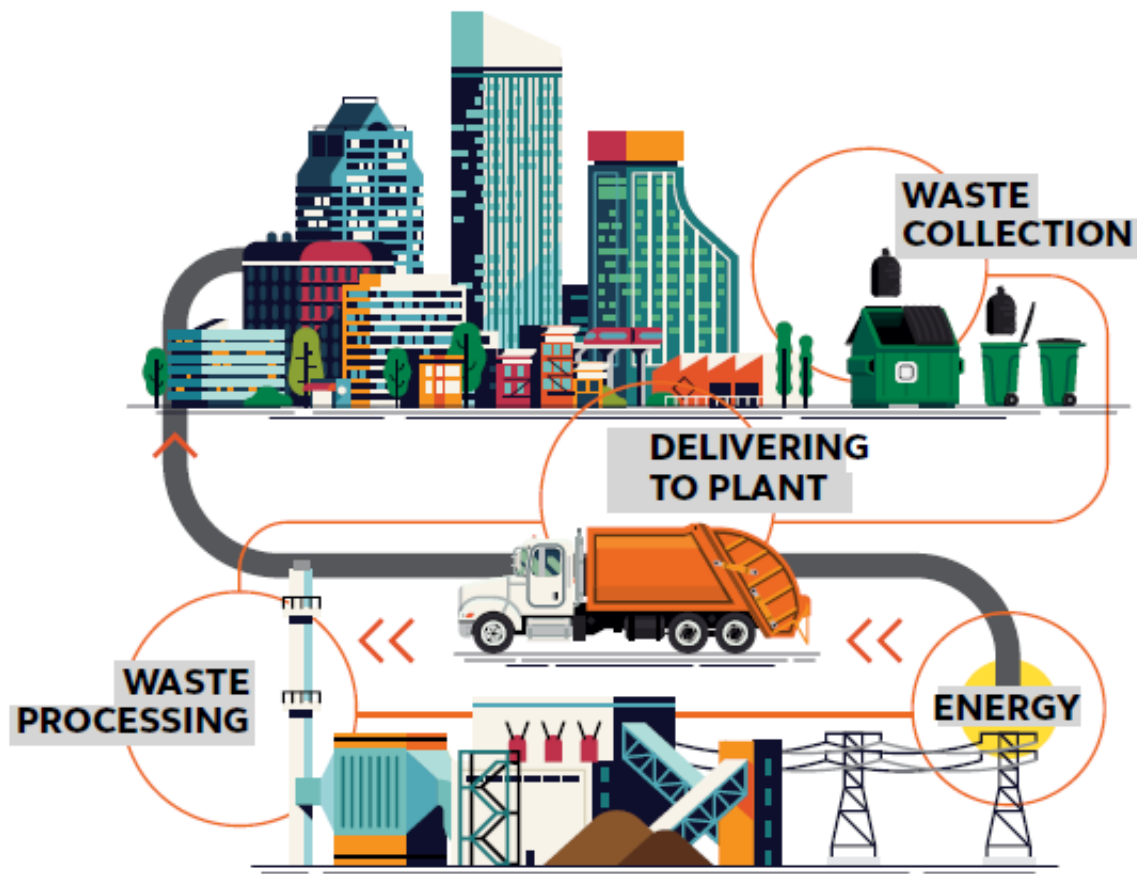


CHULLORA RESOURCE PROCESSING FACILITY

Scoping Report

20 FEBRUARY 2020



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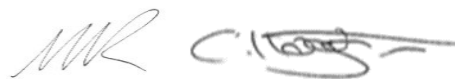
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SUEZ RECYCLING & RECOVERY PTY LTD

CHULLORA RESOURCE PROCESSING FACILITY

Scoping Report

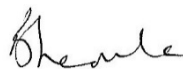
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Report No 1

Date 20/02/2020

Revision Text C

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REVISIONS

Revision	Date	Description	Prepared by	Approved by
A	20/12/2019	Draft Scoping Report	CH, MWR	KM, BS
B	29/01/2020	Second Draft Scoping Report	CH, MWR	CH
C	20/02/2020	Final Scoping Report	CH, MWR	CH

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GLOSSARY OF TERMS

Term	Definition
ABS	Australian Bureau of Statistics
AHIMS	Aboriginal Heritage Information Management System
Applicant	SUEZ Recycling & Recovery Pty Ltd
BLEP 2015	<i>Bankstown Local Environmental Plan 2015</i>
C&D	Construction and demolition
C&I	Commercial and industrial
CBD	Central Business District
CEMP	Construction Environmental Management Plan
COAG	Council of Australian Governments
Council	City of Canterbury-Bankstown Council
DA	Development Application
DECC	NSW Department of Environment and Climate Change (now Environment, Energy and Science Division of DPIE)
DotEE	Commonwealth Department of the Environment and Energy
DP	Deposited Plan
DPI	Department of Primary Industries
DPIE	Department of Planning, Industry and Environment
e.g.	for example
EIS	Environmental Impact Statement
ELA	Eco Logical Australia
EP&A Act	<i>Environmental Planning and Assessment Act 1979</i>
EP&A Regulation	<i>Environmental Planning and Assessment Regulation 2000</i>
EPA	Environment Protection Authority
EPBC Act	<i>Environment Protection and Biodiversity Conservation Act 1999</i>
EPL	Environmental Protection Licence
FRNSW	Fire and Rescue NSW
FTE	full time equivalent

Term	Definition
GHG	Greenhouse gas
ha	hectares
i.e.	that is
ICNG	NSW Interim Construction Noise Guidelines
ISEPP	<i>State Environmental Planning Policy (Infrastructure) 2007</i>
km	kilometre
L	Litres
LEPs	Local Environmental Plans
LGA	Local Government Area
m	metres
m ²	square metres
MLA	Metropolitan Levy Area
MNES	Matters of National Environmental Significance
MRF	Materials Recycling Facility
MSW	Municipal solid waste
MWh	Megawatt hours
NSW	New South Wales
NSW EfW	NSW Energy from Waste Policy
OEMP	Operational Environmental Management Plan
PEF	Processed Engineered Fuel
POEO (Waste) Regulation	<i>Protection of the Environment Operations (Waste) Regulation 2014</i>
POEO Act	<i>Protection of the Environment Operations Act 1997</i>
PVC	Polyvinyl chloride
RPF	Resource Processing Facility
RRC	Resource Recovery Centre
RRP	Resource Recovery Park
SEARs	Secretary Environmental Assessment Requirements

Term	Definition
SEPP	State Environmental Planning Policy
SEPP (State and Regional Development)	<i>State Environmental Planning Policy (State and Regional Development) 2011</i>
SEPP 33	<i>State Environmental Planning Policy No.33 – Hazardous and offensive development</i>
SSD	<i>State Significant Development</i>
SUEZ	SUEZ Recycling & Recovery Pty Ltd
TfNSW	Transport for NSW
tpa	tonnes per annum
WARR Act	<i>Waste Avoidance and Resource Recovery Act 2001</i>
WARR Strategy	<i>NSW Waste and Resource Recovery Strategy 2014-21</i>
WHS	Work Health and Safety
WHS Act 2011	<i>Work Health and Safety Act 2011</i>

EXECUTIVE SUMMARY

SUEZ Recycling & Recovery Pty Ltd (SUEZ - the Applicant) are seeking to establish a state-of-the-art Resource Recovery Park located at 21 Muir Road (Lot 2 Deposited Plan (DP) 1227526), Chullora in Sydney (the Chullora RRP). The Applicant are proposing to develop and operate the second phase of the Chullora RRP as a Resource Processing Facility (RPF) (the Proposal) to process waste including household furniture, timbers and textiles, to recover recyclables, remove any contaminants and produce alternative fuel (Processed Engineered Fuel (PEF)); with a material processing capacity of up to 250,000 tonnes per annum (tpa). The PEF is an alternative fuel source that can be supplied to the Botany Cogeneration Plant at the Botany Recycled Paper Mill, or other local suitable energy recovery facilities. The Proposal would provide a unique offering to the market by maximising waste diversion from landfill through material recovery and the manufacturing of fuel for energy generation.

The Proposal would be considered State Significant Development (SSD) under Clause 23 (waste and resource management facilities) of Schedule 1 of the *State Environmental Planning Policy (State and Regional Development) 2011*. Accordingly, an Environmental Impact Statement (EIS) would be required to support the SSD Application for the Proposal. This Scoping Report has been prepared to seek Secretary's Environmental Assessment Requirements (SEARs) for the Proposal.

Proposal overview

SUEZ is seeking to establish the Chullora RRP located at 21 Muir Road, Chullora in Sydney. The Proposal would form the second stage of a broader site redevelopment, known as the Chullora RRP, to replace the former Chullora Resource Recovery Centre (RRC) which was subject to a fire and subsequently demolished in 2017. The first two stages of the Chullora RRP are currently being proposed (SSD-10401); comprising the establishment of the site (earthworks and hardstand) as well as the construction and operation of a Materials Recycling Facility (MRF).

Through implementation of this separate proposed development, new baseline site conditions for the Proposal site will be established, which would be cleared of vegetation, levelled for construction, a hardstand area paved, and with internal road infrastructure and site access from Muir Road.

The Proposal would comprise the construction and operation of a Resource Processing Facility, with a material handling limit of up to 250,000 tpa. The input material would be sourced from non-putrescible origins – bulky waste collections from the municipal sector, commercial wastes and residuals from other SUEZ waste processing facilities. This material would include:

- Household furniture and white good appliances
- Untreated timber and wood
- Ferrous/non-ferrous metals
- Paper and cardboard
- Plastics (light and heavy) with the exception of polyvinyl chloride (PVC)
- Textiles (non-PVC).

The Proposal would operate concurrently with the adjacent MRF within the Chullora RRP site boundary. Once operational the MRF facility will process up to 172,000 tpa of co-mingled and source separated materials from Commercial and Industrial (C&I) and municipal sources. Suitable residual waste generated by this facility would be processed within the Resource Processing Facility to achieve greater overall resource recovery and divert the maximum volume of waste possible from landfill.

The Proposal would manufacture fuel tailored to the specifications of the Botany Cogeneration Plant, which would provide the Recycled Paper Mill with an alternative fuel source to operate, reducing the site's reliance on fossil fuels.

Proposal objectives

The objectives of the Proposal are to:

- Reactivate the Chullora site by establishing a state-of-the-art processing facility for non-putrescible waste in Sydney that recovers recyclables and produces an alternate fuel that meets stringent product quality criteria
- Providing a destination for material that historically has been difficult to recover and recycle
- Produce a fuel that fully complies with applicable regulations and standards
- Support the Botany Recycled Paper Mill or other energy recovery facilities in decarbonising its operations, reducing its reliance on fossil fuels by transitioning a part of its energy demand to a cleaner fuel source, securing environmental benefits and long-term jobs
- Provide a fit for purpose energy solution for the Botany Recycled Paper Mill in order to offset the cost of importing energy into the site and enhance long-term energy security by minimising risks around reliability and pricing
- Secure the viability of paper recycling in Australia, which will also support the proposed national ban on exporting unprocessed waste paper
- Promote a circular economy and reduce disposal costs for process residuals by diverting material from landfill and combustion of eligible non-putrescible waste streams, which is consistent with the waste hierarchy and supports the achievement of the recovery targets under the NSW Waste and Resource Recovery Strategy 2014-21 (NSW EPA, 2014) (WARR Strategy)
- Manage potential environmental impacts associated with the construction and operation of the Proposal in an environmentally and socially responsible manner.

Need for the Proposal

The recovery pathways for unsegregated non-putrescible waste in Australia are very limited, apart from the relatively simple sorting of the Construction and Demolition (C&D) waste stream. The key barrier has been a lack of scale, maturity and confidence in end markets for the output products from recovery facilities. However, the Proposal is an integral part an emerging whole-of-supply chain approach evolving in the Australia market in response to growing demand for more sustainable waste outcomes and, particularly in Sydney, the increasing pressures around supply and demand of non-putrescible landfill disposal.

The Proposal would support the state recycling targets for municipal solid waste (MSW) and C&I waste, as well as the overall NSW landfill diversion target, by targeting mixed, non-putrescible streams for recycling and energy recovery. Its supply chain integration with the Botany Cogeneration Plant or other suitable energy recovery facilities, with end market demand and product quality specified from the outset, would provide a highly secure, long-term recovery pathway for non-putrescible waste in New South Wales.

Recycling of MSW and C&I waste streams in NSW is continually falling short of the 70 per cent targets for 2021-22.

Large corporations, manufacturing businesses, Councils and at a granular level, households are demanding more sustainable outcomes for wastes that with some intervention could be recycled and recovered for improved environmental outcomes. There is general expectation from community that businesses take greater responsibility for the wastes they generate and pursue alternatives to landfill.

This shortfall in recovery is putting pressure on landfill capacity, particularly in the Sydney basin. While there are a range non-putrescible landfills in the region, some with significant annual licenced throughput, total non-putrescible landfill capacity has fallen in the last decade through the closure of several significant facilities. Much of the remaining capacity will be consumed by the ongoing pipeline of large transport infrastructure projects in Sydney and the expectation that close to one million tpa of non-putrescible waste being transported to Queensland will progressively be managed closer to source as the new Queensland waste levy gains traction through scheduled annual increases. Analysis of existing facilities in the Sydney basin reveals there will be a significant shortfall in capacity by 2030.

Therefore, in addition to an increase demand for better environmental outcomes, there is compelling justification to divert more resources from landfill in order to strategically manage the remaining disposal life in the region.

The Proposal would directly contribute to increasing the recycling, recovery and diversion of poorly recovered waste streams in the Sydney basin and provides additional support for the domestic processing of recycled paper. The Botany Recycled Paper Mill is a key asset in the recovered paper market, converting around 450,000 tpa of used cardboard into 100 per cent recycled packaging paper.

Provision of alternative fuel tailored to the specifications of the Botany Cogeneration Plant will provide the recycled paper mill with an alternative energy source to offset significant consumption of natural gas and electricity, while meeting almost 90 per cent of the steam needs of the mill at reduced energy costs (AECOM, 2019). This will improve the certainty of energy supply for its ongoing operations and reduce its annual carbon emissions.

The Botany Recycled Paper Mill will also help Australia meet the proposed Council of Australian Governments (COAG) ban on exporting unprocessed paper (and other nominated materials), with the paper ban proposed to start no later than June 2022.

Stakeholder engagement

SUEZ is committed to engaging in a transparent and meaningful way with stakeholders at all stages of the development of the Proposal. This will ensure that interested parties have the opportunity to understand the nature of the Proposal and can provide informed feedback. This will include a range of stakeholders, including community, businesses, local Council Government agencies and other interest groups (such as utility and service providers).

Consideration of issues that may be of interest to stakeholders, including the community and Government agencies, has helped inform the identification of key issues to be assessed as part of the EIS.

