</li> <li>The infrastructure for the bulk landscape supplies facility is already in place. However, the Applicant has committed to sealing the bulk landscape supplies area.</li> </ul>		
Construction Hours	<ul> <li>Monday to Friday, 7 am to 6 pm</li> <li>Saturday, 8 am to 1 pm.</li> </ul>		
Operations	<ul> <li>The proposed development includes four operations over three areas on the site. The proposed activities on each level include:         <ul> <li>Lower Level: Administration office, entry and exit weighbridge and associated office, load inspection bay, wastewater storage (six 35 kL tanks), car park, hydro-excavation and drill mud processing equipment and associated waste water management system.</li> <li>Mid Level: Bulk landscape supplies storage area, hydro-excavation and drill mud waste receival pit. Hydro-excavation and drill mud waste would be unloaded on this level, with the processing equipment located on the lower level.</li> <li>Upper Level: FGO and FLD processing building, administration office (including staff amenities) and car parking.</li> </ul> </li> </ul>		
Waste Received	<ul> <li>The resource recovery operations would receive and process the following wastes:         <ul> <li>hydro-excavation and drilling mud and/or muddy waters (general solid waste, non-putrescible) from excavations from drilling and easements</li> </ul> </li> </ul>		

 Table 1: Main Development Components

Aspect	Description			
Finished Product	<ul> <li>food and garden organic waste from Council's green bins and businesses comprising of clippings, branches, leaves and food scraps (general solid waste, putrescible)</li> <li>packaged foods and liquids from companies requiring secured product destruction due to expired or spoiled food and liquids such as cereals, bread and juices (general solid waste, putrescible)</li> <li>the bulk landscape supplies facility would not store waste but rather consolidate and store products.</li> <li>The finished waste product at each facility would include:</li> <li>Hydro-excavation and drill mud processing facility:         <ul> <li>engineered fill material such as Natural Excavated Material which can be used in the construction industry.</li> </ul> </li> <li>FGO waste processing facility:         <ul> <li>shredded organic material would be further processed at Bettergrow's Ravensworth facility to produce compost growing media suitable for domestic and agricultural use, in particular mine rehabilitation</li> <li>the liquid fraction (leachate) would be applied to processed food and garden organic waste or sent to a licensed facility for further reuse.</li> </ul> </li> <li>FLD waste processing facility:         <ul> <li>de-packaged food and liquid food waste would be mixed with the waste in the FGO building and/or transferred to one of Bettergrow's facilities for further processing</li> <li>packaged dry food such as cereals and breads would be processed to make stock feed used in the agricultural industry</li> <li>liquid food waste may also be transferred to an EPA licenced land application-site for soil injection.</li> </ul> </li> <li>Bulk supplies landscape facility:         <ul> <li>clays, soils, sands, gravels, aggregates, saw dust and mulch.</li> </ul> </li> <li>Residual Waste:         <ul> <li>The facility would produce approximately 4,000</li></ul></li></ul>			
Operating Hours	would be required to be disposed of at a licensed landfill.			December
	Operation Hydro-Excavation and Drill Mud Processing Facility	Receival Monday to Friday, 24 hours	Dispatch Monday to Friday, 7 am to 6 pm Saturday, 6 am to 2 pm	Processing
	Food and Garden Organic Facility	Monday to Friday, 5 am to 5 pm	Monday to Friday, 5 am to 11.00 pm Saturday, 6 am to 2 pm	Monday to Friday, 7 am to 6 pm
	Food and Liquid Depackaging Facility	Monday to Friday, 4 am to 4 pm	Monday to Friday, 5 am to 6 pm	
	Bulk Landscape Supplies Facility	Monday to Friday, 5 am to 11 pm	Monday to Friday, 7 am to 6 pm Saturday, 6 am to 2 pm	N/A
Car Parking	• 31 car parking sp	aces, including two d	isabled car parking space	es.
Road and road reserve works	• The site's main access is currently 11.5 m wide, in order to meet the Roads and Maritime Services (RMS) standards and allow for dual access this would be extended to at least 12.5 m.			
Landscaping	<ul> <li>Established native vegetation including a small patch of Cumberland Plain Woodland already exists along the site's frontage at Davis Road. No clearing of vegetation on the site is proposed. The Applicant has proposed further landscaping along the site's frontage including the planting of ground covers, bushes and shrubs to complement the existing vegetation.</li> </ul>			
Capital investment value	• \$15,886,274	•		
Employment	<ul><li>40-50 full-time eq</li><li>25 operational job</li></ul>	uivalent construction	jobs.	

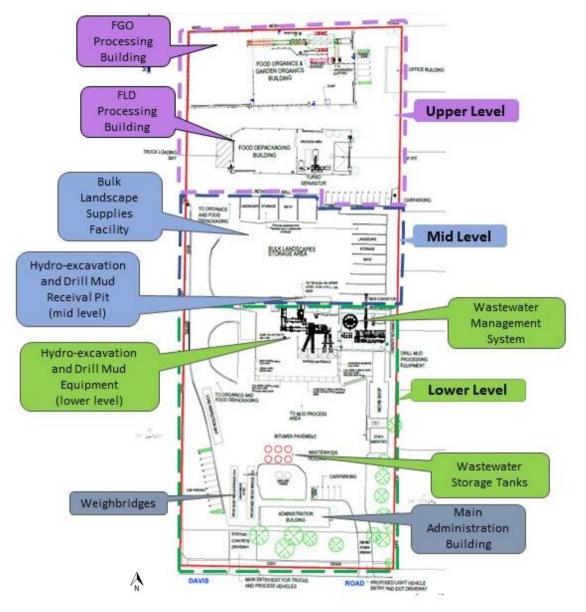


Figure 5: Proposed Development

# 2.2. Process Description

Waste received at the RRF would include hydro-excavation and drill muds, food and garden organics, and packaged food and liquids. The landscape supplies facility would store soils, clays, sands, stone, gravels, aggregates, sawdust and mulch. All waste and product received at the facility would be from contractors and public access to the facility would not be permitted.

All heavy vehicles entering the site would enter via the incoming weighbridge, where the load would be inspected prior to entering the relevant processing area. Any non-compliant loads would be removed from the site. Heavy vehicles with compliant loads would proceed to the appropriate receivals area based on waste type. The proposed development includes four different operations which are described in more detail below.

#### 2.2.1. Hydro-excavation and Drill Mud Processing Facility (Mid and Lower Level)

Hydro-excavation and drilling mud is produced from the creation of boreholes and directional drilling from gas wells, pipelines and geotechnical investigations. The drilling mud is a mixture of naturally occurring soil and rock such as clay, sandstone, shale and drilling fluid which has been generated during drilling operations. The hydro-excavation drilling method is a non-destructive drilling method that uses high pressure water to excavate materials. The contents contained in the drill muds can vary depending on the type of drilling operation but typically include a mixture of water, bentonite, sodium carbonate, lime

and polymers. The facility would process up to 60,000 tpa of hydro-excavation and drill muds. The Applicant operates a similar facility at Vineyard and therefore has experience with this type of recycling.

Trucks carrying hydro-excavation or drill muds would be required to proceed to the mid-level of the site where the waste would be unloaded into tip troughs located on the lower level. An operator would be present 24 hours a day to ensure testing and monitoring of incoming loads is conducted prior to waste being unloaded. The Applicant proposes to install a CD-Enviro System (the system) which would separate and wash the hydro-excavation and drill muds (see **Figure 6** and **7**). The system would sort aggregates via particle size and then stockpile the aggregates according to its size (see **Figure 6**). Oversized aggregates would be directed to the trommel and further broken down. The hydro-excavation and drill mud waste has a high moisture content and therefore the potential to generate dust is low.

The finished product would include engineered fill that is suitable to be used in the construction industry used to construct buildings and roads. The system would also remove any unwanted materials such as organic material, metals and plastic prior to stockpiling. The equipment would be operated outside as heavy machinery is required to load out the materials. The entire hydro-excavation and drill mud processing facility would be bunded to ensure dirty water and clean water remain separate.

As the waste has a high moisture content and requires aggregates to be washed, the process will generate wastewater. To avoid potential stormwater contamination and to optimise the re-use of water at the facility, the proposed development includes a wastewater management system (see **Figure 6** and **8**). The wastewater management system would be contained within the existing storage sheds. The wastewater management system would allow fine particles to settle to the bottom of the tank, allowing clean water to overflow the weir of the cycle and be pumped back through the system. The wastewater management system also includes a centrifuge to further remove sediment from the wastewater. Water which cannot be re-used would be stored in one of the six 35 kilolitre (kL) wastewater holding tanks (see **Figure 5**). The wastewater holding tanks have capacity to store wastewater for two days if required. The tanks would be tested and discharged to sewer in accordance with a Trade Waste Agreement with Sydney Water. Any wastewater which does not meet the trade waste requirements would be trucked offsite to a licensed waste facility for disposal.

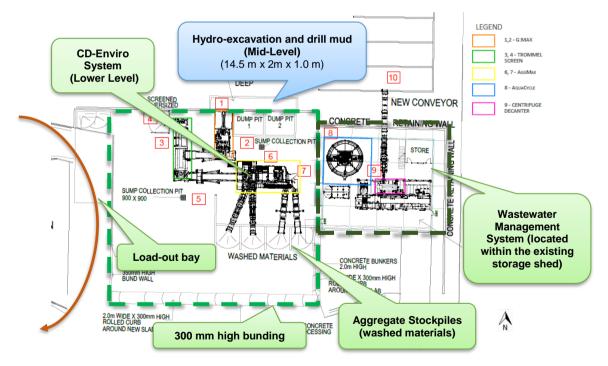


Figure 6: Key Components of the Hydro-excavation and Drill Mud Processing Facility





**Figure 7**: Example of Hydro-Excavation and Drill Mud Processing Equipment

**Figure 8**: Example of Wastewater Management System. **Note:** The proposed system would be stored indoors within the existing storage shed.

### 2.2.2. Bulk Landscape Supplies Facility (Mid-Level)

The bulk landscape supplies facility would receive and store product delivered from various wholesale landscape suppliers, the product would then be sold to customers in the landscaping and construction industry. No crushing, shredding or processing will be conducted at this facility, rather the facility would act as a distribution and consolidation centre for landscape materials. The materials stored in this area are not considered forms of waste.

The facility would utilise the existing concrete storage bays on the sites mid-level to store and consolidate the landscaping products (e.g. soil, clay, sand, sawdust and aggregates) (see **Figure 9** and **10**). It is anticipated that 40,000 tpa of landscaping materials would be stored in this area. Heavy vehicles would deliver the landscape material to the mid-level where it would be unloaded into the allocated bays. The distribution area is large enough to ensure heavy vehicles can enter the landscape supplies area and exit in a forward direction. Stockpiles would be contained within the existing concrete walled bays and have a maximum height of 3 m. The products that would be received and distributed include soil, sand, mulch, saw dust, clay, gravels and aggregates. The bulk landscape supplies facility would not store any compost materials. Drainage is to be designed to direct runoff from the landscape supplies area to the stormwater management system which includes a sediment trap and humeceptor (secondary stormwater treatment which removes oil and grease).

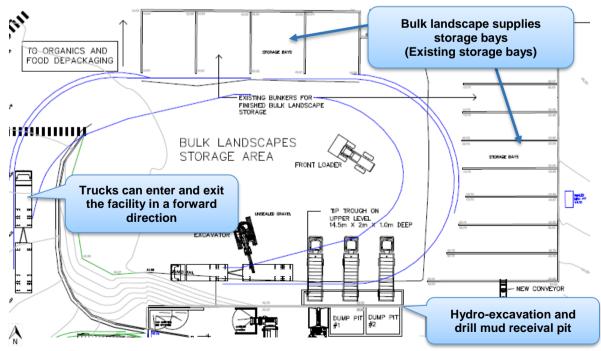
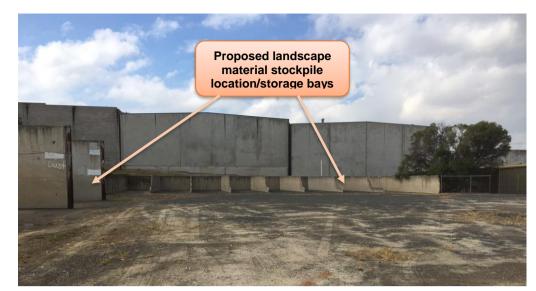


Figure 9: Bulk Landscape Supplies Facility Location on the Mid-Level



*Figure 10*: Existing Concrete Bays to be Utilised for Stockpiling Purposes as Part of the Bulk Landscape Supplies Facility

# 2.2.3. Food and Garden Organics (FGO) Processing Facility (Upper Level)

When food and garden organic matter are sent to landfills, they decompose which can produce greenhouse gases and leachate. However, the Applicant proposes to recycle the food and garden organic waste to produce valuable organic matter and nutrients which would be further processed at one of Bettergrow's EPA licenced composting facilities to produce compost which could be used for domestic and agricultural purposes.

The FGO waste processing facility would accept waste from Council's and businesses green bin garbage collection. Such waste would include food organics (i.e fruit and vegetable scraps) and garden waste such as pruning's, clippings, branches, twigs, flowers, leaves and organic food waste such as. Council's and businesses would deliver the food and garden organic waste to the facility via heavy vehicles.

The upper level of the facility would include the FGO processing building which is proposed to process 70,000 tpa of unpackaged food and garden organics. To ensure the safety of employees is maintained and to minimise pedestrian traffic across the site, a small office and amenities building along with 16 car spaces (including one disabled car space) would be constructed on the upper level of the site (see **Figure 5**).

Heavy vehicles would enter the FGO processing building through fast acting roller doors, waste would then be unloaded and stockpiled within a dedicated area towards the western end of the FGO building (see **Figure 11** and **12**). The unloaded waste would be further checked for contaminated material, any contaminated material would be removed from the stockpile and placed in a skip bin for disposal to landfill. Uncontaminated waste would then be placed in a hopper and travel along a conveyor to a decompactor. The decompactor separates the organic material and any material that is not suitable for recycling is removed (see **Figure 11**). The decompacted organic waste then proceeds to a sorting cabin where smaller pieces of non-organics such as metals and plastics are removed by hand. Organics are then transferred via a conveyor to a slow speed shredder to produce shredded organic material which can be composted. Any oversized material would be returned to the beginning of the process for further processing. The shredded organic material would be trucked to one of Bettergrow's licensed facilities for composting to produce compost which would be used for domestic and agricultural purposes (see **Figure 13** and **14**).

In the event of an emergency, the FGO building would have capacity to store shredded organics for up to two days. However, waste would only be stored on-site for a maximum of 24 hours. The processing of organic material would generate leachate and odour. Leachate would drain to a sump inside the FGO building where it would be captured and re-applied to the shredded compost material to ensure an adequate moisture content is maintained prior to the product being transported off-site. Odour would be managed via the use of fast acting roller doors, sprays to prevent the fermentation of waste and the operation of eight carbon filter units (see **Figure 11**). Plant and equipment would be regularly cleaned inside the FGO building to ensure they do not become a source of odour.

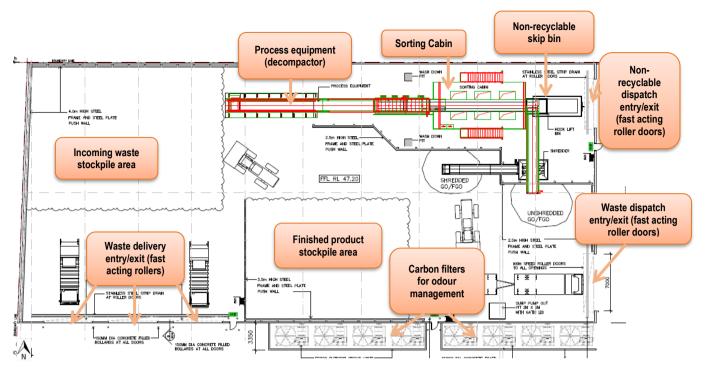


Figure 11: Food and Garden Organics (FGO) Processing Facility Operations



Figure 12: Food and Garden Organics (FGO) Processing Facility



**Figure 13**: Example of Food and Organic Waste Prior to Processing



**Figure 14**: Example of Final Composted Product, Following Processing at Bettergrows Ravensworth Facility

### 2.2.4. Food and Liquid Depackaging (FLD) Facility (Upper Level)

The FLD facility would essentially remove the packaging from food and liquid waste so that the organic waste can be recycled. Packaged foods would be received at the site by waste contractors from companies such as supermarkets and wholesale food suppliers requiring product destruction for spoiled or expired goods. Examples of the type of products that may require depackaging include spoiled or expired packaged fruit and vegetables, nuts, cereals, breads and juices.

Vehicles would enter the FLD building through fast acting roller doors. Incoming bulk packaged foods would be unloaded into the tipping pits located at the eastern end of the FLD processing building. From the tipping pit, the waste would then be grabbed and placed into the feed hopper of the turbo separator (see **Figure 15**). The turbo separator removes the packaging and separates liquid and solid waste. The packaging would either be recycled at another licensed facility or disposed of at a licensed landfill. The solid wet organic waste would be collected in bins and transferred to the FGO building for further processing to produce composted material (see **Figure 15**). The solid dry food waste such as cereals and breads would be depackaged, sorted and bundled together to produce stock feed for use in the agricultural industry. **Figure 16** shows the different waste processes for food and liquid waste at the FLD facility.

Pallets of solid and liquid foods would be delivered to the western end of the depackaging building and stored at a secure product storage area prior to being processed through the turbo separator or glass crusher. The Applicant has stated that no processed wet food would be stored in the FLD building for longer than 24 hours with the exception of small quantities that are left over at the days end on a Friday. Any material that is left over would be stored in a covered bunker over the weekend.

Liquid food waste would be generated through the processing of spoiled or expired liquids such as juices. Liquid food waste is a highly valuable resource due to its high nutrient content. Following processing, the liquid food waste would be pumped to the liquid waste tanks (two x 27,000 litres) for temporary storage (see **Figure 15**). These tanks would allow for four days of liquid waste storage. The tanks would be fitted with an alarm which would be triggered once the tanks reach 20,000 litres. The liquid waste would either be reused and blended with shredded organics in the FGO processing building, transferred to one of Bettergrow's licensed facilities or transferred to an EPA land application site for soil injection. Any liquid waste used for soil injection would be subject to the requirements of the EPA's Liquid Food Waste Exemption 2014. The liquid waste tanks would be bunded with 110% of the total storage capacity.

Air from the FLD building would be ducted to the FGO building, where odour would be managed through eight carbon filters.