Key environmental issues

An environmental risk screening analysis has been carried out for the Proposal to identify the potential environmental impacts that may be caused by the Proposal and which areas are likely to be of interest to key stakeholders. Environmental impacts would largely be operational due to the limited nature of construction activities. The key environmental assessment issues identified for more detailed assessment during the preparation of the EIS include:

- Traffic, access and parking in relation to potential impacts during construction and operation to the surrounding road network and within the Proposal site
- Noise and vibration impacts on sensitive receivers from construction and operation of the Proposal
- Air quality and odour impacts on receivers from construction and operation of the Proposal accounting for consideration background ambient conditions
- Hazards and risks arising from handling of minimal quantities of dangerous goods, and potential operational risks such as contaminated waste and fire

The Proponent has taken particular care with the development of this facility to ensure it complies with the NSW Energy from Waste (NSW EfW) Policy Statement. A detailed analysis of the Proposal's compliance with this statement will also be included in the EIS.

Other environmental aspects that will be assessed within the EIS but have been considered as 'other issues' due to the low likelihood and/or minor consequence of impacts include:

- Waste management resulting from the construction and operation of the Proposal
- Water quality and hydrology impacts such as surface water run-off into the Cooks River stormwater channel
- Soils and contamination caused by spills and leaks from the construction and operation of the Proposal
- Greenhouse gas (GHG) emissions resulting from construction and operation of the Proposal

- Visual and landscape impacts on surrounding and nearby receivers.

The EIS will also consider the Proposal's social and economic impacts, including the potential benefits relating to increased employment opportunities and amenity impacts.

The assessment concluded that minimal environmental impacts have been identified as a result of the Proposal. The EIS will include the following in accordance with Schedule 1 of the *Environmental Planning and Assessment Regulations 2000 (EP&A Regulation)*:

- A detailed description of the Proposal including its components, construction activities and potential staging
- A comprehensive assessment of the potential impacts on the key issues including a description of the existing environment, assessment of potential direct and indirect and construction, operation and staging impacts
- Description of measures to be implemented to avoid, minimise, manage, mitigate, offset and/or monitor the potential impacts
- Identify and address issues raised by stakeholders.

1 INTRODUCTION

SUEZ Recycling & Recovery Pty Ltd (SUEZ - the Applicant) are seeking to establish a state-of-the-art Resource Recovery Park (RRP) located at 21 Muir Road (Lot 2 Deposited Plan (DP) 1227526), Chullora in Sydney (the Chullora RRP) (shown on Figure 1-1). The Applicant are proposing to design, build and operate the second phase of the Chullora RRP as a Resource Processing Facility (the Proposal) to process waste including household furniture, timbers and textiles, to recover recyclables, remove any contaminants and produce Processed Engineered Fuel (PEF) for the Botany Cogeneration Plant which is being developed by SUEZ at the Botany Recycled Paper Mill premises or other suitable local facilities. The provision of PEF tailored to the specifications of the Botany Cogeneration plant would provide the adjoining Botany Recycled Paper Mill with an alternative to the use of fossil fuels for the provision of electricity. The processing capacity of the Proposal would be up to 250,000 tonnes per annum (tpa).

The Proposal would be considered State Significant Development (SSD) under Clause 23 (waste and resource management facilities) of Schedule 1 of the *State Environmental Planning Policy (State and Regional Development) 2011*, which refers to:

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

Accordingly, an Environmental Impact Statement (EIS) would be required to support the SSD Application for the Proposal. This Scoping Report has been prepared to seek Secretary's Environmental Assessment Requirements (SEARs) for the Proposal. These SEARs would allow the preparation of an EIS in line with the expectations of the regulators and in accordance with Part 4 of the *Environmental Planning and Assessment Act 1979* (EP&A Act).

This Report which has been prepared consistent with the *Scoping an Environmental Impact Statement - Draft Environmental Impact Assessment Guidelines* (Department of Planning, Industry and Environment (DPIE), 2017), including:

- Proposal description (Section 3)
- Justification and alternatives considered (Section 2)
- Planning framework and strategic planning (Section 4)
- Relevant matters for considerations including identification of those matters which will be addressed as other issues (Section 8) or key issues where a detailed assessment will also be necessary (Section 7)
- Proposed assessment approaches (Section 7)
- Identification of potential matters of concern to the community and other stakeholders (Section 5)
- Proposed approach to engagement during the EIS preparation (Section 5).

1.1 The Proposal

SUEZ is seeking to establish a state-of-the-art RRP located at 21 Muir Road (Lot 2 DP 1227526), Chullora in Sydney (shown on Figure 1-1). The Applicant is seeking approval to develop a bespoke Resource Processing Facility (RPF) to process up to 250,000 tpa of non-putrescible material to recover recyclables and produce an alternative fuel (the Proposal), a renewable fuel source that can be supplied to the proposed Botany Cogeneration Plant. The Proposal would provide a sustainable solution to the market by maximising waste diversion from landfill through material recovery and the manufacturing of PEF for energy recovery.

The Proposal would form the second stage of a broader site redevelopment, known as the Chullora RRP, to replace a former Resource Recovery Centre (RRC) that SUEZ previously operated at the same address that was subject to a fire in 2017, and subsequently demolished. The first stage of the

Chullora RRP is currently being proposed¹ (SSD-10401); comprising the establishment of the site (earthworks and hardstand) as well as construction and operation of a Materials Recycling Facility (MRF).

Through implementation of this separate proposed development, new baseline site conditions for the Proposal site would be established prior to the commencement of the construction and operation of the Proposal (shown in Figure 1-1 as 'existing'). Namely the Chullora RRP site would be cleared of vegetation, levelled for construction, a hardstand area paved, and internal road infrastructure and site access from Muir Road established.

The Proposal would comprise the construction and operation of a Resource Processing Facility, with a material handling limit of up to 250,000 tpa. The input material would be sourced from non-putrescible origins – bulky waste collections from the municipal sector, commercial wastes and residuals from other waste processing facilities. This material would include:

- Household furniture and white good appliances
- Untreated timber and wood
- Ferrous/non-ferrous metals
- Paper and cardboard
- Plastics (light and heavy) with the exception of polyvinyl chloride (PVC)
- Textiles (non-PVC).

The key construction components of the Proposal would include:

- Construction of an enclosed Resource Processing Facility shed
- Construction of ancillary infrastructure such as site office, fire safety infrastructure (fire sprinkler tanks, pumps and valve room) and site services infrastructure (electrical, water services)
- Installation of fixed processing plant and equipment.

The key operational components of the Proposal would include:

- The operation of a Resource Processing Facility (including waste receipt, recycling and processing) 24 hours per day, seven days a week
- Processing of up to 250,000 tpa of dry waste from municipal, commercial sources and residual waste from processing facilities (MRF and organics processing)
- Feedstock (dry waste) storage, including up to two days' worth of incoming non-putrescible material in the receipt hall
- Product storage.

The Proposal is required to be operational by mid-2023 to feed the commissioning requirements of the Botany Cogeneration plant (commencing end of 2023), which is scheduled for operational commencement mid-2024.

¹ The EIS is currently being prepared to seek approval for this stage.

1.2 The Applicant

The Applicant for the Proposal is SUEZ Recycling and Recovery Pty Ltd (SUEZ). SUEZ would be responsible for the development, operations and maintenance of the Resource Processing Facility and the broader Chullora RRP.

SUEZ has been operating for more than 160 years and is a global leader in water solutions, resource recovery and waste management. SUEZ is an industry leader in delivering innovative environmental solutions for businesses, government and communities in support of a circular economy where present day waste streams can be a resource of tomorrow. Currently, SUEZ operates over 50 energy recovery plants globally, serving 65 million people as a trusted partner of organisations and Governments across five continents.

In Australia, SUEZ manages critical infrastructure such as the Prospect Water Filtration Plant in Sydney, treating 85 per cent of Sydney's drinking water as well as desalination plants in Melbourne and Perth. SUEZ is also a market leader in resource recovery in New South Wales and manages the most extensive waste network infrastructure in the state, with a focus on recycling and recovery of critical resources. This includes operation of Spring Farm Resource Recovery Park, Eastern Creek Resource Recovery Park and Moruya Resource Recovery Centre.

SUEZ leverages its extensive network of waste facilities and fleet of collection vehicles to manage a significant proportion of Sydney basin municipal solid waste (MSW) and commercial & industrial (C&I) waste. As a leading waste service provider with a national footprint, SUEZ has an extensive portfolio of commercial contracts and is a market leader in responding to and shaping the resource recovery and sustainability aspirations of large national and multinational clients.

This includes leading the evolution of resource recovery in Australia from a "push" model focused on producing low-grade, low cost commodities, to a "pull" model that integrates the whole of the supply chain to produce high quality commodities tailored to specific end market needs.

SUEZ brings global expertise in developing energy recovery facilities, and has an exceptional track record of building, operating and maintaining energy projects across the world, with safety and environmental compliance always being SUEZ's number one priority.

Chullora Resource Processing Facility

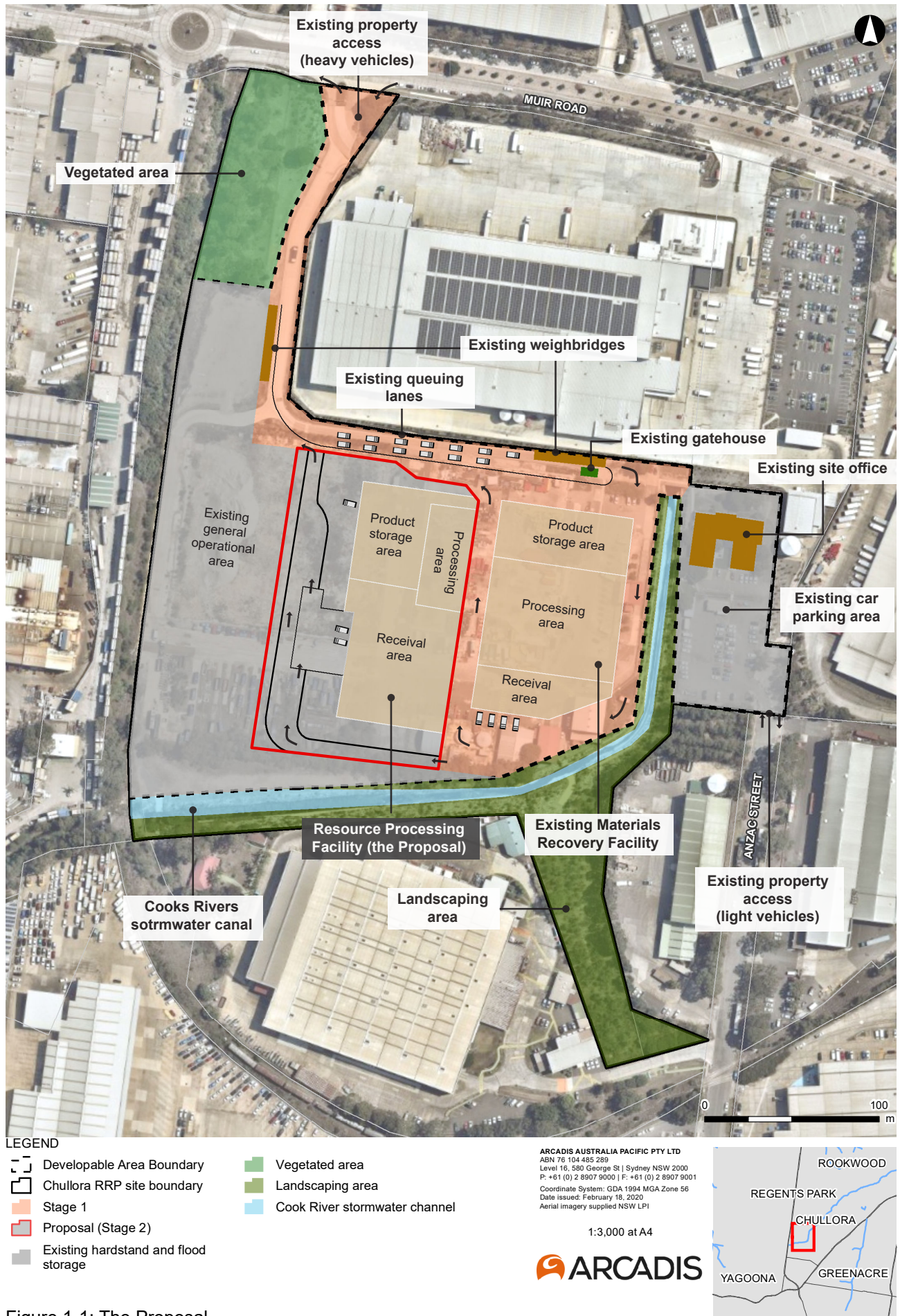


Figure 1-1: The Proposal

1.3 Site location

The Proposal site is located within the broader 9.2 hectare (ha) Chullora RRP site, shown in Figure 1-1, which comprises one parcel of land being 21 Muir Road, Chullora (Lot 2, DP DP1227526)). The Proposal site comprises a 1.8 ha portion of the Chullora RRP site, which is located in the Canterbury-Bankstown Local Government Area (LGA) approximately 18 kilometres (km) west of Sydney Central Business District (CBD) and 10 km east of Parramatta CBD. Figure 1-2 shows the location and regional context of the Chullora RRP site.

The Chullora RRP site is bounded by Muir Road to the north, Anzac Street to the east and existing industrial development further east and to the south. A disused freight railway line forms the site's boundary to the west.

The Chullora RRP site is located within the Chullora Technology Park and surrounded by a range of industrial developments including PFD Storage Warehouse, Tip Top Bakery, News Limited, Fairfax, Volkswagen Distribution Centre, Bluescope Steel and Veolia transfer station. Directly to the west of the Proposal site is a narrow strip of land owned by the Rail Corporation New South Wales (RailCorp), which formed part of the former railway through this area. A number of other businesses are located further to the west, including a service station, fitness centre and a range of other industrial warehouse.

The closest residential receivers are located approximately 370 metres (m) to the southwest, 430 m south and 820 m to the east of the site. Nearby sensitive receivers are shown in Figure 1-3.

Through implementation of the first stage of the Chullora RRP, new baseline site conditions for the Proposal Site will be established, which would be cleared of vegetation, levelled for construction, a hardstand area paved, and with internal road infrastructure and site access from Muir Road.

1.4 Site history

The Proposal site was formerly owned by the State Rail Authority of NSW and the Railways Commissioner of NSW from the 1920s to 1996. During this time, the Proposal site functioned as a railway depot for the maintenance of electrical train carriages.