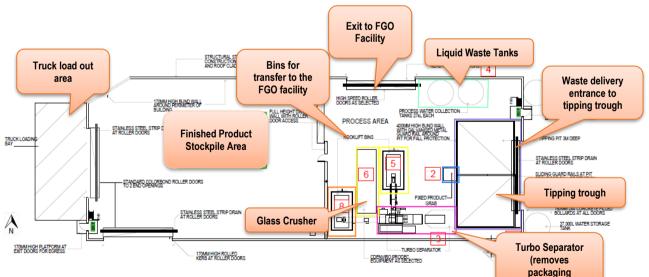


Figure 15: FLD Building Proposed Operations

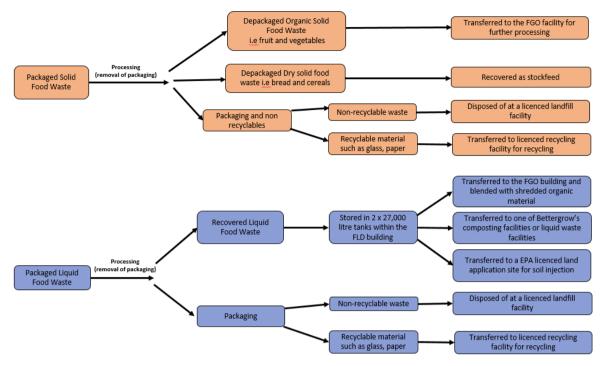


Figure 16: FLD Building - Process Flowchart for Solid and Liquid Waste

#### 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) and the *Western Sydney Regional Waste Avoidances and Resource Recovery Strategy 2014-2017* through re-using hydro-excavation and drill mud waste, food and organic waste and diverting waste from landfill.

The Applicant states the facility would ensure waste is recovered and re-used, resulting in less waste being landfilled. The Applicant has identified that almost half of household waste is considered food and garden organic waste. With Sydney's population on the rise, it is estimated by 2021 Sydney would generate over 800,000 tpa of domestic waste. As such, there is expected to be an increased demand for processing general solid waste (putrescible).

The Applicant states that the RRF would have social and economic benefits to businesses and the surrounding community, with an estimated capital investment value of \$15.8 million.

The Applicant has obtained grant funding for the proposed development through the NSW EPA's Waste Less Recycle More Initiative, with a particular focus on funding for organics processing. The *Organics Infrastructure (Large and Small) Program* supports new and enhanced infrastructure and on-site processing of organic waste.

The Applicant has also noted the site at 24 Davis Road, Wetherill Park was selected for the proposed development due to its:

- proximity to major transport corridors (located within 4 km of the M4 and M7 Motorways)
- proximity to end markets for resale of recycled and stored materials
- surrounding industrial land uses thereby minimising impact to sensitive receivers
- existing site layout complements the separation of proposed processes without requiring significant earthworks or modifications to the sites existing topography
- the facility would utilise the existing infrastructure on-site, which would reduce construction impacts.

# 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 providing 40-50 new construction jobs and 25 permanent operational jobs in the Fairfield LGA. The development also represents a \$15.8 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 would:

- assist in the transformation of western Sydney by providing growth and investment in an identified industrial precinct, with high levels of accessibility to the regional road network (Direction 1.4)
- provide additional employment opportunities with close proximity to existing residential developments in western Sydney (Direction 1.4)
- provide a high-quality development which would stimulate economic activity and create new jobs within the Wetherill Park industrial area (Direction 1.7)
- utilise appropriate land to reduce the amount of waste going to landfill and treat materials for potential re-use (Direction 4.3).

# Waste Avoidance and Resource Recovery Strategy 2014-2021

Reducing waste and keeping materials circulating within the economy are priorities for the NSW Government. To meet this important challenge, the Government prepares a new state-wide *Waste Avoidance and Resource Recovery Strategy* every five years. The strategy identifies six key objectives and targets which include avoid and reduce waste generation, increase recycling, divert more waste from landfill, manage problem wastes better, reduce litter and reduce illegal dumping.

The strategy for 2014-2021 sets a waste recovery targets for municipal solid waste (MSW) and construction and demolition waste (C&D). The targets are as follows:

By 2021–22, increase recycling rates for:

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

The proposed facility would contribute to the State's recovery performance by recycling MSW, C&I waste, C&D waste and diverting waste from landfills.

#### A Plan for Growing Sydney

A Plan for Growing Sydney (the Plan) aims to ensure Sydneysiders have greater access to great outdoor spaces, greater housing choice, living closer to work and world class job opportunities. The Greater Sydney Commission (GSC) is tasked with implementing the plan in partnership with State and local governments. The plan includes specific directions for creating jobs closer to home for Sydney residents, improving transport connections, delivering housing supply and well-planned neighbourhoods, providing networks of green and open spaces and protecting Sydney's unique natural environments.

The Department has considered the development in the context of the Plan and notes it would create and retain jobs for residents in the Fairfield LGA. Wetherill Park is also identified as a major employment and urban services area.

#### Draft South West District Plan, 2016

GSC has released drafts of six district plans encompassing Greater Sydney which will guide the delivery of *A Plan for Growing Sydney*. The draft district plans set out the vision, priorities and actions for the development of each district. The proposed development site is located within the south-west district which is identified as Sydney's fastest growing district. The draft south-west 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 at least 40-50 construction jobs and 25 permanent operational jobs within the district. The proposed development would assist in meeting action S11, as it improves environmental performance through increased waste reuse and recycling.

### 3.2. State Significant Development

The development is State significant development pursuant to section 89C of the *Environmental Planning* Assessment Act, 1979 (EP&A Act) as it involves the operation of a resource recovery or recycling facility 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. Consequently, the Minister for Planning is the consent authority for the proposed development.

### 3.3. Permissibility

The site is zoned General Industrial IN1 under the *Fairfield Local Environmental Plan 2013* (LEP). Development for the purposes of waste or resource management facilities is permissible with consent in the IN1 zone under the LEP.

### 3.4. Consent Authority

On 11 October 2017, the Minister delegated the functions to determine SSD applications to the Executive Director, Key Sites and Industry Assessments where:

- the relevant local council has not made an objection
- there are less than 25 public submissions in the nature of objections
- a political disclosure statement has not been made.

A total of eight submissions were received. None objected to the proposed development and no submissions were received from the general public. Council did not object to the development. No reportable political donations were made by the Applicant in the last two years and no reportable political donations were made by any persons who lodged a submission.

Accordingly, the application can be determined by the Executive Director, Key Sites and Industry Assessments under delegation.

#### 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 proposed development, an Environment Protection License (EPL) will need to be applied for and issued by the Environment Protection Authority (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 proposed 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 (Western Sydney Parklands) 2009
- 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)
- State Environmental Planning Policy No. 65 Advertising Structures and Signage (SEPP 64)

• Fairfield Local Environmental Plan 2013.

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 *Fairfield Citywide DCP 2013 (Amendment 13)* 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 EPI's.

### 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 4 May 2017 until 2 June 2017. 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;
  - (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 2**).

Object	Consideration	
5(a)(i)	The proposed development would result in the development and use of the land for the purpose for which it was zoned, being general industrial. The proposed development would also utilise existing infrastructure on-site and thereby reducing the overall construction impacts. The proposed development would promote economic welfare for the local community through the provision of 40-50 construction jobs and 25 permanent operational jobs.	
5(a)(ii)	The proposal would allow the orderly and economic use of suitably zoned land for the purpose of increasing the capacity of existing waste management facility.	
5(a)(vi)	The Department's assessment in <b>Section 5</b> 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 acceptable level of environmental performance.	
5(a)(vii)	The proposal is consistent with the principles of ESD as the proposal utilises existing waste management infrastructure on industrial zoned land.	
<ul> <li>5(b)</li> <li>The Department has assessed the development in consultation with and giving due conside to the technical expertise and comments provided by Council and other Government author. This is consistent with the object of sharing the responsibility for environmental planning be different levels of Government</li> </ul>		
5(c)	The Department provided the public the opportunity to comment on the proposal and considered all issues raised in public submissions during its assessment of the application.	

 Table 2: Considerations Against the EP&A Act

#### 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.

The development is located within an industrial area and 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 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 EIS for the development included 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

#### 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:

- consultation with potentially interested Aboriginal groups in accordance with Clause 80C of the *National Parks and Wildlife Regulation 2009* including a letter mail out to key Aboriginal stakeholders in February 2016 and an advertisement in the Fairfield Advance in early February 2016
- consultation with neighbouring properties, properties that may be affected by the proposed development and those along the principal transport route including a letter drop which included a project information sheet and feedback form in early February 2016. Up to 260 project information sheets and feedback forms were distributed. In addition, to the 260 project information sheets that were delivered via letter-box drop, the Applicant mailed a further 160 project fact sheets and feedback forms in early February 2016
- in late February 2016, the Applicant held a community information session on-site
- information regarding the proposed development has also been made available to the public via Bettergrow's website.

The key concerns that were raised during the Applicant's community consultation process included odour and traffic impacts.

#### 4.1.2. Consultation by the Department

The Department undertook consultation with relevant public authorities through preparation of the Secretary's environmental assessment requirements (SEARs). After accepting the DA and EIS for the application, the Department:

- made it publicly available from Thursday 4 May 2017 until Friday 2 June 2017:
  - on the Department's website
  - at the Department's Information Centre (320 Pitt Street, Sydney)
  - at Fairfield City Council (86 Avoca Road, Wakeley).
- notified landowners and occupiers 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 Fairfield Advance and Fairfield Champion.

During the exhibition period, on 18 May 2017 the Department visited the site with the Applicant. A total of eight submissions were received during the exhibition period. All eight submissions were from public authorities, no submissions were received from the general public. No objections to the proposed development were received. A summary of the issues raised in the submissions is provided below, with a copy of each submission included in **Appendix E**.

#### 4.1.3. Public Authorities

**Fairfield City Council (Council)** raised no objection to the proposed development, however Council requested the bulk landscape supplies stockpile bay be roofed and bunded and all trafficable areas (including the bulk landscape supplies area) be sealed. In addition, Council requested the following information:

- clarification that all infrastructure including the sewerage discharge point would be above the 1 in 100 year ARI
- an assessment of pre and post stormwater development flows be provided and predicted surface water quality be compared to the Georges River Estuary Coastal Zone Management Plan (July 2013) objectives
- details on leachate and surface water management, to ensure leachate is not discharged from the site
- a copy of the traffic modelling data
- a Remediation Action Plan (RAP)
- a landscape plan
- Section 94A Development Contributions
- recommended a number of conditions of consent in relation building controls and compliance.

The **EPA** raised no objection to the proposed development, however the EPA requested the following information:

- a guarantee from the manufactures that the carbon filters used to manage odour can achieve 99.9% odour removal
- further justification in relation to the assumptions made in the odour assessment
- the ducting from the FLD facility to the FGO facility be shown on a figure
- an air quality assessment be prepared
- a RAP and Site Audit Statement be provided to address the outstanding data gaps in the contamination assessment.

Western Sydney Parklands Trust did not object to the proposed development, however, they stated the land to the north of the site is Western Sydney Parklands and as such requested the impacts to the parklands be assessed by the Department.

**Sydney Water** raised no objection to the application and advised that water and wastewater services are available to the site, however amplifications and extension to these mains may be required and that detailed requirements will be provided as part of the Section 73 Compliance Certificate under the *Sydney Water Act 1994.* 

**Fire and Rescue NSW** (**FRNSW**) raised no objection to the proposed development and stated the development was low in risk in terms of combustibility and had no further comments.

**Roads and Maritime Services** (RMS) raised no issues or objections to the proposed development and recommended a number of standard conditions.

The Office of Environment and Heritage (OEH) raised no issues or objections to the proposed development.

Department of Primary Industries (DPI) raised no issues or objections to the proposed development.

### 4.2. Response to Submissions

On 5 September 2017, the Applicant provided a Response to Submissions (RTS) on the issues raised during the exhibition of the development (see **Appendix F**). The RTS contained the following additional information:

- revised figures and plans which showed swept paths of trucks manoeuvring through the site and the ducting between the FLD facility and the FGO facility
- further contamination investigations which demonstrated that the in-situ contamination does not warrant remediation
- a site audit report and site audit statement which concluded the site is suitable for the proposed commercial/industrial use and recommended an unexpected finds protocol be prepared
- an assessment of dust impacts, which concluded the air quality criteria could be met at the nearest residential receiver
- a revised traffic impact assessment
- traffic modelling data
- carbon filter unit specifications
- further information regarding surface water and wastewater management system.

The RTS was made publicly available on the Department's website and was provided to key agencies to consider whether it adequately addressed the issues raised. A summary of the agencies responses is provided below.

The **EPA** recommended an odour audit be conducted once the facility is operating, to verify the predicted odour impacts and mitigation measures

**Council** maintained its concern about the quality of stormwater from the bulk landscape supplies facility and requested the bulk landscape supplies area stockpile bay be covered and the entire area be sealed.

DPI and RMS had no additional comments.

Western Sydney Parklands did not provide comments.

The Department consulted with the EPA and Council on the draft conditions of consent. Neither Council nor the EPA raised any concerns with the draft conditions.

The Department has considered the issues raised in submissions, the RTS 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 RTS and supplementary information in its assessment of the development. The Department considers the key assessment issues are:

- odour
- traffic and access

A number of other issues have also been considered. These issues are considered to be minor and are addressed in **Table 4** under **Section 5.3**.

#### 5.1. Odour

The processing of general solid waste (putrescible) within the FGO and FLD facility has the potential to cause offensive odours in the surrounding area if not appropriately managed. The Applicant proposes to process 70,000 tpa of food and garden waste within the FGO facility and 30,000 tpa of packaged food and liquid waste within the FLD facility.

Odour is a source of general concern for residents in Western Sydney due to the relatively high number of waste and composting facilities in Eastern Creek, Erskine Park and Kemps Creek. Whilst no public submissions were received, during the Applicant's consultation process odour was raised as a concern by surrounding landowners and occupiers. To determine the potential odour impacts that would be generated from operating the FGO and FLD facility, the Applicant commissioned Advanced Environmental Dynamics to carry out an odour assessment (OA). The assessment included dispersion modelling using CALPUFF to predict off-site odour levels undertaken in accordance with the *Approved Methods of Modelling and Assessment of Air Pollutants in NSW* (the Approved Methods) (EPA, 2016) and Assessment and Management of Odour from Stationary Sources in NSW (EPA, 2006).

To minimise the potential odour impacts from the operation of the FGO and FLD facilities, the Applicant has proposed the following odour control system:

- fully enclosing the FGO and FLD buildings which would be held under negative pressure and fitted with automatically closing truck roller doors
- installing an air extraction device which directs air to eight carbon filters with a 99.9% odour elimination efficiency rate within the FGO building (see **Figure 17**)
- ducting the air from the FLD building to the FGO building for treatment through the eight carbon filters (see Figure 17)
- fitting the FGO building with a volatile organic compounds (VOC) breakthrough detection alarm which would be triggered once the carbon filters reach 90% saturation
- utilising biological inoculums to deodorise plant and equipment areas
- installing misting sprays above the truck entry/exit doors to supress odour emissions
- carrying out all unloading and loading operations within the FGO and FLD buildings
- regularly cleaning plant and equipment to ensure odours do not accumulate.

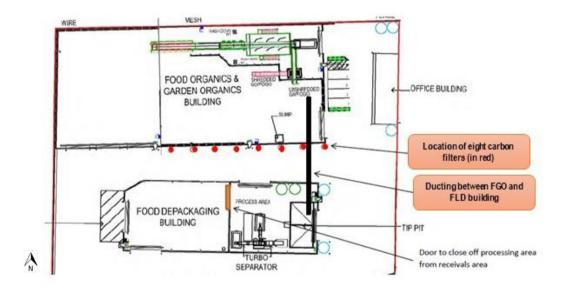


Figure 17: Location of Carbon Filters and Ducting Between the FGO and FLD Facilities

The Applicant states it would take up to 24 hours to process and dispatch the food and garden organic waste once received. However, in the event of an emergency the facility has enough storage capacity to store waste for up to two operational days. The OA modelled the potential odour impacts of the proposed development at the industrial receivers located immediately adjacent to the site. The OA did not consider residential and other potentially sensitive receivers such as schools and hospitals as these receivers, the closest of which are located some 1.5 km to the south-east of the site, are far enough away so as not to be affected by odour impacts.

To quantify the potential odour impacts, the following processing scenarios were modelled by the Applicant as agreed with the EPA:

- 1. Average Tonnage which assumes an average throughput of 1,350 tonnes of food and garden organic waste being processed over a five-day period in the FGO building and 580 tonnes of food waste being processed over a five-day period in the FLD building.
- Peak Tonnage which assumes a peak throughput of 1,750 tonnes of food and garden organic waste being processed over a five-day period in the FGO building and 700 tonnes of food waste being processed over a five-day period in the FLD building.

The Applicant suggests the assumptions made for peak operations is considered a worst-case scenario. The modelling also included the potential for fugitive emissions to be released during the opening and closing of the roller doors. **Figures 18** to **21** show the odour contours for the peak tonnage under a range of scenarios including:

- scenario 1: normal operations with all eight carbon filters operating at 99.9% efficiency
- scenario 2: normal operations would all eight carbon filters operating at 90% efficiency
- scenario 3: reduced operating conditions with the western most carbon filter down and only seven carbon filters operating at 90% efficiency (considered worst case scenario)
- scenario 4: reduced operating conditions with the eastern most carbon filter down and only seven carbon filters operating at 90% efficiency (considered worst case scenario).

The EPA's most stringent criterion of 2 odour unit (OU) at the 99<sup>th</sup> percentile was applied to the nearby industrial receivers which represents a very small level of odour concentration and allows for unforeseen events. The 2 OU criterion is show in red in the below odour contours.

The Department agrees that the modelling in the OA represents a worst-case scenario as both peak tonnages and the odour management system operating at a reduced capacity were modelled. Notwithstanding, it is unlikely that both these scenarios would simultaneously occur.



Figure 18: Scenario 1

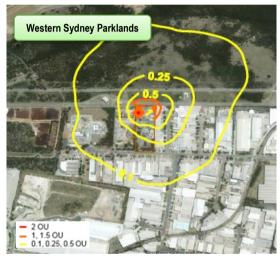


Figure 19: Scenario 2

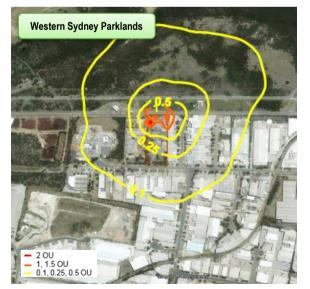


Figure 20: Scenario 3

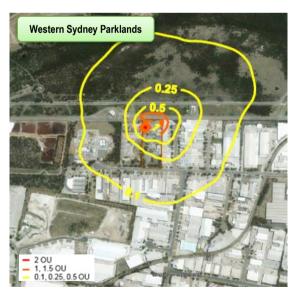


Figure 21: Scenario 4

The OA demonstrates that even when the facility is working under a worst-case scenario, the off-site impacts are predicted to be well below EPA's criterion of 2 OU. As such, the OA concludes the proposed development is not expected to result in odour impacts for the surrounding industrial area or Western Sydney Parklands.