In 1996, the Waste Recycling and Processing Service of NSW took ownership of the site. WSN Environmental Solutions, a State-owned corporation, operated the site in 1997 until 2011 as a waste facility when they were acquired by SITA Australia Pty Ltd. (now SUEZ). The Chullora RRP site, as well as the neighbouring site immediately to the north, were previously operated by SUEZ as the previous Chullora RRC, which included a Transfer Station, Materials Recycling Facility, Garden Organics platform and building used for glass processing. In 2016, Frasers Property acquired both the Chullora RRP site and the site to the north, leasing the Proposal site back to SUEZ for ongoing use. The previous MRF building on the Chullora RRC was subject to a fire in 2017 and subsequently demolished, along with the former glass processing building. Since demolition of the previous Chullora RRC, the site has been used for storage of residential waste bins, maintenance and parking of waste trucks, a heavy vehicle workshop, 5000 litre (L) diesel tank and wash bay to support truck maintenance activities.

The Proposal site retains Canterbury Bankstown Council (Council) approvals for a range of waste management activities (refer to Section 4.1).

1.5 Proposal Site Description

The Chullora RRP would be developed on a 9.2 ha single parcel of land; being 21 Muir Road, Chullora (Lot 2 DP1227526) (the Chullora RRP site). The Chullora RRP site comprises the following elements:

- Developable area – covering 7 ha of developable site area within the Chullora RRP site. This includes:
 - The Stage 1 area covering a 2.5 ha area containing the proposed MRF (SSD-10401)

- The Stage 2 area (the Proposal site) – covering a 1.8 ha area for the construction and operation of a Resource Processing Facility
- The existing site office and car parking area - comprising the 0.7 ha eastern portion of the developable area
- General operational area – comprising the 2 ha eastern portion of the developable area
- The Cooks River stormwater canal – approximately 0.5 ha to the south and east of the Developable area
- A 1.2 ha landscaping area comprising the southern portion of the Chullora RRP site
- A 0.5 ha vegetated area in the north-western corner of the Chullora RRP site.

The first stage of the Chullora RRP is currently being proposed (SSD-10401). Construction for the first stage is due for completion in 2021 and therefore will be finalised prior to the commencement of the Proposal.

1.6 Interaction with Stage 1 MRF

The Proposal would operate concurrently with the MRF operations occurring under the Chullora RRP Stage 1 (SSD-10401) project. These facilities would operate separately but utilise shared infrastructure, which would include the following:

- Inbound and outbound traffic lanes
- Three weighbridges and an inbound gatehouse, located at entry and egress areas
- Site administration buildings
- Maintenance workshop, located within the MRF
- Staff parking area, located to the east of the MRF.

The neighbouring MRF would operate 24 hours a day, seven days a week and would supply a small portion of the incoming residual waste to the Resource Processing Facility for processing. This residual waste would be transferred from the MRF to the Proposal's tipping area either via a conveyor system or using trailer trucks (after weighing at the weighbridge).

All trucks, for both the MRF and the Resource Processing Facility, would enter the facility via the site access point on Muir Road into one of the two 100 m queuing lanes prior to being weighed at the inbound weighbridge. Trucks delivering feedstock or receiving product from the Proposal would then be directed around the eastern and southern sides of the MRF facility toward the unloading platform and receival area at the south western end of the Proposal facility. Delivery vehicles would tip feedstock into the receival area, via roller doors, where it would be separated into material and source types for processing. Collection vehicles would continue passed the unloading platform along the western side of the Proposal shed and be loaded with product at the product storage area. Once the delivery or collection is complete, trucks would be directed offsite via the outbound weighbridge.

The maintenance workshop, located within the MRF product storage area, would support the ongoing operational maintenance activities occurring as part of the Proposal. This would include the maintenance of trucks and equipment and would be operating 24 hours a day. Staff for the Proposal would share the car parking facilities in the existing site office area with staff from the MRF.

Apart from the site features identified above, the Proposal would operate separately from the neighbouring MRF facility within the larger Chullora RRP which would be an integrated waste recovery and processing precinct. Existing site features and details of the infrastructure associated with the Proposal are described in greater detail in Section 3.

Chullora Resource Processing Facility



LEGEND

- Primary road
- Watercourse
- Developable area boundary
- Chullora RRP site boundary
- Stage 1
- Proposal (Stage 2)
- Existing hardstand and flood storage
- Vegetated area
- Landscaping area
- Cook River stormwater channel

ARCADIS AUSTRALIA PACIFIC PTY LTD
ABN 76 104 485 289
Level 16, 580 George St | Sydney NSW 2000
P: +61 (0) 2 8907 9000 | F: +61 (0) 2 8907 9001
Coordinate System: GDA 1994 MGA Zone 56
Date issued: February 18, 2020
Aerial imagery supplied NSW LPI

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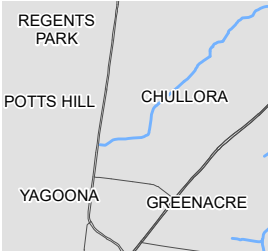


Figure 1-2: Regional context

Chullora Resource Processing Facility



LEGEND

- | | |
|--------------------------------------|---------------------------------|
| Developable Area Boundary | Industrial receivers |
| Chullora RRP site boundary | Recreational area |
| Stage 1 | Sensitive residential receivers |
| Proposal (Stage 2) | Education facilities |
| Existing hardstand and flood storage | |
| Vegetated area | |
| Landscaping area | |

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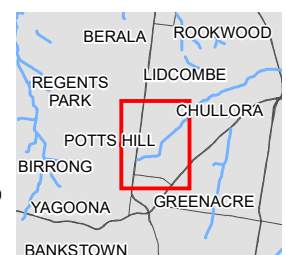


Figure 1-3: Nearby sensitive receivers

2 PROPOSAL NEED AND OBJECTIVES

2.1 Proposal objectives

The objectives of the Proposal are to:

- Reactivate the Chullora site by establishing a state-of-the-art processing facility for non-putrescible waste in Sydney that recovers recyclables and produces an alternate fuel that meets stringent product quality criteria
- Providing a destination for material that historically has been difficult to recover and recycle
- Produce a fuel that fully complies with applicable regulations and standards
- Support the Botany Recycled Paper Mill in decarbonising its operations, reducing its reliance on fossil fuels by transitioning a part of its energy demand to a cleaner fuel source, securing environmental benefits and long-term jobs
- Provide a fit for purpose energy solution for the Botany Recycled Paper Mill in order to offset the cost of importing energy into the site and enhance long-term energy security by minimising risks around reliability and pricing
- Secure the viability of paper recycling in Australia, which will also support the proposed national ban on exporting unprocessed waste paper
- Promote a circular economy and reduce disposal costs for process residuals by diverting material from landfill and combustion of eligible non-putrescible waste streams, which is consistent with the waste hierarchy and supports the achievement of the recovery targets under the NSW Waste and Resource Recovery Strategy 2014-21 (NSW EPA, 2014) (WARR Strategy)
- Manage potential environmental impacts associated with the construction and operation of the Proposal in an environmentally and socially responsible manner.

2.2 Need for Proposal

The recovery pathways for mixed dry wastes in Australia are very limited, apart from the relatively simple sorting of the Construction and Demolition (C&D) waste stream. The key barrier has been a lack of scale, maturity and confidence in end markets for the output products from recovery facilities. However, the Proposal is an integral part an emerging whole-of-supply chain approach evolving in the Australia market in response to growing demand for more sustainable waste outcomes and, particularly in Sydney, the increasing pressures around supply and demand of non-putrescible landfill disposal.

The Proposal would support the state recycling targets for MSW and C&I waste, as well as the overall NSW landfill diversion target, by targeting mixed waste, non-putrescible streams for recycling and energy recovery. The supply chain integration with the Botany Cogeneration Plant, with end market demand and product quality specified from the outset, would provide a highly secure, long-term recovery pathway for non-putrescible waste in New South Wales.

Three million tonnes of putrescible and non-putrescible C&I waste was generated in Metropolitan Levy Area (MLA)² in 2017-18, according to the 2019 WARR Progress Report. Nearly 49 per cent was recycled (1.47 million tonnes), marginally below the comparable state-wide performance of 53 per cent and significantly short of the 70 per cent C&I waste recycling target for 2021-22. To achieve the target recycling rate, another 636,000 tonnes of C&I recycling would have been required across the MLA in 2017-18, an increase of 43 per cent more.

Recycling of the MSW stream was 41 per cent in the MLA, comparable to the 42 per cent state average but far short of the 70 per cent state target for MSW recycling in 2021-22. An additional

² Comprising the Sydney metropolitan area, the Illawarra region, the Central Coast and the southern Hunter region

853,00 tonnes of MSW recycling was required in the MLA to achieve the state target, a 70 per cent increase on the 1.22 million tonnes delivered in 2017-18.

This shortfall in recycling is putting pressure on landfill capacity, particularly in the Sydney basin. While there are a range of non-putrescible landfills in the region, some with significant annual licenced throughput, total non-putrescible landfill capacity has fallen in the last decade through the closure of several significant facilities. Much of the remaining capacity will be consumed by the ongoing pipeline of large transport infrastructure projects in Sydney and the expectation that close to one million tpa of non-putrescible waste being transported to Queensland will progressively be managed closer to source as the new Queensland waste levy gains traction through scheduled annual increases. Analysis of existing facilities in the Sydney basin reveals there will be a significant shortfall in capacity by 2030.

With landfill airspace in the Sydney basin effectively a finite resource due to the challenge to develop any new waste facility in the city, and in particular a landfill, there is a compelling justification to divert more resources from landfill in order to strategically manage remaining disposal life in the region.

Overall landfill diversion in NSW was 65 per cent in 2017-18, short of the 2021-22 state target of 75 per cent. A diverse portfolio of solutions is required to deliver the step change in diversion. The MRF proposed to be separately developed by the Proponent at the Chullora site will support higher order outcomes from conventional clean recycling streams (Figure 2-1), while the Proposal will recover recyclables and produce an alternative fuel from mixed, non-putrescible streams that are more difficult to extract value from.

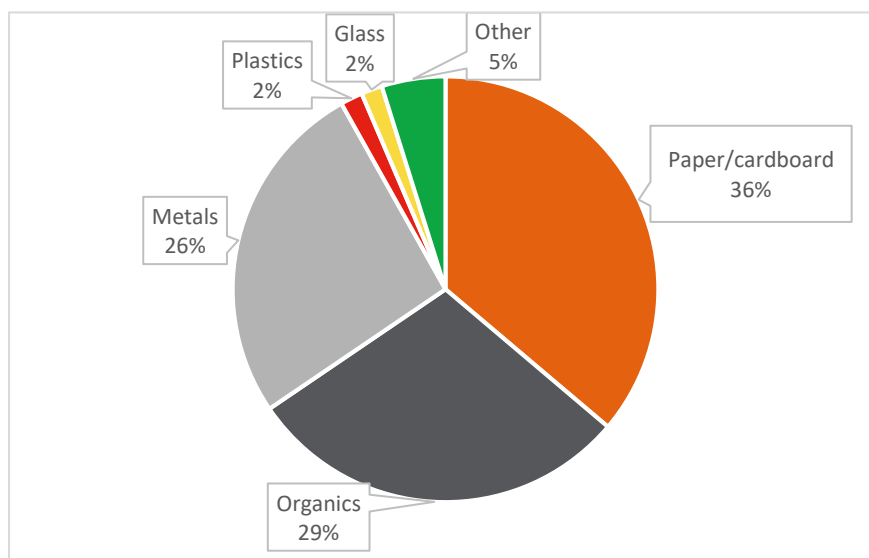


Figure 2-1: C&I resources recycling in the MLA, by material (2016-17, latest available) (EPA, 2019)³

The Applicant recently commissioned two audit and characterisation campaigns of the waste streams managed through their collection operations and transfer station network. The audits indicated that 89 per cent of the waste could be initially diverted from landfill, with significant fractions suitable for each of conventional recycling and energy recovery.

The Proponent has taken particular care in the design of the facility to ensure the proposal will comply with the NSW EfW Policy and its resource recovery criteria. SUEZ currently manages around 500,000 tonnes of non-putrescible waste within its Sydney collections and transfer station network and this facility conservatively represents less than 40 per cent of the eligible waste, with a high representation of large clients with best practice on-site source separation. SUEZ therefore has ability to select the most appropriate feedstock for this facility.

Given the reliable and sustainable offtake arrangement for the alternative fuel material produced from the facility, it is anticipated that this will attract additional volumes into the SUEZ network over time,

particularly from the municipal market for Council clean up waste and commercial customers seeking landfill diversion. This is coupled with the expectation of volumes previously directed to Queensland returning to the Sydney market after the introduction of the levy in July 2019.

In addition to the direct contribution to recycling and diversion from landfill of poorly recovered waste streams in the Sydney basin, the Proposal provides additional support for the domestic processing of recycled paper. The Botany Recycled Paper Mill is a key asset in the recovered paper market, converting around 450,000 tpa of used cardboard into 100 per cent recycled packaging paper.

Provision of fuel tailored to the specifications of the Botany Cogeneration Plant would provide the Recycled Paper Mill with a low carbon alternative to fossil fuels capable of meeting almost 90 per cent of the steam needs of the mill. It would realise significant cost savings through reduced energy costs, provide energy security for the mill and offset more than 1.5 million Giga Joules of natural gas per year (enough to supply 70,000 homes) and 63,000 Megawatt hours (MWh) per year of grid electricity (enough to power 12,000 homes) (AECOM, 2019).

The Botany Recycled Paper Mill will help Australia meet the proposed COAG ban on exporting unprocessed paper (and other nominated materials), with the paper ban proposed to start no later than June 2022 (Department of the Environment and Energy (DotEE), 2019).

2.2.1 Other benefits

The Proposal would result in a number of additional benefits during construction and operation, namely:

- Reducing the potential for impacts to the natural environment (e.g. land clearing) compared to a greenfield site by utilising an existing industrial site for development
- Maximising waste diversion from landfill, through material recovery for recycling and fuel manufacture for energy generation
- Provide an alternative energy source for the Botany Cogeneration Plant to substitute the plant's natural gas consumption, reducing the recycled paper mill's reliance on fossil fuels
- Improved environmental benefits compared to the previous Chullora RRC by providing a state-of-the-art fully enclosed non-putrescible waste processing facility which will operate alongside a recently developed MRF facility
- Provide direct and indirect economic and social benefits both locally and regionally through:
 - Providing employment for up to 120 full time equivalent positions⁴ during the 12-month construction period.
 - Creating up to 30 full-time equivalent (FTE) positions during the operation of the Proposal
 - Capital investment in the region of up to \$40 million, creating the potential for sourcing Proposal resources from regional providers, suppliers and subcontractors.

2.3 NSW EfW Policy compliance

The NSW Energy from Waste Policy Statement (2015) outlines the requirements that facilities in NSW must meet in order to recover energy from waste via thermal treatment. The scope includes both the production and combustion of waste derived fuel, including the alternative fuel (PEF) produced at the facility.