During the exhibition period, the EPA requested the following information in relation to odour:

- a guarantee from the manufacture that the carbon filters can achieve a 99.9% odour removal efficiency
- further justification that the carbon filters operating at 90% is considered conservative and further details regarding the performance of the filter as it fills
- further information regarding the VOC detection alarm
- consideration of contingency measures should the proposed mitigation measures fail to achieve the desired performance or an emergency occur.

The Applicant addressed the EPA's concerns in its RTS and confirmed the carbon filters were able to achieve a 99.9% odour elimination efficiency and justified that 90% was considered conservative as it was the level at which 2 OU would be exceeded at the sites boundary. The RTS also provided further details regarding the VOC detection alarm.

In terms of contingency measures, the Applicant has demonstrated that the facility can adequately manage odour with seven carbon filters operating. Notwithstanding, the odour control system has been designed with eight carbon filters to ensure that even if one odour unit is offline for repairs the facility can continue to adequately manage odour. In the event of an emergency such as a power outage, the Applicant has committed to closing down the building, ceasing deliveries and using a proprietary inoculum to minimise putrefaction and odour generation. The EPA stated they were satisfied with the Applicant's response and recommended an odour assessment be conducted to validate the predicted odour impacts.

The Department acknowledges the odour issue in the Western Sydney region. However, there is sufficient buffer distance between the proposed development and the nearest sensitive receivers (1.5 km). Further, the predictions of the odour emissions at the boundary under a worst-case scenario is well below the relevant criteria, even under various scenarios.

The Department notes the proposed odour control system includes an additional carbon filter so that odour can continue to be effectively managed if one of the carbon filters is offline. The Department is satisfied the worst-case scenario modelled in the OA is overly conservative as it assumes a peak tonnage, fugitive emissions and reduced capacity of the carbon filters, all of which are unlikely to simultaneously occur. Given, the proposed development is predicted to meet the EPA's criteria with seven carbon filters in operation, the Department considers eight carbon filters is suitable to ensure the odour impacts are managed even in a worst-case scenario. Nevertheless, the Department has recommended the preparation and implementation of an Odour Management Plan which includes contingency measures for design or system failure to ensure that in the event of an emergency odour can be managed. To ensure the peak operations are consistent with the Applicant's odour impact predictions, the Department has limited the amount of waste that can be received at the facility over a five day period.

The Department and the EPA have reviewed the OA and RTS and are satisfied that odour impacts can be adequately managed through the odour controls put forward by the Applicant and the imposition of a series of recommended conditions of consent. These conditions include the requirement to install the proposed odour control system (with eight carbon filters), maintain the FGO and FLD buildings under negative pressure, regularly wash down the facility, provide contingency measures in the event of an emergency and to carry out an odour audit to validate the predictions in the OA.

The Department's assessment concludes that with odour controls and recommended conditions in place, the odour impacts from the proposed development are unlikely and are able to be satisfactorily managed.

#### 5.2. Traffic and Access

All four proposed operations would generate traffic movements to and from the site. Increased construction and operational traffic has the potential to have an impact on the safety, capacity and efficiency of the surrounding road network. The EIS included a Traffic Impact Assessment (TIA) prepared by Thompson Stanbury Associates, which assessed the potential traffic impact of the proposed development on the surrounding road network.

# **Construction Traffic Impacts**

The construction period is anticipated to be staged over a two to three year period. The Applicant has committed to preparing a construction environmental management plan (CEMP). Council and RMS did not raise any concerns in relation to construction traffic impacts.

An assessment of the construction traffic impacts was not provided. However, the overall traffic during the construction phase is expected to be less than the operational phase. The construction traffic impacts are expected to be minimal as:

- the site is located within an industrial area
- no bulk earthworks are required
- the construction would be staged
- the site is large enough to accommodate a number of light and heavy vehicles internally on the site

For these reasons the Department is of the view the construction traffic impacts can be adequately managed through the implementation of a CEMP. As such, the Department has recommended conditions requiring the Applicant to implement a CEMP, which would address the management of construction traffic.

### **Operational Traffic Generation**

All of the proposed operations would generate heavy vehicle traffic movements. The site has good connectivity to the M4 and M7 Motorways which is desirable to ensure waste and product can be easily transported to and from the site.

The site is located on Davis Road, which is a local road with a two-way, one lane configuration, that connects to Elizabeth Street to the south and Prospect Highway to the east. The Prospect Highway is a classified road which connects to the M4 Motorway (see **Figure 22**). Elizabeth Street provides access to Horsley Drive and the M7 Motorway to the west. The heavy vehicle haul routes for the development are depicted in **Figure 22** below.

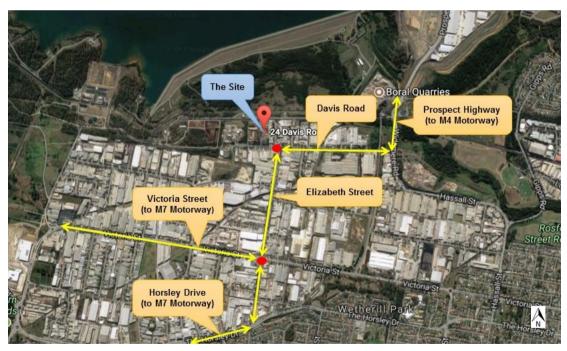


Figure 22: Heavy Vehicle Haulage Routes

The TIA estimates for peak hour and daily heavy vehicle volumes resulting from the development are provided in **Table 3**. Daily heavy vehicle movements were predicted as both a worst-case scenario during peak operations and as an average. **Table 3** does not include light vehicles as the site is not accessible to the public and therefore the only light vehicles that would access the site would be from the 25 employees. The Applicant states the majority of employees would arrive before peak hour at 5 am as such, the traffic impacts associated with light vehicle access are considered by the Department to be negligible.

Period	Heavy Vehicle Traffic Movements		
Penda	In	Out	Total
AM Peak Hour (worst-case scenario)	19	19	38
PM Peak Hour (worst-case scenario)	11	11	22
Daily Movements (worst-case scenario)	153	153	306
Daily Movements (average)	115	115	230

The Applicant has calculated the current daily traffic movements along Davis Road to be approximately 7,620 vehicles (including the recently approved SUEZ Waste Transfer Station (SSD 7267) on Davis Road). Therefore under a worst-case scenario, the proposed development would represent a 4% increase in daily traffic movements along Davis Road. The Applicant suggests that this increase would not impact on the efficiency of Davis Road.

To analyse the performance of the key intersections of Davis Road/Elizabeth Street and Elizabeth Street/Victoria Street (see **Figure 22**, denoted by red circles), SIDRA modelling was undertaken during the industrial areas AM peak hour of 7 am to 8 am and the PM peak hour period of 4 pm to 5 pm. The modelling concluded:

- the intersection of Davis Road/Elizabeth Street would continue to perform to a high standard and would maintain a Level of Service (LoS) A, during peak AM and PM periods
- the intersection of Elizabeth Street/Victoria Street is currently near or at capacity from certain directions and has a LoS of C and D, during peak AM and PM periods. However, the proposed development is not expected to impact on the current LoS at this intersection and the current level of service would be maintained.

Neither the RMS nor Council raised any issues in relation to construction or operational traffic volumes generated by the development and the ability of the road network to accommodate them.

The Department is satisfied with the conservative approach used in the TIA as the heavy vehicle movement predications were based on a worst-case scenario of trucks accessing the site during the peak hours of the road network. Based on the results of the TIA, the Department believes the performance of the key intersections for the development would not be adversely affected by the proposed development and that no road infrastructure or other upgrades are required. The Department also considers the site location to be suitable for the intended traffic flows as it is located in an established industrial area with road configurations suitable for the proposed heavy vehicle sizes and the proposed haulage routes do not have frontage to any residential areas. For these reasons, the Department is satisfied the proposed development would not have an impact on the safety, function and efficiency of the surrounding road network.

Nevertheless, some controls are recommended to effectively manage this additional traffic. The Department has recommended conditions of consent requiring the Applicant to prepare a Driver Code of Conduct to minimise traffic impacts on the local and regional road network. A Traffic Management Plan (TMP) is also required to be prepared as part of the Operational Environmental Management Plan (OEMP) for the site, which includes the measures that are to be implemented to ensure road safety and efficiency are maintained.

#### Truck Manoeuvring 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. In addition, access arrangements of waste facilities must be designed to allow for various vehicle sizes to enter and exit the site in a forward direction without affecting the safety and efficiency of the road network. The Department notes RMS raised no objection to the development.

The site is proposed to have separate access for light vehicles and heavy vehicles. Light vehicles would access the site from the eastern driveway while vehicles are proposed to use the western driveway. The western driveway is currently 11.5 m wide and would be required to be widened to 12.5 m to meet RMS standards to allow for dual access of heavy vehicles. All heavy vehicles would be required to enter and exit the facility over the site's weighbridges.

The TIA provided a swept paths analysis which demonstrated heavy vehicles could safely manoeuvre around the site. However, the TIA did not address whether the site's design and truck volumes in peak hour would result in queuing along Davis Road. Both the Department and Council raised concern about the potential for heavy vehicles queuing on Davis Road during peak times, whilst waiting to enter the weighbridge.

The Applicant provided further information to address these concerns in which the Applicant stated that five of the 19 heavy vehicles movements during peaks hours could be re-scheduled to a later time. The Applicant suggested the movements could be moved to an hour of operation outside of the peak hour because they related to the delivery or fuel and landscape materials which could be easily adjusted. Therefore, under the revised scenario there is potential for 14 heavy vehicles to enter the facility under a worst-case scenario during the peak hour, representing approximately one vehicle every four minutes. The Applicant stated it would take approximately two minutes for vehicles to pass through the weighbridge. As such, the Applicant argues the weighbridge operations are capable of handling upwards of 30 heavy vehicles per hour which can more than cater for the worst-case scenario of 14 heavy vehicles accessing the site and that queuing on Davis Road is not expected.

The Applicant also provided clarification that the number of vehicles expected to be present on the site during peak operations can be accommodated in designated loading bays, truck parking or waiting areas. The Applicant confirmed that if required there would be space for 20 heavy vehicles to park on-site at any one time including one truck on the weighbridge and one 19 m B-Double (or two medium rigid vehicles 8.8 m long each) parked behind the weighbridge ready to enter the site. The 20 heavy vehicle spaces allows for a contingency of six spaces should an unforeseen event occur, such as it taking longer than expected to unload waste. Therefore, the Applicant does not believe internal stacking of vehicles would cause queuing of vehicles along Davis Road and that heavy vehicles can adequately manoeuvre through the site at all times.

The Department considers queuing along Davis Road to be unlikely considering the efficiency of the weighbridge, the availability of a queuing space behind the weighbridge and the relatively low number of heavy vehicles which would access the site during peak hours. However, the Department agrees with Council that adequate measures and contingencies need to be in place to avoid queuing along Davis Road during exceptional circumstances such as truck breakdowns or weighbridge malfunctioning. Such measures may include contacting truck drivers remotely and deploying traffic controllers to direct trucks away from the facility or re-scheduling deliveries outside of peak times. Accordingly, the Department has recommended a condition of consent requiring the preparation of a TMP, Driver Code of Conduct and Traffic Control Plan (TCP) to address these measures. A further condition has been recommended prohibiting any vehicles accessing the site from queuing or parking within Davis Road. With these mitigation measures in place and the recommended conditions of consent, the Department is satisfied the development would not impact on the safety and efficiency of Davis Road.

#### **Conclusion**

The Department's assessment concludes that, subject to the recommended conditions and the Applicant's mitigation measures, the site's 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 TMP and TCP. Provisions for construction traffic management and parking are also considered to be adequate and can be managed through the implementation of a CEMP.

The Department concludes that the proposal would not have a detrimental impact on the safety, capacity and efficiency of the surrounding road network.

#### 5.3. Other Issues

The Department's assessment of other issues is provided in Table 4.

Continues     Considering surface water and Flooding Impact Assessment (SWFIA)     Construction Impacts     The Applicant would manage surface water during construction and sediment impacts     The Applicant would manage surface water during construction via standard erosion     and sediment impacts to be detailed in a CEMP. The Department is satisfied     the erosion and sediment impacts can be adequately managed.     Operational Impacts     Stormwater     Gourcil raised some concerns about the stormwater quality objectives.     The Applicant proposes a stormwater quality objectives used in the     SWFIA and recommended rofing and sealing the bulk landscape supplies     are a     verity pollutant loads     in the Applicant that cooring in the ater tradicage supplies     are a concerns about the stormwater guality objectives used in     the Department agrees with the Applicant that roofing the bulk landscape supplies     are a concerns about the stormwater quality objectives used in     the safety aspect associated with thall loading quippent.     The Department agrees with the Applicant that roofing the bulk landscape supplies     are a concerns about the stormwater guality objectives used in     the GO or FL     The Department agrees with the Applicant test for the require processing ad-     no first RTs the Applicant confirmed the erosyne at landscape     monitor and verify pollutant loads once the development is coernalinal.     The Department is satisfied the site is intragruture is located about for the two if y objectives.     The Department is satisfied the site is intragruture is located about for the two is the advision gradity is poreator.     The Department is satisfied the setter of the conducted area.     The Hoperator council's stored with no erot of the site is intragruture is located ad which area in ot operation is not water water to in the very could water water to a field with an alarm     system on the two 35 kL hoding tanks     the operator from the hydro-excavation and drill mud proc	Table 4: Assessment of Other Issues		
<ul> <li>The EIS included a Surface Water and Flooding Impact Assessment (SWFIA) Require the Applicant to: considering surface water impacts during construction and operation, management of leachate and wastewater from the potential impacts of flooding.</li> <li>The Applicant would manages unface water during construction via standard erosion controls and sediment impacts can be adequately managed.</li> <li>Operational impacts</li> <li>The Applicant proposes a stormwater quality objectives. Treated water would be discharged to the existing stormwater quality objectives. Treated water would be discharged to the existing stormwater quality objectives used in the Council's stormwater quality objectives. Treated water would be discharged to the existing stormwater quality objectives used in the SWFIA and recommende forofing and sealing the bulk landscape supplies area is not necessary as the landscaping material does not require processing and roofing is not fleasible during and ending and loading activities. To ensure stormwater is adequately during unloading and loading activities. To ensure stormwater is adequately during unloading activities. To ensure stormwater is adequately during unloading activities. To ensure stormwater is adequately during unloading cape supplies area is not necessary as the landscaping material does not require processing and monitor and verity pollutant loads on certification.</li> <li>The Department has committed the stormwater pollutant loads be verified to meest. Stellad and frequired turber mitigation measures be implemented. In 100 Average Recurrence Interval (ARI).</li> <li>Council raised concern about the location to processing of packaged foods and liquid. Liquid fload waste would be upmed to two 27.000 lire (liquid % capacity to noity the operators when the fGO building.</li> <li>The Epartment is satisfied the sters infrastructure is located above the 1.100 ARI.</li> <li>The Department is satisfied the sters infrastructure is located above the 1</li></ul>	Consideration		
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Groundwater Pequire the Applicant to:	<ul> <li>considering surface water impacts during construction and operation, management of leachate and wastewater during operation and potential impacts of flooding.</li> <li>Construction Impacts</li> <li>The Applicant would manage surface water during construction via standard erosion and sediment comtol measures to be detailed in a CEMP. The Department is satisfied the erosion and sediment impacts can be adequately managed.</li> <li>Operational Impacts</li> <li>Stomwater</li> <li>The Applicant proposes a stormwater management system which includes treatment devices to meet Council's stormwater quality objectives. Treated water would be discharged to the existing stormwater network within the industrial estate.</li> <li>Council raised some concerns about the stormwater quality objectives used in the SWFIA and recommended roofing and sealing the bulk landscape supply area.</li> <li>The Applicant has committed to seal the area but advised roofing is not feasible due to safety aspects associated with tall loading equipment.</li> <li>The Department agrees with the Applicant that roofing the bulk landscape supples area is not necessary as the landscaping material does not require processing and roofing the operations may compromise safety during unloading and loading activities.</li> <li>To ensure stormwater is adequately managed and Council's concerns are addressed, the Department has recommends the Applicant teal the landscape supply area and monitor and verify pollutant loads once the development is operational, to demonstrate compliance with Council's objectives.</li> <li>Flooding</li> <li>The lower level of the site is marginally affected by the Probable Maximum Flood (PMF) and the 1 in 100 Average Recurrence Interval (ARI).</li> <li>Council raised concern about the location of the infrastructure and whether it was located within a flood affected area.</li> <li>The EPA's requirements or located above the 1 in 100 ARI.</li> <li>The EPA's requirements</li></ul>	<ul> <li>prepare a CEMP which includes sediment and erosion controls</li> <li>prepare and implement an Emergency Response Plan</li> <li>seal the bulk landscape supplies area</li> <li>verify pollutant loads in stormwater and if necessary install additional mitigation measures</li> <li>all leachate generating activities must be conducted entirely within either the FGO or FLD building</li> <li>install an alarm system on the two 27,000 litre liquid organics tanks to notify operators when the tanks reach 75% and requiring emptying</li> <li>the 35 kL wastewater tanks be fitted with an alarm to notify the operator when they reach 80% capacity</li> <li>wastewater from the hydro-excavation and drill mud facility is not permitted to enter the stormwater system.</li> </ul>	
	Groundwater	Require the Applicant to:	