The EfW Policy acknowledges energy recovery is a valid pathway for managing residual wastes where *“further material recovery through reuse, reprocessing or recycling is not financially sustainable*

⁴ Construction job estimates are based on a direct multiplier of 6 jobs being supported for each \$1M spent. This estimate of employment support by the proposal has been calculated using factors derived from the 2004-05-1-O table scheduled within the 'Guidelines of estimating employment supported by actions, programs and policies of the NSW Government' document published by NSW Treasury. The capital value of the Chullora RPF would be approximately \$40M, however \$20M of this would be for the fixed plant component of the RPF which would be manufactured overseas. The construction jobs have therefore been estimated based on a construction capital value of \$20M, equating to 120 personnel.

or technically achievable". In order to optimise higher value resource recovery outcomes, the policy bans thermal treatment of unprocessed mixed waste and establishes a matrix of Resource Recovery Criteria to prioritise source separation and pre-processing of mixed waste to extract recyclable materials.

The Project would produce a PEF material for delivery to the proposed cogeneration facility at the Botany Recycled Paper Mill. It will comply with the Resource Recovery Criteria, in the process ensuring the Botany cogeneration plant complies with the requirement to only receive feedstock from waste facilities or collection systems that meet the specified criteria.

Table 2-1 identifies the relevant Resource Recovery Criteria for the Proposal based on its target feedstock of dry commercial waste, municipal kerbside bulky waste and non-recoverable residuals from processing of commingled recyclables and organics from SUEZ current activities across its network.

Table 2-1 Relevant Resource Recovery Criteria for the Proposal

Waste stream	Processing facility	% residual waste allowed for energy recovery
Mixed wastes		
Mixed municipal waste (MSW)	Facility processing mixed MSW waste where a council has separate collection systems for dry recyclables and food and garden waste.	No limit by weight of the waste stream received at a processing facility
	Facility processing mixed MSW waste where a council has separate collection systems for dry recyclables and garden waste	Up to 40% by weight of the waste stream received at a processing facility
	Facility processing mixed MSW waste where a council has a separate collection system for dry recyclables	Up to 25% by weight of the waste stream received
Mixed commercial and industrial waste (C&I)	Facility processing mixed C&I waste (non-putrescible)	Up to 50% by weight of the waste stream received at a processing facility
	Facility processing mixed C&I waste where a business has separate collection systems for all relevant waste streams	No limit by weight of the waste stream received at a processing facility
Residuals from source-separated materials		
Source-separated recyclables from MSW	Facility processing source-separated recyclables from MSW.	Up to 10% by weight of the waste stream received at a processing facility
Source-separated garden waste	Facility processing garden waste	Up to 5% by weight of the waste stream received at a processing facility
Source-separated food waste (or food and garden waste)	Facility processing source-separated food or source-separated food and garden waste	Up to 10% by weight of the waste stream received at a processing facility

The operation of the Proposal to ensure compliance with the Resource Recovery Criteria will be specified within the EIS document, and will encompass:

- The feedstock sources, aligned to the above collection and processing facility categories

- The procedure to identify and assure the overall waste mix in compliance with the eligibility limits within a defined period
- The site waste acceptance criteria and procedures, including a list of acceptable / non-acceptable / prohibited materials and the quality assurance and testing procedures
- The recovery processes and indicative recovery rate to meet the requirement for “bona-fide” resource recovery.

2.4 Alternatives

The Proposal site is situated in close proximity to key regional transport infrastructure and is of appropriate zoning for an industrial use. Further the Proposal would be supported by the existing SUEZ infrastructure, including the existing site office, and would integrate into a larger resource recovery development, including the adjoining MRF. The Proposal site is therefore considered the optimal location for the Proposal, with the result that alternate sites have not been considered.

An alternative to the Proposal would be developing a new Resource Processing Facility on a greenfield site, potentially on the fringe of the Sydney Growth Centres, which would result in greater impact for the natural environment. The location of the Proposal is better placed geographically to service central Sydney customers and would yield the benefit of previously operating as a waste management facility.

In terms of alternative solutions, there are no viable options to process non-putrescible waste material. Mechanical processing is the only primary treatment option, while energy recovery is the only offtake market for the majority non-recyclable component of the waste stream. The Proposal responds to the pull-through demands of the Botany Cogeneration Plant, providing a key part of a holistic approach that integrates fuel production and combustion in an integrated solution.

The realistic alternative without the Proposal is the downside option of depositing non-putrescible waste directly to landfill. Based on the above factors, construction and operation of the Proposal at the chosen site is considered the most suitable option.

3 PROPOSAL DESCRIPTION

The Applicant is seeking approval for the construction and operation of a Resource Processing Facility to process up to a combined total of 250,000 tpa of non-putrescible waste in order to recover recyclable materials and manufacture alternative fuel (PEF). Material to be processed at the Resource Processing Facility would comprise:

- Co-mingled material collected from waste transfer stations, municipal and commercial sources
- Residual waste from processing facilities (e.g. Chullora RRP MRF)
- Oversized organics material from organics processing facilities.

The Proposal is shown in Figure 1-1 and described in Section 3.1 below. A detailed description of the Proposal will be provided in the EIS. The Proposal would be constructed on a hardstand area, which would have been constructed as part of the previous stages of the Chullora RRP (SSD-10401), on a vacant lot at 21 Muir Road, Chullora. The development would utilise existing hardstand, road infrastructure, other utility installations and stormwater discharge. The Proposal would be constructed in one stage (Stage 2), which would follow the completion of the previous stage of the Chullora RRP (SSD-10401). The previous stage (Stage 1) includes:

- Early works and site establishment
- Construction and operation of a MRF.

The Proposal would comprise the following stage:

- Stage 2: Resource Processing Facility.

The Proposal would manufacture PEF tailored to the specifications of the Botany Cogeneration Plant, generating steam and electricity for use by the Botany Recycled Paper Mill, providing the mill with an alternative fuel source to operate. Fuel may also be generated for other suitable energy recovery facilities. Figure 3-1 shows an overview of this relationship.

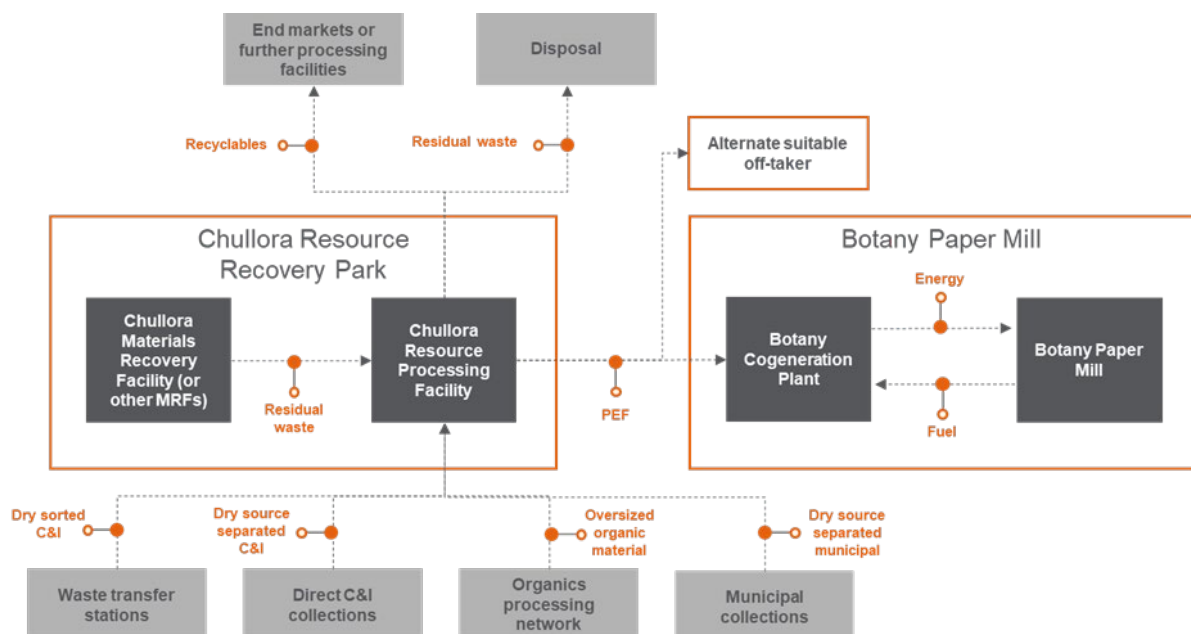


Figure 3-1 The Proposal and Botany Cogeneration Plant

3.1 Built form

The Proposal includes the construction of an enclosed building within the footprint shown in Figure 1-1. The proposed processing shed would comprise an approximately 10,000 square metre (m²) shed, designed to receive and analyse input material, recover recyclables and prepare PEF. The building would comprise:

- An external feedstock unloading platform
- Feedstock receipt hall including:
 - Areas for material inspection and testing
 - Separate storage bays for each material type/source
- Recyclables and rejected/non-complying waste storage areas
- Processing plant comprising shredders, screens, picking stations, optical sorters, metal and air separation equipment and storage bays
- Product storage areas for recovered material
- Compaction equipment
- Firewalls
- Access and egress points
- Administrative area and control room
- Dust suppression and sprinkler system
- Fire suppression system
- Site office facilities and amenities.

The Proposal would be supported by existing (by the time the Proposal has commenced) shared infrastructure, which includes the following:

- Three weighbridges and an inbound gatehouse, located at entry and egress areas
- Site administration buildings
- Maintenance workshop
- Staff parking area, located to the east of the MRF (shown on Figure 1-1).

The Proposal would be designed and constructed in accordance with relevant legislation, regulations and standards.

3.2 Construction activities

Construction is anticipated to commence late 2022 and would be anticipated to take approximately 12 months to complete. Works would primarily be undertaken during standard construction hours:

- 7am to 6pm Monday to Friday
- 8am to 1pm Saturday
- No works on Sundays or public holidays.

The key construction components of the Proposal would include:

- Provision of parking and stacking spaces for trucks
- Provision of parking for staff (light vehicles only) along the northern edge of the Resource Processing Facility
- Installation of signage
- Construction of enclosed RPF and associated infrastructure

- Installation of site services
- Installation of fixed processing plant and equipment.

Construction equipment is anticipated to include:

- Forklifts
- Cherry pickers and mobile cranes
- Concrete agitators, concrete pumps and concrete saws.

3.3 Operations

Operation of the Proposal would comprise:

- Receival of non-putrescible material from municipal, commercial sources and a small proportion of residual wastes from SUEZ MRF and organics facilities, including the neighbouring MRF, on an external feedstock tipping platform, with manual and mechanical removal of hazardous or non-compliant items
- Recovery and storage of recyclables materials such as ferrous and non-ferrous materials, bulky cardboard and plastics
- Manufacture and storage of PEF for transportation offsite.

Key operational details are included in

Table 3-1. An indicative flow diagram of a typical SUEZ Resource Processing Facility is provided in Figure 3-2.

Table 3-1 Key operational details

Operational component	Operational control
Processing limit	250,000 tpa
Waste source	Non-putrescible waste materials from municipal and commercial sources as well as residual materials from SUEZ's processing facilities.
Types of waste processed	Dry waste material excluding organics and hazardous components, for example: • Household furniture and white good appliances • Untreated timber and wood • Ferrous/non-ferrous metals • Plastics (light and heavy, non PVC) • Paper and cardboard • Textiles (non PVC).
Operating hours	24 hours a day, seven days a week (Monday to Saturday) required to maintain environmental controls and ideal processing conditions for the waste.

Operational component	Operational control
General type of equipment used for processing	Equipment to be utilised on site would include the following: • Mobile plant: – Loaders and excavators – Forklifts – Container handling units. • Fixed plant and equipment: – Shredders – Screens – Sorting cabins – Air separators – Magnets – Eddy current separators – Optical sorters – Waste packers.
Number of employees	Approximately 30 FTEs

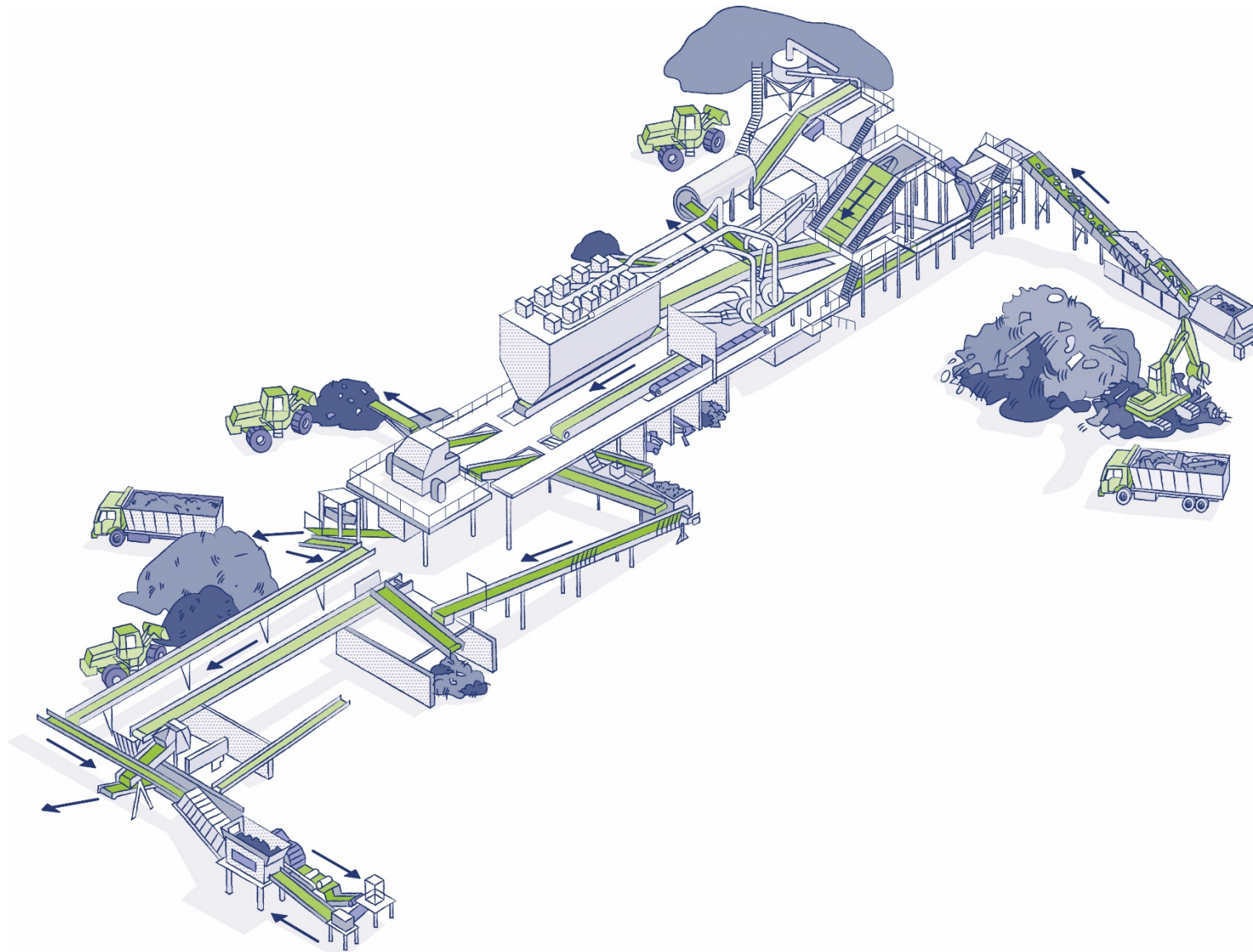


Figure 3-2 Indicative PEF manufacturing process

The process for manufacturing PEF is outlined in Table 3-1. A detailed description of processing will be provided within the EIS.