0	Recommended				
	onsideration	Conditions			
• • <u>Cc</u>	The majority of the site would be sealed with limited surface water infiltration to groundwater. The FLD facility is the only facility which has the potential to impact groundwater as it requires a tip pit to be constructed which would temporarily store putrescible waste and leachate. The Applicant proposes to line the tip pit with an impermeable barrier to prevent leachate infiltrating groundwater. The Department is satisfied the FLD tip pit can be sufficiently located above the groundwater table. The Department has recommended a condition requiring the tip pit to be constructed with an impermeable barrier prior to any waste being received at the facility to prevent leachate from entering the groundwater. In addition, the Department has recommended groundwater monitoring be conducted every 12 months following the commencement of operations to verify the impermeable barrier is working effectively.	<ul> <li>install the tip pit above 44.5 m AHD</li> <li>install an impermeable liner within the FLD facility tip pit</li> <li>conduct groundwater monitoring every 12 months following the commencement of operations to verify that leachate from the tip pit is not entering the groundwater</li> <li>prepare a protocol for unexpected finds to ensure any material identified as contaminated is disposed of appropriately.</li> </ul>			
N	recommended a condition requiring a protocol to manage unexpected contamination.				
140		Require the Applicant to:			
•	The proposed development has the potential to generate noise and vibration which could impact the existing amenity of the locality including receivers in the Wetherill Park industrial area and Western Sydney Parklands. <i>bration</i> The Applicant provided a vibration assessment as part of the RTS, following a request from the Department. The vibration assessment concluded impacts on adjacent buildings from the hydro-excavation and drill mud processing equipment would be unlikely. The assessment recommended the vibration impacts be verified during commissioning and measures implemented if impacts are identified. Whilst the vibration impacts are predicted to be low, the Department agrees the vibration impacts should be verified to ensure adjacent buildings are protected. The Department has recommended vibration testing be conducted during commissioning. <i>USE</i> A Noise Impact Assessment (NIA) was prepared by Global Acoustics in accordance with the <i>Industrial Noise Policy</i> (INP). <i>Interim Construction Noise Guidelines</i> (ICNG) and the <i>Road Noise Policy</i> (RNP). The NIA predicted noise would be below relevant guidelines at the nearest residential receivers for the worst case scenario of all equipment operating simultaneously, at full capacity and with roller doors open in the FGO and FLD buildings. The EPA and Council did not raise any concerns regarding noise impacts and no noise limits were recommended by the EPA. The Department notes the use of reversing beepers on trucks can cause nuisance impacts particularly during night-time operations. Therefore, the Department has recommended operational noise criteria for the development consistent with the predictions in the NIA. The Department concludes the noise impacts of the development would be below relevant limits and would be adequately	<ul> <li>ensure only vehicles with broadband reversing alarms be utilised</li> <li>comply with established noise and vibration criteria</li> <li>verify the vibration impacts during commissioning of the development.</li> </ul>			
_	managed through the recommended conditions.				
Vi	sual				
•	Architecture which included photomontages of the proposed development. The proposed development utilises the existing buildings which would ensure the development remains a similar scale to the surrounding industrial and commercial buildings. The new buildings would also be of a similar scale and nature to the surrounding industrial estate and would be located at the rear of the site.	<ul> <li>Require the Applicant to:</li> <li>prepare a Building and Material Schedule and a Landscape Plan</li> <li>ensure all external lighting complice with</li> </ul>			
•	The Applicant also proposes to retain the vegetation buffer along the site's southern boundary which includes remnant Cumberland Plain Woodland. The Applicant also proposes to provide supplementary planting in this area. No clearing is proposed as part of the proposal.	lighting complies with Australian Standard AS 4282.1997			

Consideration	Recommended Conditions
<ul> <li>The VIA concluded the visual impacts associated with the development would be low to negligible following the implementation of the proposed mitigation measures.</li> <li>Council raised concern with the visual impacts of the proposed development and recommended a landscape plan be provided prior to the commencement of any works.</li> <li>The Department has reviewed the VIA and concludes the proposed development is consistent with the character and scale of the surrounding industrial estate.</li> <li>To address Council's concerns, the Department has recommended a Landscape Plan and Building and Material Schedule be provided to ensure the facility has minimal visual impact and satisfactory architectural treatments. The Department has also recommended a condition that requires the Applicant to comply with the relevant standards for lighting and signage. The Department considers the visual impacts of the development would be acceptable.</li> </ul>	ensure any new signage complies with the State Environmental Planning Policy 64 – Adverting and Signage, as relevant.
Air Quality (Dust)	
<ul> <li>Dust generated during construction and operation has the potential to impact on neighbouring properties. The nearest sensitive land use is the residential area of Wetherill Park, 1.5 km to the south-east.</li> <li>Construction Impacts</li> <li>The Applicant proposes to manage dust during construction through standard controls implemented through the CEMP. The Department considers construction dust impacts would be adequately managed through standard controls.</li> <li>Operational Impacts</li> <li>The Applicant provided an air quality assessment (AQA) as part of the RTS, following a request from the Department for further analysis of air quality impacts.</li> <li>The AQA noted the primary dust generating activity is the bulk landscape supplies component of the development. The AQA concluded the development would meet all relevant air quality impact assessment criteria at the nearest residential receivers.</li> <li>Council recommended roofing the bulk landscape supply bays and sealing the area.</li> <li>The Applicant agreed to seal the bulk landscape supply area to reduce dust but claimed is not feasible to roof the area due to safety constraints posed by loading equipment. As previously indicated the Department agrees with this position.</li> <li>The Department notes that the Applicant would have appropriate management and mitigation measures in place during operation and dust impacts would be adequately managed through the implementation of an OEMP.</li> <li>The Applicant's commitment to seal the bulk landscape supplies area has been formalised in the recommended conditions. The Department also recommends dust impacts are minimised during adverse meteorological conditions.</li> </ul>	<ul> <li>Require the Applicant to:</li> <li>prepare a CEMP and OEMP to manage and address dust impacts</li> <li>seal the bulk landscape supplies area</li> <li>minimise the air quality impacts during adverse meteorological conditions.</li> </ul>
	Dequire the Applicent to:
<ul> <li>Council recommended the Applicant pay a Section 94A levy in accordance with the <i>Fairfield City Council Indirect Development Contributions Plan 2011.</i></li> <li>In accordance with this plan, the levy to be paid is \$158,862.74 which is 1% of the Capital Investment Value of the development.</li> </ul>	<ul> <li>Pay contributions in accordance with the Section 94A levy</li> </ul>
Waste Management	
<ul> <li>The facility would generate up to 4,000 tpa (2.5%) of non-recyclable residue which would be sent to landfill or another recycling facility for further processing.</li> <li>Council and the EPA did not raise any concerns with regards to waste management.</li> <li>To ensure waste materials are handled efficiently on-site, the Department recommends a condition requiring the Applicant to regularly wash down the FGO and FLD processing facility to ensure odours in these buildings do not build up.</li> <li>The Department also recommends the Applicant prepare and implement a Waste Monitoring Program and Waste Management Plan to ensure waste inputs and outputs are monitored and adequate measures are in place to defer waste from the RRF in the event of an emergency.</li> <li>The Department has also recommended a condition limiting the amount of waste disposed to landfill each year, consistent with the WARR strategy.</li> <li>The Department has also recommended a conceptual decommissioning plan be provided to ensure waste is adequately managed during decommissioning to avoid waste being left on the site.</li> <li>The Department's assessment concludes the site is suitable for the proposed use and can accommodate the volume of waste proposed to be processed. In addition to meeting all statutory requirements, specific conditions are recommended to ensure waste is received, handled and dispatched in an appropriate and responsible manner.</li> </ul>	<ul> <li>Require the Applicant to:</li> <li>comply with statutory requirements for waste receipt, storage and handling</li> <li>regularly wash down the FGO and FLD processing areas</li> <li>prepare and implement a Waste Monitoring Program and Waste Management Plan</li> <li>classify and dispose of waste on-site in accordance with the EPA's Waste Classification Guidelines</li> <li>prepare a conceptual decommissioning plan.</li> </ul>

Consideration	Recommended Conditions
Hazards and Risk	Conditions
<ul> <li>The EIS considered the hazards and risks from operation of the development and proposed fire prevention measures.</li> <li><i>Fire Prevention</i></li> <li>The waste material stored on site has a relatively high moisture content and has low combustibility. The Applicant would minimise fire risks by limiting the height of stockpiled materials.</li> <li>The FGO and FLD buildings would be constructed to meet the Building Code of Australia's fire protection and management requirements.</li> <li>The hydro-excavation and drill mud processing facility would have a fully contained system meaning any run-off caused by fire fighting in this area would be fully contained within the wastewater management system.</li> <li>FRNSW did not raise any concerns in relation to fire management.</li> <li>The Department concludes the fire risks of the development are low and has recommended standard conditions for an Emergency Response Plan and limits on stockpile heights.</li> <li><i>Hazards and Risk</i></li> <li>The development includes a 5 kL diesel storage tank within an existing storage shed in a bunded area.</li> <li>The quantity of dangerous goods stored on-site does not trigger the threshold values in <i>State Environmental Planning Policy 33 – Hazardous and Offensive Development</i> (SEPP 33), and the facility is therefore not a potentially hazardous industry.</li> <li>To ensure dangerous goods stored on site are adequately managed the Department recommends any storage occur in accordance with the relevant Australian Standards.</li> </ul>	<ul> <li>Require the Applicant to:</li> <li>prepare an Emergency Response Plan</li> <li>limit all stockpiles to 4 m in the FGO and FLD building</li> <li>limit all stockpiles to 3 m in the bulk landscape supplies area</li> <li>ensure storage of dangerous goods complies with the relevant Australian Standards.</li> </ul>
Greenhouse Gases	· · · ·
<ul> <li>The development is estimated to emit a total of 3,673.6 tonnes of CO2-e per annum which would be Scope 1 and 2 emissions from electricity consumption and fuel use in front end loaders and the sites equipment.</li> <li>The emissions are estimated to contribute around 0.0007% to the annual national total and 0.031% of the national waste sector emissions.</li> <li>The building would be designed to comply with all Australian Building Codes and National Construction Code (NCC) and a Section J Energy Efficiency Assessment would be performed prior to construction.</li> <li>Proposed energy efficiency measures at the facility include: <ul> <li>selecting building materials that provide insulation and aid in reducing energy consumption</li> <li>the potential use of photovoltaic cells and battery storage to generate power onsite</li> <li>optimised truck routes to reduce the distance and effort required by the vehicles.</li> </ul> </li> <li>The Department's assessment concludes that GHG from the development can be effectively managed through the implementation of the Applicant's commitments.</li> </ul>	N/A

# 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 proposed development would focus on the conversion of waste into reusable products via recycling. It would also assist in diverting food and garden organics, expired and soiled packaged food and liquids and hydro-excavation and drill mud 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.

In response to the Department's and the EPA's concerns the Applicant provided further information in relation to traffic, contamination, air quality and odour impacts. To address Council's concerns the Applicant has committed to sealing the bulk landscape supplies area.

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:

- odour
- traffic and site access.

In summary, the development would:

- positively contribute to the State's Waste Avoidance and Resource Recovery Strategy performance by diverting waste away from landfill
- be consistent with the strategic direction for waste management in NSW
- meet the relevant odour, air quality and noise criteria at sensitive and industrial receivers
- adequately manage odour as the proposed waste processing activities which generate odour would be fully enclosed, kept under negative pressure and include and odour management system
- generate traffic which could be accommodated on the site and local and regional roads without any significant impacts on the safety, capacity or efficiency of the road network
- provide a range of environmental and economic benefits for the region, through resource recovery and the provision of 25 new full-time jobs.

The Department's assessment concluded that 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. Nonetheless, the Department acknowledges the history of odour complaints in the Western Sydney area and has recommended stringent conditions in relation to odour, to ensure the development does not exacerbate the existing odour issues. The Department considers the development is in the public interest and is recommended for approval, subject to conditions.

The Department considers the development is approvable, subject to any conditions of consent. This assessment report is hereby presented to the Executive Director for determination.

# 7. RECOMMENDATION

For the purpose of section 89E of the *Environmental Planning and Assessment Act 1979*, it is recommended that the Executive Director, Key Sites and Industry Assessments as delegate of the Minister for Planning:

- Consider the findings and recommendations of this report;
- Approve the application in respect of State significant development SSD 7401
- Sign the attached development consent (Appendix A).

Recommended by:

Kelly McNicol Team Leader Industry Assessments

Recommended by:

Chris Ritchie 18/12/17-Director Industry Assessments

# 8. DECISION

The recommendation is: Approved by:

Anthea Sargeant 22/12/17Executive Director Key Sites & Industry Assessments as delegate of the Minister for Planning

# 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 p	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 <b>Appendix C</b> 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 any coastal zone management plan (within the	The Department has undertaken its assessment of the proposed development in accordance with all relevant matters as prescribed by the regulations, the findings of which are contained within this report.
	meaning of the <i>Coastal Protection Act</i> 1979) that apply to the land to which the development application relates,	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 iental impacts on both the natural and built ients, 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	itability of the site for the development,	The development is a RRF project located on industrial zoned land which is permissible with development consent.
(d) any submissions made in accordance with this Act or the regulations,		All matters raised in submissions have been summarised in <b>Section 4</b> of this report and given due consideration as part of the assessment of the proposed development in <b>Section 5</b> of this report.
(e) the public interest.		The development would generate up to 40-50 jobs during construction and 25 jobs during operation. The development is a considerable capital investment in the Western Sydney 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

The SRD SEPP identifies certain classes of development as SSD. In particular, the operation of a resource recovery or recycling facility that handles more than 100,000 tpa of waste which meets the criteria in Clause 23(3) of Schedule 1 of the SRD SEPP. The proposal satisfies the criteria in Clause 23(3) as it would handle more than 100,000 tpa of waste.

### State Environmental Planning Policy (Infrastructure) 2007 (ISEPP)

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

The proposed development constitutes traffic generating development under Schedule 3 of the ISEPP and therefore was referred to the RMS for comment. RMS confirmed they have no objection to the development and did not provide any conditions. The development is considered to be consistent with the aims and objectives of the ISEPP, and the requirements of clause 104 of 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. The Department has concluded the development is not considered a potentially hazardous or offensive development as the Applicant has demonstrated that dangerous goods stored on the site is below the threshold limits specified in SEPP 33.

### 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 (see **Table 3**). The EIS and RTS considered site contamination and confirmed that a remedial action plan is not required and the site auditor deemed the suit suitable for its intended use. Based on the conclusions of the Applicant's assessment and the site audit statement the Department is satisfied the site is suitable for the intended use without remediation. The Department has included specific conditions for managing any unexpected contaminated material during excavation and construction works.

# Fairfield Local Environmental Plan 2013 (FLEP)

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

The development is located on industrial zoned land and the area immediately surrounding the site is also located on industrial zoned area.

The Department has consulted with Fairfield City Council throughout the assessment process and has considered all relevant provisions of the FLEP and those matters raised by Council in its assessment of the development (see **Section 5** of this report). The Department concludes the development is consistent with the relevant provisions of FLEP.

# Fairfield City Wide Development Control Plan Fairfield (DCP)

The DCP includes specific development controls for the Fairfield LGA. The relevant provisions for the development include Chapter 9 – Development in Industrial Areas and Chapter 11 – Flood Risk Management. 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 Fairfield DCP. The impact of the development on flood levels would be kept within the site and therefore complies with the Flood Effects section (Schedule 6 of Chapter 11) of the DCP.

The Department has consulted with Fairfield City 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). The Department has also recommended a Flood Emergency Response Plan be implemented prior to construction.

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

While SEPP 64 applies to the development, Part 3 of SEPP 64 does not apply as the signage consists of business and building identification signs as defined under clause 9 of SEPP 64. The Department has assessed the proposed signage in **Table 5** below. The Department's assessment concludes the proposed signage complies with the requirements of SEPP 64 and would not detract from the surrounding locality, would provide suitable tenant identification from within the site and would be consistent with the aims and objectives of SEPP 64.

Criteria	Compliance
Character of the Area	
Is the proposal compatible with the existing or desired future character of the area or locality in which it is proposed to be located?	Yes. The development will be undertaken adjacent and existing industrial precinct that contains signage for Business Identification purposes.
Is the proposal consistent with a particular theme for outdoor advertising in the area or locality?	Yes. The signage is consistent throughout the development site.
Special Areas	
Does the proposal detract from the amenity or visual quality of any environmentally sensitive areas, heritage areas, natural or other conservation areas, open space areas, waterways, rural landscapes or residential areas?	No. The site and signage is removed from any special area and would be located within the development site and screened by future industrial development.
Does the proposal obscure or compromise important views?	No. The signage would not obstruct important views.
Does the proposal dominate the skyline and reduce the quality of vistas?	No. The site will not dominate the skyline.
Does the proposal respect the viewing rights of other advertisers?	Yes. The signage will not obstruct any other existing signage.
Streetscape, setting and landscape	
Is the scale, proportion and form of the proposal appropriate for the streetscape, setting or landscape?	Yes. The signage is of an acceptable scale to allow navigation and identification within the development site.
Does the proposal contribute to the visual interest of the streetscape, setting or landscape?	Yes. The signage will allow site users to efficiently navigate the site.
Does the proposal reduce clutter by rationalising and simplifying existing advertising?	Yes. The number of signs are limited to these required for easy navigation and tenant identification on-site.
Does the proposal screen unsightliness?	The Applicant has advised the signage will not be used as a screen or filter.
Does the proposal protrude above buildings, structures or tree canopies in the area or locality?	The signage is located below roof levels for estate and building elevation signage and would not enter the skyline.
Does the proposal require ongoing vegetation management?	No. The signage will be located separately from vegetated areas.
Site and building	
Is the proposal compatible with the scale, proportion and other characteristics of the site or building, or both, on which the proposed signage is to be located?	Yes. The signage is compatible with the scale and industrial character of the site and area.
Does the proposal respect important features of the site or building, or both?	Yes. The signage will remain below the roof lines of the buildings.
Does the proposal show innovation and imagination in its relationship to the site or building, or both? Associated devices and logos with advertisements and advertising structures	The signage is located to clearly identity the site's operations and would reflect its industrial context.
Have any safety devices, platforms, lighting devices or logos been designed as an integral part of the signage or structure on which it is to be displayed?	Appropriate street and on-lot lighting will be provided to illuminate the estate signage.
Illumination	
Would illumination result in unacceptable glare?	No. Signage would be designed to avoid unacceptable glare, the signage proposed is not illuminated.
Would illumination affect safety for pedestrians, vehicles or aircraft?	No. Signage would be designed in a way to not interfere with pedestrians and vehicles.

Table 5: Assessment against SEPP 64 Criteria

Would illumination detract from the amenity of any residence or other form of accommodation?	The site and signage is not near any residential receivers.
Is the illumination subject to a curfew?	No curfew would apply to the proposed signage.
Can the intensity of the illumination be adjusted, if	No illuminated signage is proposed.
necessary?	
Safety	
Would the proposal reduce the safety for any public road?	The signage will not be positioned to cause any hazard for any road.
Would the proposal reduce the safety for pedestrians or bicyclists?	The signs would not impact pedestrian or cyclist safety.
Would the proposal reduce the safety for pedestrians, particularly children, by obscuring sightlines from public areas?	The signage will not obstruct pedestrian sight lines or cause any disruption from public areas.

# APPENDIX D: ENVIRONMENTAL IMPACT STATEMENT

See link: <u>http://majorprojects.planning.nsw.gov.au/index.pl?action=view\_job&job\_id=7401</u>

# APPENDIX E: SUBMISSIONS

See link: <u>http://majorprojects.planning.nsw.gov.au/index.pl?action=view\_job&job\_id=7401</u>

# APPENDIX F: RESPONSE TO SUBMISSIONS AND ADDITIONAL INFORMATION

See link: <u>http://majorprojects.planning.nsw.gov.au/index.pl?action=view\_job&job\_id=7401</u>