Table 3-1 PEF Manufacture process

Stage	Description
Stage 1: Waste Reception, handling and storage	Receival of feedstock within the receival hall area. All wastes received would be inspected and visually cleared to confirm their suitability for processing.
Stage 2: Screening and size separation	Feedstock material would be fed into a hopper followed by a screen to separate material into 3 particle sizes: fines, intermediate and bulky.
Stage 3: Primary size reduction	The bulky material is fed into the primary shredder to reduce its size to intermediate and allow for further processing. The fines and intermediate materials are processed in the sorting and cleaning plant.
Stage 4: Sorting and cleaning	The sorting cabin would recover valuable commodities (e.g. hard plastics and cardboard) and remove elements that could damage the equipment or affect fuel quality, such as PVC and electronic waste. The material is then further processed using optical sorters, magnets and eddy current separators to recover recyclables. This includes: 1. Over band magnets would remove ferrous metals (e.g. steel) from the material as it does not contribute to the fuel production process. Ferrous metals will be extracted for processing at other metal recycling facilities 2. Eddy current separators would remove non-ferrous metals (e.g. aluminium, copper etc.) from the material as it does not contribute to the fuel production process. Non-ferrous metals will be extracted for processing at other metal recycling facilities 3. Optical sorters would recover hard plastics to improve recovery 4. Air separators would be installed to refine the remaining material. Material such as rocks, bricks, ceramics and glass fines are components that do not contribute to the fuel production process and are managed as residuals from the facility. The residual waste would then be transported to an approved disposal facility unless a viable beneficial re-use or processing channel is identified. After the sorting and recovery are complete, the material is fed into the secondary shredders to produce the fuel.
Stage 5: Secondary size reduction	The secondary shredders would further refine the PEF material to the size requested by the offtake market. For the Botany Cogeneration Plant, this will be particles below 150mm.
Stage 6: Quality control	A conveyor arrangement will be installed to divert about 10% of the final product for online calorific value and chemical analysis performed by an optical detector.
Stage 7: PEF storage and compaction	PEF would be stored in bulk in a dedicated area and quality control testing will be undertaken. PEF would then be loaded into the compaction line (feeding hopper followed by waste packers). The waste packers would load PEF into 40' shipping containers for storage and subsequent transportation offsite.

The Proposal would be designed to only process non-putrescible material that is free from hazardous components. SUEZ currently receives around 500,000 tonnes of non-putrescible material into its

network annually. This excludes the small proportion of MRF residuals and the oversized green waste material that is also generated through SUEZ's other processing facilities. The table below presents the materials targeted by SUEZ for the operation of the Proposal. Throughput and feedstock proportions are approximate and will be confirmed during the preparation of the EIS.

Table 3-1 Proposal waste streams

Waste Stream	Proposed Sources	Approximate Quantity (tpa)	Proportion of feedstock
Dry Waste	Waste transfer stations and direct collections	160,000	64%
Council bulky kerbside clean-up	Municipal collections	55,000	22%
Residual waste	Residual waste from processing facilities (e.g. MRFs and organic processing facilities)	35,000	14%
Total feedstock received by the resource processing facility		250,000	100%

4 PLANNING CONTEXT

The following section provides an overview of the key legislation and planning instruments applicable to the Proposal. A detailed assessment of all the relevant legislation will be undertaken as part of the EIS.

4.1 Existing approvals and Environmental Protection License

The Proposal site, as well as the broader Chullora RRP and neighbouring site immediately to the north, were previously operated by SUEZ as the Chullora Resource Recovery Centre (the previous Chullora RRC). The previous MRF building on the Chullora RRC was subject to a fire in 2017 and subsequently demolished, along with the former glass processing building.

The Proposal site is located within an area subject to approvals associated with the first stage of the Chullora RRP (SSD-10401). This development includes the early works and site establishment of the Chullora RRP and the construction and operation of a MRF with a material handling limit of up to 172,000 tpa.

Various development consents have been granted for the Proposal site over an extended period of time. With the exception of the subdivision approval, these approvals have mainly permitted the processing of various types of waste; including green waste, plastics processing, paper compaction and associated activities. The current approvals relevant to the Proposal site are summarised in Table 4-1.

Existing consents will be reviewed as part of the preparation for the EIS and those that are superseded by this Proposal will be surrendered.

Table 4-1 Current approvals relevant to the Chullora RRF

Development Application (DA) Number	Application type	Approval Summary	Date of Approval	Status
897/1994	DA	Establishment of waste management centre, including a transfer station, recycling and green waste processing facility.	13/10/1995	Superseded
	Modification	Addition of construction and demolition waste handling facility.	13/02/1998	Superseded
	Modification	Modification to transfer station operating hours to be between 2am-5pm weekdays, 8am-5pm weekends and public holidays.	18/08/1998	Active
287/1996	DA	Recycling depot to sort, bale and dispatch recyclable materials collected from Council kerb-side recycling programs (establishment of MRF).	03/09/1996	Superseded

Development Application (DA) Number	Application type	Approval Summary	Date of Approval	Status
	Modification	Increase in the approved annual operating capacity of the materials recycling facility from 50,000 tpa to 100,000 tpa.	05/11/2010	Active
532/97	DA	Signage for the waste/recycling management centre.	25/06/1997	Active
1148/97	DA	Use of part of the site (south of recycling depot) for parking of trucks.	09/09/1997	Active
1028/1998	DA	Partial demolition and refurbishment of existing warehouse building.	14/07/1998	Active
1158/98	DA	Change of use factory – plastics recycling centre.	23/09/1998	Superseded
	Modification	Modification to plastic recycling centre.	12/02/1999	Superseded
	Modification	Change of Use Factory – plastics recycling Centre. Lot 22 DP 860283, No 15 Muir Road was added to the property description.	23/08/2005	Active
2153/2000	DA	Installation of a paper compacter within existing recycling park.	2/01/2001	Active
1219/2000	DA	Variation to approved tonnage limit, bulky goods sale from premises and adaptation and use of a building for temporary storage of recycled paper.	25/06/2001	Superseded
	Modification	2002 Modification to consent for variation to approved tonnage limit, bulky goods sale from premises and adaptation and use of a building for temporary storage of recycled paper.	11/10/2002	Active
973/2002	DA	Installation and operation of a glass fines processing plant at the MRF.	12/11/2002	Active
552/2004	DA	Upgrade of stormwater channel.	2/08/2007	Active
269/2012	DA	Additional Use of Premises for Sale of Wood Mulch and Soil Conditioner at Existing Waste Recycling Centre	23/05/2012	Active

Development Application (DA) Number	Application type	Approval Summary	Date of Approval	Status
409/2013	DA	Acceptance, Treatment, Processing and Off-Site Disposal of Asbestos and General Building Waste at Existing SITA Waste Recycling Facility. This Development Application is Nominated Integrated Development pursuant to Section 43(a) of the <i>Protection of the Environment Operations Act 1997</i> (POEO Act) as it requires a License for Waste Processing (Non-Thermal Treatment). The Relevant Approval Body is the NSW EPA.	18/09/2013	Active
105/2016	Subdivision DA	Subdivision of Lot 21 DP 860283 into two separate lots including construction of access driveway, weighbridges and the office on proposed Lot 2 and demolition of existing structures and buildings on proposed Lot 1	2/08/2016	Active
	Modification	Amendment to conditions of consent	21/12/2016	Active
CC-686/2016	Construction certificate	Subdivision Works including Construction of Access Driveway and Services (excluding Weighbridges and Kiosk)	28/19/2016	Active

The previous Chullora RRC holds Environmental Protection Licence (EPL) 5893 which authorises a number of scheduled activities including, composting, recovery of general waste, and waste storage. The existing EPL could either be updated via a variation application or a new one sought for the Proposal.

4.2 Commonwealth legislation

An initial assessment of the Proposal against Matters of National Environmental Significance (MNES) under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act), suggests that the Proposal would not have a significant impact upon these matters and therefore referral to the Commonwealth Minister for the Environment is not considered warranted.

4.3 NSW Legislation

4.3.1 Environmental Planning and Assessment Act 1979

The EP&A Act and EP&A Regulation provide the regulatory framework for planning approval and environmental assessment in NSW. Part 4 of the EP&A Act provides for control of 'development' that requires development consent from the relevant consent authority. Division 4.7 of Part 4 provides for control of SSD where the Minister for Planning and Public Spaces (or delegate) is the consent authority.

The Proposal would be considered an SSD under Clause 23 (waste and resource management facilities) of Schedule 1 of the *State Environmental Planning Policy (State and Regional Development) 2011 (SEPP (State and Regional Development))*, which refers to:

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

4.3.2 Other legislation

The EIS would provide a review of the Proposal against relevant legislation. Legislation that may be applicable to the Proposal includes, but may not be limited to:

- *Protection of the Environment Operations Act 1997*: The Proposal would be a Scheduled Activity as per Schedule 1 of the POEO Act and would consequently require an EPL under Section 48 of the POEO Act. It is noted the Chullora RRP currently holds an EPL which could either be updated or a new EPL sought for the Proposal
- *The Waste Avoidance and Resource Recovery Act 2001 (WARR Act)*: The WARR Act aims to encourage the most efficient use of resources to reduce environmental harm and ensure that resource management is undertaken in a logical, sustainable and organised manner. The Proposal would promote resource recovery and diversion of waste to landfill and most importantly deliver on the principles of a circular economy.

4.4 State Environmental Planning Policies

The following State Environmental Planning Policies (SEPPs) may be applicable to the Proposal, and would be considered within preparation of the EIS if required:

- *State Environmental Planning Policy No. 33 - Hazardous and Offensive Development (SEPP 33)*: SEPP 33 links the permissibility of an industrial development Proposal to its safety and environmental performance. The Proposal falls within the definition of a “potentially hazardous industry” or “potentially offensive industry” under the SEPP 33. A preliminary hazard analysis would be undertaken by the proponent, the findings of which would be presented in the EIS.
- *State Environmental Planning Policy (Infrastructure) 2007 (ISEPP)*: Section 121 of the ISEPP facilitates the development for the purposes of waste or resource management facilities to be undertaken, with development consent within a ‘prescribed zone’ being IN1 General Industrial. The subject site is zoned IN1 General Industrial under the *Bankstown Local Environmental Plan 2015*. Therefore, development of waste or resource management facilities would be permissible on the Proposal site with development consent.

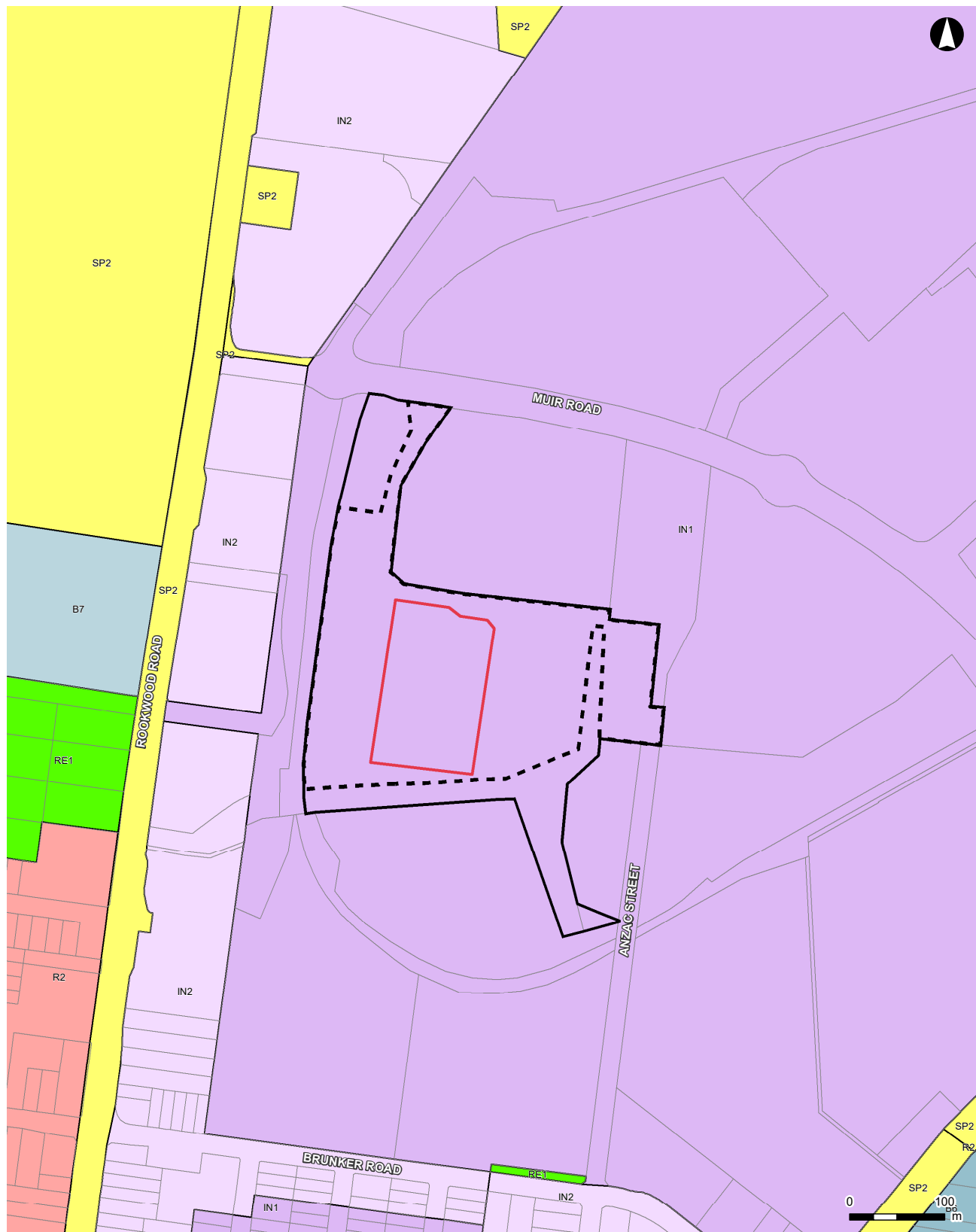
In addition, the ISEPP identifies development that is considered to be Traffic Generating Development. As per Schedule 3 of the ISEPP, a recycling facility or transfer station of any size or capacity is considered to be a Traffic Generating Development. The EIS will assess traffic impacts in accordance with ISEPP.

4.5 Local planning instruments

The relevant local planning instrument is the *Bankstown Local Environmental Plan 2015 (BLEP 2015)*. The Proposal site is zoned IN1 General Industrial under the BLEP 2015, as shown in Figure 4-1. Waste or resource management facilities are prohibited within the IN1 General Industrial zone in the BLEP 2015.

However, the IN1 General Industrial zone is a ‘prescribed zone’ in the ISEPP and therefore development for the purpose of waste or resource management facilities may be carried out with consent.

Chullora Resource Processing Facility



LEGEND

- | | |
|----------------------------|----------------------------|
| Chullora RRP site boundary | IN1 General Industrial |
| Developable site boundary | IN2 Light Industrial |
| Proposal site boundary | R2 Low Density Residential |
| Zoning | RE1 Public Recreation |
| B6 Enterprise Corridor | SP2 Infrastructure |
| B7 Business Park | Cadastre |

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 Coordinate System: GDA 1994 MGA Zone 56
 Date issued: February 18, 2020
 Aerial imagery supplied NSW LPI

1:6,000 at A4

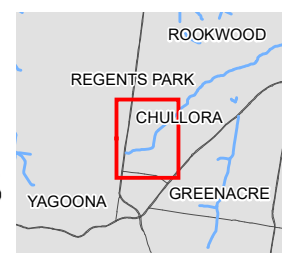


Figure 4-1: Zoning Map Bankstown LEP 2015 (IN1 in purple)

4.6 Strategic planning

The EIS will present an assessment of how the Proposal contributes to achieving the objectives of relevant strategic plans, including:

- **NSW Waste Avoidance and Resource Recovery Strategy 2014-21** – The Proposal would form a key piece of waste infrastructure for enabling Sydney to achieve and promote the objectives of the WARR Strategy, achieving an increased recycling rate and increased diversion of waste to landfill, and is therefore considered consistent with the WARR Strategy
- **National Waste Policy: Less Waste, More Resources** – The Proposal would assist in the implementation of the outcomes of the National Waste Policy by providing best practice materials recycling in an environmentally safe, scientific and sound method, and is therefore consistent with the aims and objectives of the National Waste Policy
- **NSW 2021: A Plan to Make NSW Number 1** – Overall, the Proposal would result in benefits to both the community, the commercial and industrial sectors and the environment. These factors are considered important to the improvement of the quality of development and stimulus of economic growth in NSW, and therefore meet the goals of the NSW 2021 State Plan
- **Greater Sydney Region Plan: A Metropolis of Three Cities** – The *Greater Sydney Region Plan* identifies the need for additional waste management and recycling infrastructure, including landfill and liquid waste processing capacity, noting the need for additional recycling infrastructure capacity for municipal (local council), commercial and industrial, and household hazardous waste. The Proposal is consistent with and supports the goals, directions and actions of this Plan
- **Canterbury-Bankstown Community Strategic Plan 2028** – The Canterbury-Bankstown Community Strategic Plan 2028, and the supporting Delivery Program 2018-2021, details the Councils commitment to providing recycling and waste management facilities. The Proposal is consistent with this Plan, as it would provide additional materials recycling capacity for the area.

5 STAKEHOLDER ENGAGEMENT

SUEZ is committed to engaging in a transparent and meaningful way with stakeholders at all stages of the development of the Proposal. This will ensure that interested parties have the opportunity to understand the nature of the Proposal and can provide informed feedback. This will include a range of stakeholders, including community, businesses, local Council Government agencies and other interest groups (such as utility and service providers).

Consideration of issues that may be of interest to stakeholders, including the community and Government agencies, has helped inform the identification of key issues to be assessed as part of the EIS. The environmental issues and assessment scope identified in this report have been informed by:

- Stakeholder interactions that occurred during the operation of the previous Chullora RRC. There was generally minimal stakeholder interest in the operations of the previous Chullora RRC reflecting the separation distance of the site to sensitive receivers
- Understanding of comparable projects, previously undertaken by SUEZ or other parties, highlighting typical areas of concern for key stakeholders
- Targeted consultation carried out to date during the preparation of the preliminary concept design for the Proposal and the preparation of this Scoping Report supported through consultation with EPA, Council and DPIE.

5.1 Community and stakeholder engagement

The DPIE *Community and Stakeholder Engagement* (DPIE, 2017) guideline provides direction to applicants on how to engage with the community and other stakeholders during the scoping phase and throughout the environmental impact assessment process.

SUEZ will develop a community and stakeholder engagement plan as part of the preparation of the EIS to ensure that the best outcomes for the community and other stakeholders are attained during the assessment process. This strategy will outline the key stakeholders, engagement activities and techniques and processes for evaluating the outcomes of community and stakeholder participation.

Community engagement will be carried out by SUEZ throughout the preparation of the EIS to provide an opportunity for community members to provide feedback throughout the process. Engagement with the community, nearby businesses and other potential interest groups will occur via range of communication tools, including:

- Website updates and notifications
- Fact sheets and newsletters
- Embellishment of an established email address and phone hotline
- Media statements and advertising in local publications
- Email, letter, phone calls and/or door knocks to surrounding businesses and relevant residential areas.

5.2 Government agency engagement

SUEZ has commenced engagement with a number of Government and agency stakeholders regarding the Proposal and other works being carried out on the site. Recently engagement has commenced with DPIE, EPA and Fire Rescue NSW (FRNSW).

Extensive consultation will be undertaken during the preparation of the EIS with a range of Government agencies.

During the preparation of the EIS the proponent will consult with, as a minimum, the following:

- Canterbury-Bankstown Council
- Environment Protection Authority

- Department of Planning, Industry and Environment
- Department of Primary Industries (DPI)
- Sydney Water
- Water NSW
- Transport for NSW (TfNSW)
- Fire and Rescue NSW
- Nearby landowners and occupiers that may be affected by the Proposal.

The EIS will describe the consultation process and the issues raised by both the community and Government agencies and identify where the design of the development has been amended in response to these issues. Where amendments have not been made to address an issue, adequate explanation will be required in the EIS.

6 PRELIMINARY ENVIRONMENTAL RISK ANALYSIS

An initial review of potential environmental issues for consideration has been undertaken to determine the level of assessment required to adequately identify and reduce the risk of each issue. The *Scoping an Environmental Impact Statement - Draft Environmental Impact Assessment Guidelines* (DPIE, 2017), provide guidance on key considerations for determining areas likely to have an impact, including:

- Extent (geographic) of the impact
- Duration of the impact
- Severity of the impact
- Sensitivity of the receiving environment
- Potential for cumulative impact.

A preliminary risk screening analysis has been carried out to determine key issues associated with the Proposal with potential to have an impact. The screening analysis has been determined based on the methodology described below as well input from stakeholder engagement (described in Section 5).

6.1 Environmental risk screening methodology

The preliminary environmental risk screening identified and assessed the potential environmental impacts associated with the Proposal and assigned a risk ranking to each of the impacts identified. Each of the potential environmental impacts has been ranked between 'very low' and 'very high' based on the unmitigated environmental impacts that could potentially result.

Table 6-1 provides the risk categories used to guide the identification of an appropriate risk ranking.

Table 6-1 Risk analysis categories and criteria for risk rating

Likelihood	Consequence				
	1 – Not significant	2 – Minor	3 – Moderate	4 – Major	5 – Severe
A – Almost certain	Moderate	Moderate	High	Very High	Very High
B – Likely	Low	Moderate	High	Very High	Very High
C – Possible	Low	Low	Moderate	High	High
D – Improbable	Very low	Low	Low	Moderate	Moderate
E - Rare	Very low	Very low	Low	Low	Moderate

The allocation of risk is determined on the basis of consideration of both the likelihood of an impact occurring, and the consequences of the impact occurring. The criteria for evaluating likelihood and consequence of risk are identified in Table 6-2 and Table 6-3, respectively.

Table 6-2 Criteria for evaluating likelihood

Level	Descriptor	Description	Frequency of Occurrence
A	Almost Certain	Is expected to occur in most circumstances	Once per month
B	Likely	Will probably occur in most circumstances	Between once a month and once a year
C	Possible	Might occur at some time	Between once a year and once in five years
D	Improbable	Could occur at some time	Between once in five years and once in 20 years
E	Rare	May occur in exceptional circumstances	Once in more than 20 years

Table 6-3 Criteria for evaluating consequence

Level	Category	Environmental
1	Not Significant	Release to the environment immediately contained.
2	Minor	Release to environment contained with internal assistance.
3	Moderate	Release to the environment and contained with external assistance.
4	Major	Pollution event with short-term detrimental effect.
5	Severe	Pollution event with long-term detrimental effect.

The screening process aims to prioritise the environmental issues for assessment and does not take into consideration the application of any mitigation measures to manage the potential impacts. Appropriate mitigation measures and safeguards would be developed during the assessment process and detailed in the EIS to minimise the potential impacts the Proposal would have on the environment. The risk assessment has been used to identify which environmental issues pose the greatest risk and are proposed as key issues, and which issues pose a low risk and would not require assessment within the EIS.

6.2 Preliminary risk screening

The outcomes of the preliminary environmental screening process for the Proposal are presented in Table 6-4.

Table 6-4 Outcomes of environmental risk screening

Issue	Unmitigated Environmental Risk Screening			Environmental Assessment Significance
	Likelihood	Consequence	Risk	
Traffic, access and car parking				
Construction traffic and transport impacts	Likely	Minor	Moderate	High
Operational traffic and transport impact on surrounding network	Likely	Major	Very high	
Noise and vibration				
Construction noise and vibration impact on sensitive receivers	Possible	Moderate	Moderate	Moderate
Operational noise and vibration impact on sensitive receivers	Possible	Moderate	Moderate	
Air Quality				
Construction air quality impacts on sensitive receivers	Improbable	Minor	Low	Moderate
Operational dust and vehicle emissions on sensitive receivers	Likely	Moderate	High	
Operational odour impact on sensitive receivers	Possible	Minor	Low	
Water quality and hydrology				
Potential to encounter groundwater during construction	Rare	Minor	Very Low	Low
Potential for water contamination during construction	Improbable	Moderate	Low	
Change in flooding regime resulting in increased flood impacts	Improbable	Moderate	Low	
Soils and contamination				
Potential to encounter contaminated soils during construction	Rare	Minor	Very Low	Low

Issue	Unmitigated Environmental Risk Screening			Environmental Assessment Significance
	Likelihood	Consequence	Risk	
Contamination of soils caused by spills and leaks	Improbable	Minor	Low	Moderate
Hazards and risk				
Storage and handling of dangerous goods causing risk	Improbable	Moderate	Low	
Potential fire or other hazard and risk	Likely	Major	Very High	
Greenhouse Gas (GHG) Emissions				
GHG emissions from direct and indirect sources	Likely	Minor	Low	Low
Biodiversity				
Construction or operational impact to flora and fauna	Improbable	Minor	Very Low	Very low
Potential impact to threatened flora and fauna that the site may support	Rare	Minor	Very Low	
Waste management				
Construction waste generation	Likely	Not significant	Low	Low
Operational waste handling and generation	Likely	Not significant	Low	
Visual				
Construction (temporary) impact on visual landscape on sensitive receivers	Improbable	Minor	Low	Low
Long-term impact on visual landscape on sensitive receivers	Improbable	Minor	Low	
Social and economic				
Amenity impacts during construction and operation	Improbable	Minor	Low	Low

Issue	Unmitigated Environmental Risk Screening			Environmental Assessment Significance
	Likelihood	Consequence	Risk	
Property and land use impacts	Rare	Not significant	Very low	Very low
Creation of employment opportunities	Improbable	Minor	Low	
Aboriginal and non-Aboriginal heritage				
Construction or operational impacts to Aboriginal heritage	Rare	Minor	Very low	
Construction or operational impacts to non-Aboriginal heritage	Rare	Minor	Very low	

7 KEY ENVIRONMENTAL ASSESSMENT ISSUES

The preliminary risk screening in Section 6, identified key environmental issues requiring further assessment. A summary of the key issues is presented in Table 7-1 below. All issues will be assessed further in the EIS, however detailed technical assessment will be undertaken for issues presenting a moderate, high or very high-risk level, and have been identified as “key issues”. Issues determined as having a lower risk level have been separated into “other issues”. Key and other issues have been further assessed in Sections 7 and 8 respectively.

Table 7-1 Identification of environmental issues

Environmental Aspect	Risk Level	Potential impact	Relevant Sections
Traffic, Access and Parking	High	- Construction traffic and transport - Operational traffic, transport and access	7.1
Noise and vibration	Moderate	- Construction noise and vibration impact - Operational noise and vibration impact	7.2
Air Quality	Moderate	- Construction air quality impacts - Operational dust and vehicle emissions - Operational Odour	7.3
Hazards and risk	Moderate	- Handling of potentially dangerous good - Potential fire or other hazard and risk	7.4
Other issues			
Waste Management	Low	Construction and operation waste generation	8.1
Water Quality and Hydrology	Low	- Potential for water contamination during construction - Water use during operation	8.2
Soils and Contamination	Low	Contamination of soils caused by spills and leaks	8.3
GHG Emissions	Low	GHG emissions	8.4
Landscape and Visual	Low	- Minor and temporary changes in visual landscape during construction - Minor visual impact to views and changes to surrounding properties	8.5
Socio-economic	Low	- Employment benefits - Amenity impacts during construction and operation	8.6
Issues not requiring further assessment			
Biodiversity	Low	The Proposal is located on an existing hardstand with no existing ecological values. Appendix A presents a Biodiversity Development Assessment Report waiver.	N/A

Environmental Aspect	Risk Level	Potential impact	Relevant Sections
Aboriginal and Non-Aboriginal heritage	Very Low	A search of relevant publicly available databases did not identify any items or areas of Aboriginal heritage or non-Aboriginal heritage significance within or in close proximity to the Proposal site. As a result of disturbance at the site there is limited potential for the discovery of unexpected items of heritage value. Appendix B presents an Aboriginal and non-Aboriginal heritage assessment waiver.	N/A

All potential environmental impacts will be considered further as part of the EIS, including a detailed assessment of the key issues. Potential environmental impacts associated with the Proposal will be considered and if required, managed through the implementation of appropriate mitigation and control measures.

7.1 Traffic, access and parking

7.1.1 Overview

The Proposal has been identified as a Traffic Generating Development, as per Schedule 3 of the ISEPP. It is noted that recycling facilities and waste transfer stations of any size or capacity are classified as a Traffic Generating Development.

The site currently has two vehicular access points. The access point for heavy vehicles is via Muir Road, west of the roundabout at Muir Road/Dasea Street. A secondary access point for light vehicles is provided from Anzac Street. The Proposal site would utilise these existing access points which are part of the broader Chullora RRP development. Primary access to the Proposal site from the north would remain via Muir Road from both directions, and egress is via left turn only onto Muir Road. There are four major intersections along Muir Road including linkages to Rookwood Road (Metroad 6) and the Hume Highway:

- Two-lane roundabout at the intersection of Muir Road and Dasea Street
- Signalised intersection at Muir Road and Worth Street
- Signalised intersection at Muir Road and Rookwood Road
- Signalised intersection at Muir Road and Hume Highway.

Trucks would enter the facility into one of two 100 m queuing lanes prior to being weighed at the inbound weighbridge and be directed to the Resource Processing Facility receival area by traversing past the eastern and southern sides of the MRF facility. Any trucks identified as containing 'non-conforming' waste at the inbound weighbridge and would be directed off-site to appropriate disposal points. PEF stored in containers is transported out of the site (outbound) by vehicles that arrive at the site empty. The traffic flow arrangement throughout the site would provide one way clockwise internal circulation that allows large B-double trucks to easily enter and exit the site with minimal movements.

The existing secondary access is provided for authorised selected personnel from the south via Anzac Street. Provision of parking for light vehicles would provide up to light vehicle parking spaces including disability parking spaces.

7.1.2 Summary of issues

Construction

Construction of the Proposal would require the use of heavy vehicles to deliver construction plant, equipment and materials as well as remove waste from the Proposal site. The construction period would also result in a temporary increase of light vehicles on the surrounding road network associated with the construction workforce. Due to the minor nature of construction works, construction traffic generated during construction are anticipated to be minimal. Notwithstanding this, the introduction of additional heavy and light vehicles may result in temporary deterioration of intersection and traffic performance on the surrounding road network.

Operation

Operation of the Proposal would result in an increase in truck movements associated with transportation of wastes to the Proposal site and processed product from the Proposal site. The potential impacts of the operational traffic from the Proposal on the surrounding road network may include:

- Increased heavy and light vehicle traffic may impact traffic movement
- Alterations to local intersection performance
- Potential for limited queuing traffic outside the Proposal site access point
- Alterations to road safety
- Increase the risk of truck conflict and collision.

7.1.3 Proposed further assessment

The EIS will be accompanied by a comprehensive Traffic Impact Assessment that will determine the impacts associated with the Proposal for both the construction and operational phases. It will provide consideration of the following aspects:

- The current and future capability of local and regional road infrastructure
- Operational traffic flow patterns with consideration to peak traffic generated by the Resource Processing Facility operations including impacts on the level of service of key intersections along Muir Road at Rookwood Road (Metroad 6), Dasea Street, Worth Street and the Hume Highway. This assessment would also consider cumulative traffic impacts on the level of service of key intersections when both the Resource Processing Facility and MRF facility are operational
- The type and frequency of heavy vehicles proposed to utilise the site
- The suitability of the proposed site layout to accommodate the predicted heavy vehicle movements from the site
- Details of the internal road layout network and parking in accordance with Australian Standards.

The EIS will include recommendations to mitigate the potential impacts of the development on the road network including manoeuvring arrangements, operational management plans and the suitability of the existing road network to accommodate the Proposal. Appropriate consultation with TfNSW will be undertaken to satisfy the requirements of ISEPP.

7.2 Noise and vibration

7.2.1 Overview

The area surrounding the Proposal site is characterised as an industrial precinct. The closest sensitive receivers, as shown in Figure 1-3, are as follows:

- TAFE NSW Chullora Campus, 320 m northeast of the Proposal site
- An active recreation area (greyhound racing track) located 300 m west of the Proposal site
- Residences on Boardman Street, Yagoona, approximately 370 m south-west of the Proposal site
- Residences on Cliffe Street, Regents Park, approximately 780 m north-west of the Proposal site
- Residences on Northcote Road, Greenacre, approximately 820 m south-east of the Proposal site
- University of Sydney, Cumberland Campus located 1.1 km away.

The residential receivers above are affected by the existing road traffic along Rookwood Road, Joseph Street, and the Hume Highway, and the existing industrial noise from Chullora industrial precinct.

7.2.2 Summary of issues

Construction

Construction activities will be undertaken during the 'standard hours' period in accordance with the *Interim Construction Noise Guideline* (ICNG) (Department of Environment and Climate Change (DECC), 2009) as follows:

- Monday to Friday: 7 am to 6 pm
- Saturday: 8 am to 1 pm
- Sunday and public holiday: No work.

Noise emissions would vary depending on the construction activities being undertaken. The construction of the Proposal would be likely to have the following impact:

- A number of noise-sensitive receivers may be impacted by construction traffic and the operation of plant and equipment. The extent of impact would vary according to the relationship of the construction works to the receiver location, and the nature of construction work at various stages of the construction process
- Potential construction noise sources include construction vehicles, heavy lift cranes, generator sets and hand tools
- There would be potential for construction vibration impacts on nearby buildings and other structures. The level of impact would depend on the construction techniques used and the offset distances between the vibration source and the sensitive receiver.

Operation

The Proposal would operate 24 hours per day, seven days per week. Operational noise would be generated by plant and equipment as well as from truck movements arriving and departing the facility. However, given the distance to nearby sensitive receivers noise impacts are expected to be low. Due to the distance of the Proposal site from any residential receivers or other sensitive receivers, it is believed that the development would not have any discernible impact on the amenity or sleep disturbance levels at these locations. The operation of the Proposal would also generate additional traffic which would require an assessment of potential road noise traffic.

Operational noise modelling conducted for the previous Chullora RRC found that the operational activities complied with the established noise criteria at all sensitive receivers. As the Proposal would comprise similar operations as those consented for the previous Chullora RRC, it is reasonable to

expect similar worst-case scenario noise impacts. As such operational noise and vibration impacts associated with the Proposal are considered to be low.

7.2.3 Proposed further assessment

A detailed noise and vibration assessment will be undertaken as part of the EIS to determine the potential impacts of the Proposal, both during construction and operations. The assessment will:

- Establish existing ambient and background noise levels (including from the MRF which will be operational by the time construction of the Resource Processing Facility commences) at the potentially most affected off-site receiver locations
- Identify nearby sensitive receivers, land use and terrain
- Identify sound power levels for each piece of equipment or process
- Assess operational and construction noise impacts in accordance with the Noise Policy for Industry (2017) and the ICNG respectively
- Assess traffic noise consistent with EPA's Road Noise Policy
- Identify feasible and reasonable noise mitigation measures to address noise exceedances at sensitive receivers noting that MSW initial modelling indicates exceedances are unlikely.

7.3 Air Quality and odour

7.3.1 Overview

Air quality in the area is expected to be characteristic of a typical industrial area and affected by the existing operations of neighbouring properties including warehousing, metalworking and waste (non-putrescible) processing.

Emissions of products of fuel combustion from delivery trucks and other fixed and mobile equipment at the site are anticipated to be minor. These emissions are most appropriately managed through equipment maintenance programs. Dust and particles may be generated by the manufacturing of PEF, however, all operations would be within a covered and wholly enclosed environment which would provide mitigation for potential air quality impacts.

7.3.2 Summary of issues

Construction

During construction of the Proposal, air quality impacts are likely to be caused by dust generation and emissions from construction vehicles, plant and equipment. Due to the limited scope of works for construction (i.e. no earthworks will be undertaken) the air quality impacts are expected to be minor.

Appropriate dust control measures will be implemented to minimise any potential impacts of dust generation on nearby sensitive receivers.

Operation

Air quality impacts during operations is likely to be in the form of dust generation. The dust which would emanate from the Proposal site would generally be caused by either wind or traffic generated on hardstand areas.

The emission sources and major pollutants identified at the Proposal site are as follows:

- Particulate emissions from loading/unloading of waste material
- Particulate emissions from waste material handling/sorting/processing activities
- Particulate emissions from onsite vehicle movements.

Waste and product loading/unloading, and waste processing would be carried out within a fully enclosed building, minimising potential for dust and particulate matter generation. The design of the facility will also incorporate dust suppression and control systems.

Odour emissions during the operation of the Proposal would be associated with the transport, storage and manufacturing of PEF. However, as no organic waste would be received by the Proposal, these odour emissions would be minor.

The Proposal site is located in an industrial area and neighbouring properties include a mix of warehousing, trucking and metalworking industrial activities. Any potential air quality and odour impacts to residential receivers are minimised by the distance these receivers are to the Proposal site.

7.3.3 Proposed further assessment

A detailed air quality impact assessment will be carried out as part of the EIS to evaluate the impact of emissions of key pollutants to inform mitigation and management measures for the design and operation of the Proposal. The assessment will:

- Predict air quality impacts from the operation of the facility in accordance with the NSW EPA's *Approved Methods for the Modelling and Assessment of Air Pollutants in New South Wales*. In addition, cumulative particulate matter impacts will be assessed
- Predict odour impacts from the operation of the Proposal in accordance with the NSW EPA's *Technical framework: assessment and management of odour from stationary sources in NSW* (NSW EPA, 2006)
- Identify feasible and reasonable management measures (particularly dust suppression management measures) to be implemented as a core design parameter.

7.4 Hazards and risk

7.4.1 Overview

The Proposal has the potential to pose environmental, human health and amenity hazards. The Proposal is not considered a “potentially hazardous industry” or “potentially offensive industry” under SEPP 33 however, due to the nature of the Proposal and the very minimal likely quantities of potentially dangerous or hazardous goods to be stored onsite (limited to cleaning chemicals, oils and diesel) it is considered unlikely to be deemed a hazardous facility. It is possible non-conforming waste within the recyclables stream may include some dangerous goods (e.g. batteries, chemicals, paints, aerosols, etc.), however this would be also minimal in quantity.

A hazard is anything or situation with a potential for causing damage to people, property or the biophysical environment. Beyond potential risks associated with the minimal storage of dangerous goods the Proposal would include processing of paper and waste cardboard material, both of which are combustible materials, and would be subject to other hazards and risk (such as vehicle collisions).

7.4.2 Summary of issues

Construction

Hazards associated with construction of the Proposal would be managed as part of a Construction Environmental Management Plan (CEMP), which would be prepared prior to construction commencing. Work health and safety (WHS) risks will be identified in the CEMP and managed in accordance with the *WHS Act 2011* (WHS Act). Hazards and risk will be identified and managed through the process of a risk assessment during the design phase. Small quantities of hazardous or dangerous goods may be stored onsite during construction.

Operation

The operation of the Proposal would include material storage which could pose a fire risk to the Proposal. The nature of operations of the Proposal means that it would have an inherent fire risk which will be managed through design that meets the FRNSW Fire Safety in Waste Facilities Guideline, best management practices and through the development and implementation of emergency response plans.

Hazards associated with operation of the Proposal would be managed as part of an Operational Environmental Management Plan (OEMP), which would be prepared prior to operation commencing.

Small quantities of hazardous or dangerous goods may be stored onsite during operation

7.4.3 Proposed further assessment

To determine if the Proposal is a potentially hazardous and / or offensive industry a screening analysis will be completed in accordance with DPIE's *Applying SEPP 33 Guideline*. The EIS will confirm the types, quantities, storage locations and storage conditions of any dangerous goods proposed to be stored on site. The EIS will also confirm the proposed frequency of transport movements relating to dangerous goods. Where any exceedances to thresholds are identified, the EIS will be supported by a comprehensive Preliminary Hazard Analysis to determine the cumulative risks associated with the Proposal, however this is considered highly unlikely to be required given minimal quantities of dangerous goods to be stored onsite.

Hazards and risks associated with the construction and operation of the Proposal will be identified as part of the EIS and mitigation measures to reduce risk, including fire, will be identified. An assessment of the Proposal's compliance of the FRNSW Fire Safety in Waste Facilities Guideline will also be provided.

8 OTHER ISSUES

A preliminary assessment identified that impacts to waste management, water quality and hydrology, soils and contamination, greenhouse gas emissions and landscape and visual amenity may occur as a result of the Proposal. These issues are considered to be of lesser consequence than key issues taking outlined in Section 7 when into account the scope of the Proposal, the existing environment, the implementation of standard, best practice management, and mitigation measures. While not a key issue, further assessment will be carried out as part of any future environmental assessment for the Proposal. Any environmental management and safeguard measures required to minimise and mitigate impacts will be documented as part of the EIS

8.1 Waste management

8.1.1 Overview

Waste management associated with the inherent activities of resources recovery for the Proposal are described in the project description (Section 3.3). The construction and operation of the Proposal itself would have limited potential to generate waste.

8.1.2 Summary of issues

Construction

During the construction phase, the potential waste streams that could be generated by the construction process include:

- Formwork – use and offcuts
- Steel and steel reinforcement offcuts
- Fixings
- Timber
- Adhesive/resins/paints/fixings
- Batteries
- Miscellaneous construction chemicals
- Tool and equipment consumables
- Fuels/oils/grease
- Packaging – cardboard, plastic and drums
- Putrescible waste from lunchrooms
- Plant and equipment maintenance waste (e.g. oily rags, oil filters, tyres etc).

These waste streams would need to be managed appropriately to ensure minimisation of waste generation and avoid, where possible, transportation to landfill.

Operation

The Proposal would be unlikely to generate substantial quantities of waste with only limited volumes of waste likely to be generated by office and workforce activities as well as maintenance activities. No potential operational impacts have been identified.

8.1.3 Proposed further assessment

The EIS will document how such waste streams are to be managed on site and in the context of regulatory obligations under the POEO Act and the WARR Act.

A resource and waste management assessment will be undertaken as part of the EIS to determine the potential impacts of the Proposal, both during construction and operations. The assessment will:

- Identify waste streams generated during the construction stage of the Proposal
- Assess waste management impacts associated with construction activities
- Identify management and mitigation measures for resource use and waste across the project including disposal sites and transport impacts.

8.2 Water quality and hydrology

8.2.1 Overview

The Proposal is located in the upper catchment of the Cooks River. The Proposal site has been identified by (the former) Bankstown City Council as being affected by overland flooding (BMT WBM, 2010). A Bankstown City Council Stormwater System Report issued in October 2013 indicates that part of the site is affected by 1 in 100-year stormwater flooding.

The Proposal site comprises levelled ground that has been raised above the 1:100 flood level as part of the works for the broader Chullora RRP development. Stormwater infrastructure would also be installed across the broader Chullora RRP site as part of these broader proposed works within the Proposal under SSD-10401.

8.2.2 Summary of issues

Construction

As site preparation will have been completed prior to the commencement of construction of the Proposal under SSD-10401, there are unlikely to be any significant water quality or hydrology related impacts associated with the construction of the Proposal.

Surface water run-off into the Cooks River stormwater channel may result in an increase in sediment loads entering the stormwater system and entering nearby receiving waterways. Appropriate measures will be implemented to prevent any impacts associated with the contamination of the stormwater system during construction.

Operation

The Proposal may have potential for spills and leaks from operating machinery to contaminate soil, groundwater and surface water. Additionally, waste may generate small volumes of leachate which, if not contained, has the potential to contaminate the surrounding soils, groundwater and surface water bodies.

The Proposal would be constructed on an existing raised hardstand area which will provide flood immunity in the 1 in 100-year flood event.

8.2.3 Proposed further assessment

As the Proposal site is located wholly within the boundary of the Chullora RRP, impacts to water quality and hydrology would be minimal. Notwithstanding this, the EIS will include an assessment of Proposed site operations to identify potential water pollutant sources and pathways, and impacts on receiving waterways, including:

- Potential increases in annual flows and generic pollutants from the Proposal based on water balance calculations and Model for Urban Stormwater Improvement Conceptualisation modelling
- Preparation of a site water balance to support sustainable water use at the Proposal site
- Details of stormwater/wastewater/leachate management systems, including capacity of onsite detention systems and measures to treat, reuse or dispose of stormwater.

8.3 Soils and contamination

8.3.1 Overview

Review of the Sydney 1:1,000,000 Soil Map indicates that the Proposal site is underlain by Blacktown Landscape Group with soil comprising medium plasticity which indicates the soils could be subjected to shrink or swell movements, depending on soil moisture changes. Soils encountered on-site generally consist of various fill material overlying natural clays and shale bedrock.

Through implementation of broader development works of the Chullora RRP, new baseline site conditions for the Proposal Site will be established, which would be cleared of vegetation, levelled for construction, a hardstand area paved, and with internal road infrastructure and site access from Muir Road. Due to this, no soils will be encountered during either the construction or operation of the Proposal.

8.3.2 Summary of issues

Construction

As the construction of hardstand will have been completed prior to the commencement of construction of the Proposal under SSD-10401, there are unlikely to be any significant soil and contamination related impacts associated with the construction of the Proposal.

Operation

Operation of the Proposal has the potential for spills and leaks from operating machinery resulting in contamination of soil, groundwater and surface water. In addition, small volumes of leachate from waste which, if not contained, has the potential to contaminate the surrounding soils, groundwater and surface water bodies.

8.3.3 Proposed further assessment

As the Proposal site is located wholly within the boundary of broader Chullora a limited soil and contamination assessment will be undertaken for the Proposal to assess the potential for impacts to soils and provide recommendations for erosion and sediment control measures during construction and operation of the Proposal.

8.4 Greenhouse gas emissions

8.4.1 Overview

GHG emissions associated with the Proposal would result from both direct and indirect sources. The Proposal would, however, result in waste being diverted from landfill once other recycling options are pursued.

8.4.2 Summary of issues

Construction

The construction of the Proposal would contribute to GHG emissions, either directly or indirectly, through the following:

- Fuel combustion from the operation of construction plant, generator sets and site vehicles
- Electricity used to power construction plant and site offices
- Indirect GHG emissions such as through embedded energy of construction materials and the transport of materials.

Operation

The operation of the Proposal would contribute to GHG emissions, either directly or indirectly, through the following:

- Stationary (non-transport) sources including diesel fuels in generators on site
- Mobile sources including trucks, cars and other equipment and machinery
- Consumption of purchased grid electricity.

8.4.3 Proposed further assessment

GHG emissions that are likely to be generated by the construction and operation of the Proposal will be quantified. GHG emissions for the Proposal will be considered/analysed in terms of:

- Scope of emissions: Scope 1 and Scope 2
- Emission source relevant to the Proposal, including:
 - Diesel use
 - Fuel combustion for site preparation
 - Fuel and electricity usage.
- Significance of the GHG emissions at a state and national level.

8.5 Landscape and visual amenity

8.5.1 Overview

The Proposal includes the construction of a processing shed. The Proposal site forms part of the broader Chullora RRP and is located within a broader industrial precinct. The visual nature of surrounding development is typified by a mix of industrial developments including a MRF, manufacturing and repair industries, automotive distribution and services industries, food manufacturing, hardware and general supplies, warehousing and various light industrial developments. Views to and from sensitive receivers are generally shielded by surrounding developments.

The Proposal is consistent with the visual built form of the existing site and is considered to be consistent with the established built form and visual character of the broader area. Further the Proposal would replace the previous Chullora RRC which comprised a structure of a similar nature, size and scale.

8.5.2 Summary of issues

Construction

The construction of the Proposal would be likely to result in minor visual impacts associated with construction activities (sites/compounds, machinery, temporary structures etc.) on the visual amenity of adjacent properties and to users of Muir Rd. Sensitive receivers, such as residents on Boardman Street, Chullora, would be separated from visual impacts during construction by distances of more than 300 m. Sensitive receivers would also be visually shielded from the site by the surrounding developments and as such these receivers are unlikely to be impacted.

Operation

The operational Proposal would be generally consistent with the visual built form of the existing site and is considered to be consistent with the established built form and visual character of the broader area and is not anticipated to result in significant visual impacts to the surrounding receivers. Sensitive receivers, such as residents on Boardman Street, Chullora, would be separated from visual impacts during operation by distances of more than 300 m. Sensitive receivers would also be visually shielded from the site by the surrounding developments and as such these receivers are unlikely to be impacted.

8.5.3 Proposed further assessment

Visual and landscape character assessments will have been completed for the previous stage of the Chullora RRP (SSD-10401). As the Proposal site is located wholly within the boundary of the previous assessments, no detailed visual and landscape character assessments will be undertaken for the Proposal.

Previous assessments of the potential for visual and landscape character impacts will have included:

- Identification of the visual qualities present, including the existing landscape character of the region, sensitive locations, catchments and key viewpoints
- A desktop visual impact assessment of the Chullora RRP in the whole and parts on the landscape and urban character of the area, views to and from the Proposal, magnitude of change to existing views and the visual sensitivity of the viewers.
- The identification of feasible and reasonable measures to mitigate impacts. Identified mitigation measures will be incorporated in the Proposal design.

8.6 Socio-economic

8.6.1 Overview

The Proposal would be located in the Canterbury-Bankstown LGA which currently has a population of 346,000 people and is projected to continue to grow into the future (Australian Bureau of Statistics (ABS), 2017). The key economic activities in the vicinity of the Proposal site include manufacturing, storage, freight and government services. Residential receivers are located to the southwest along Rookwood Road in Yagoona and southeast along the Hume Highway in Greenacre. The Sydney University Cumberland Campus is located in Lidcombe approximately one km to the north of the Proposal site.

8.6.2 Summary of issues

Construction

The Proposal is likely to employ a construction workforce of up to 120 FTE positions⁵ for the 12 months of construction. This would result in socio-economic benefits to the local economy by employing local labour and to the wider region by supporting the development of housing and infrastructure projects.

However, the Proposal may result in impact to the amenity of sensitive and industrial receivers during construction. This will result from an increase in construction traffic in the local road network and potential air quality, noise and visual impacts as discussed in the sections above. These impacts are anticipated to be minor due to the limited nature of the construction activities and short construction timeframe.

Operation

The Proposal would provide the following direct social and economic benefits to the Sydney region during operations:

- Creation of 30 permanent FTE positions
- Increase the levels of landfill diversion in NSW
- Facilitate the introduction of a proven technology in energy recovery plants and PEF into Australia and provide a working model for harnessing the embedded energy from waste materials for other industrial or waste facilities.

However, the Proposal may impact upon the amenity of surrounding sensitive receivers as a result of air quality, noise, visual and transport discussed in the sections above. The community and stakeholder engagement plan (refer to Section 5.1) will inform the approach to community consultation during the preparation of the EIS. This will enable key community concerns to be addressed and ensure that avoidance and mitigation strategies are incorporated into the final assessment.

8.6.3 Proposed further assessment

The potential social and economic impacts associated with the Proposal during both construction and operation will need to be further informed by technical impact assessments carried out for relevant issues (i.e. traffic, air and noise). Feedback from community and stakeholder consultation and engagement activities will be required to inform the mitigation strategies implemented for the Proposal.

⁵ Construction job estimates are based on a direct multiplier of 6 jobs being supported for each \$1M spent. This estimate of employment support by the proposal has been calculated using factors derived from the 2004-05-I-O table scheduled within the 'Guidelines of estimating employment supported by actions, programs and policies of the NSW Government' document published by NSW Treasury. The capital value of the Chullora RPF would be approximately \$40M, however \$20M of this would be for the fixed plant component of the RPF which would be manufactured overseas. The construction jobs have therefore been estimated based on a construction capital value of \$20M, equating to 120 personnel.

9 CONCLUSION

The Applicant are seeking to establish a market leading Chullora RRP Resource Recovery Park located at 21 Muir Road, Chullora. As part of the second stage of this project, the Applicant is seeking approval to develop a bespoke resource processing facility at Chullora, NSW to process up to 250,000 tonnes per annum of non-putrescible material to recover recyclables and produce Process Engineered Fuel (the Proposal), an alternative fuel source that can be supplied to the Botany Cogeneration Plant at the Botany Recycled Paper Mill premises.

The Proposal would be considered State Significant Development on the basis that it satisfies Clause 23(2) in Schedule 1 of the *State Environmental Planning Policy (State and Regional Development) 2011* and therefore requires the preparation of an EIS and consent from the Minister for Planning and Public Spaces.

The potential environmental impacts have been identified and their magnitude ascertained as part of this SSD Scoping Report. The assessment concluded that minimal environmental impacts have been identified as a result of the Proposal. The key environmental issues identified for the Proposal include:

- Traffic, access and parking
- Noise and vibration
- Air quality and odour
- Hazards and risk.

The EIS will include the following in accordance with Schedule 1 of the EP&A Regulations:

- A detailed description of the Proposal including its components, construction activities and potential staging
- A comprehensive assessment of the potential impacts on the key issues including a description of the existing environment, assessment of potential direct and indirect and construction, operation and staging impacts
- Description of measures to be implemented to avoid, minimise, manage, mitigate, offset and/or monitor the potential impacts
- Identify and address issues raised by stakeholders.

10 REFERENCES

- AECOM (2019), *Botany Cogeneration Plant Scoping Report*, prepared for SUEZ Recycling & Recovery Pty Ltd.
- Australian Bureau of Statistics (ABS) (2016), 'Quick Stats Canterbury-Bankstown (A)', viewed on 19 December 2019, accessed from:
https://quickstats.censusdata.abs.gov.au/census_services/getproduct/census/2016/quickstat/LGA11570?opendocument
- Blue Environment / Department of Environment and Energy (DotEE) (2019), *Assessment of waste exports from Australia in May 2019*, commissioned by Department of Environment and Energy.
- BMT WBM (2010) *Rookwood Road Catchment Flood Study Report*, prepared for Bankstown City Council.
- Costin Roe Consulting (2017) *Overland Flow Report: Suez Land*, prepared for Frasers Property Australia.
- Department of the Environment and Energy (DotEE) (2019), *Banning exports of waste plastic, paper, glass and tyres*, Discussion paper on implementing the August 2019 decision of the Council of Australian Governments, National Waste and Recycling Taskforce within Department of the Environment and Energy.
- Department of Environment and Climate Change (DECC) (2008), *Managing Urban Stormwater: Soils and Construction volume 1 and volume 2*, State of NSW and Department of Environment and Climate Change NSW.
- Department of Environment and Climate Change (DECC) (2009), *Interim Construction Noise Guidelines*, State of NSW and Department of Environment and Climate Change NSW.
- Department of Planning, Industry and Environment (DPIE) (2017a), *Scoping an Environmental Impact Statement - Draft Environmental Impact Assessment Guidelines*, Crown Copyright 2017 NSW Government.
- Eco Logical (2016), *Chullora Resource Recovery Park – Proposed Access Road Flora and Fauna Assessment*, prepared for SUEZ Recycling and Recovery.
- Enviroview (2016) *Site Audit Report, Proposed Lot 2, 15 Muir Road, Chullora NSW*, prepared for SUEZ Recycling and Recovery.
- ERM (2019), *Stage 2 Contamination Assessment – 15 Muir Road, Chullora NSW 2190*, Prepared for Frasers Property Australia
- New South Wales Environment Protection Authority (NSW EPA) (2014), *NSW Waste Avoidance and Resource Recovery Strategy 2014-21*, State of NSW and Environment Protection Authority, 59 Goulburn Street, Sydney NSW 2000.
- New South Wales Environment Protection Authority (NSW EPA) (2018a), 'Response to the enforcement of the China National Sword Policy', accessed online November 2019, accessed from <<https://www.epa.nsw.gov.au/your-environment/recycling-and-reuse/response-to-china-national-sword>>
- New South Wales Environment Protection Authority (NSW EPA) (2018b), *Waste Avoidance and Resource Recovery Strategy Progress Report 2017-18*, State of NSW and Environment Protection Authority, 59 Goulburn Street, Sydney NSW 2000.

APPENDIX A BIODIVERSITY DEVELOPMENT ASSESSMENT WAIVER APPLICATION

Chullora Resource Processing Facility: Biodiversity Development Assessment Waiver Application

Introduction

SUEZ Pty Ltd (the Applicant) are proposing to develop a resource processing facility as part of the broader Chullora Resource Recovery Park (RRP) at 21 Muir Road, Chullora (the Proposal site). The Proposal site is shown in Figure 1.

This memo has been prepared to provide an assessment of impacts to biodiversity values associated with the Proposal and to support a Biodiversity Development Assessment Report (BDAR) waiver application.

Background

The Applicant is seeking approval to develop the second phase of the Chullora RRP a bespoke Resource Processing Facility to process up to 250,000 tonnes per annum (tpa) of non-putrescible material to recover recyclables and produce an alternative fuel source that can be supplied to the proposed Botany Cogeneration Plant.

The Proposal is located on the site of the former Chullora Resource Recovery Centre (RRC) which included a Transfer Station, Materials Recycling Facility (MRF), Garden Organics platform and building used for glass processing. This site was subject to a fire in 2017 and subsequently demolished.

The Proposal (refer to Figure 1) would form the second stage of a broader site redevelopment, known as the Chullora RRP to replace the former Chullora RRC that SUEZ previously operated. The first phase of the Chullora RRP is currently under development¹ (SSD-10401) comprising:

- Early works and site establishment
- Construction and operation of a Materials Recovery Facility (MRF).

Through implementation the first phase of the Chullora RRC, new baseline site conditions for the Proposal site would be established prior to the commencement of the construction and operation of the Proposal. Namely the Chullora RRP site would be cleared of vegetation, levelled for construction, a hardstand area paved, and internal road infrastructure and site access from Muir Road formalised.

The Proposal is considered State Significant Development (SSD) under Schedule 1, Clause 23 (Waste and Resource Management Facilities) of the *State Environmental Planning Policy (State and Regional Development) 2011* (State and Regional SEPP). Schedule 1 of the State and Regional SEPP describes development which is considered to be SSD and this includes any waste and resource management facility handling greater than 100,000 tpa. Accordingly, Part 4, Division 4.7 of the *Environmental Planning and Assessment Act 1979* (EP&A Act) requires that an Environmental Impact Statement (EIS) be prepared to assess the potential impacts of the Proposal on the

¹ The EIS is currently being prepared to seek approval for Stage 0 and Stage 1.

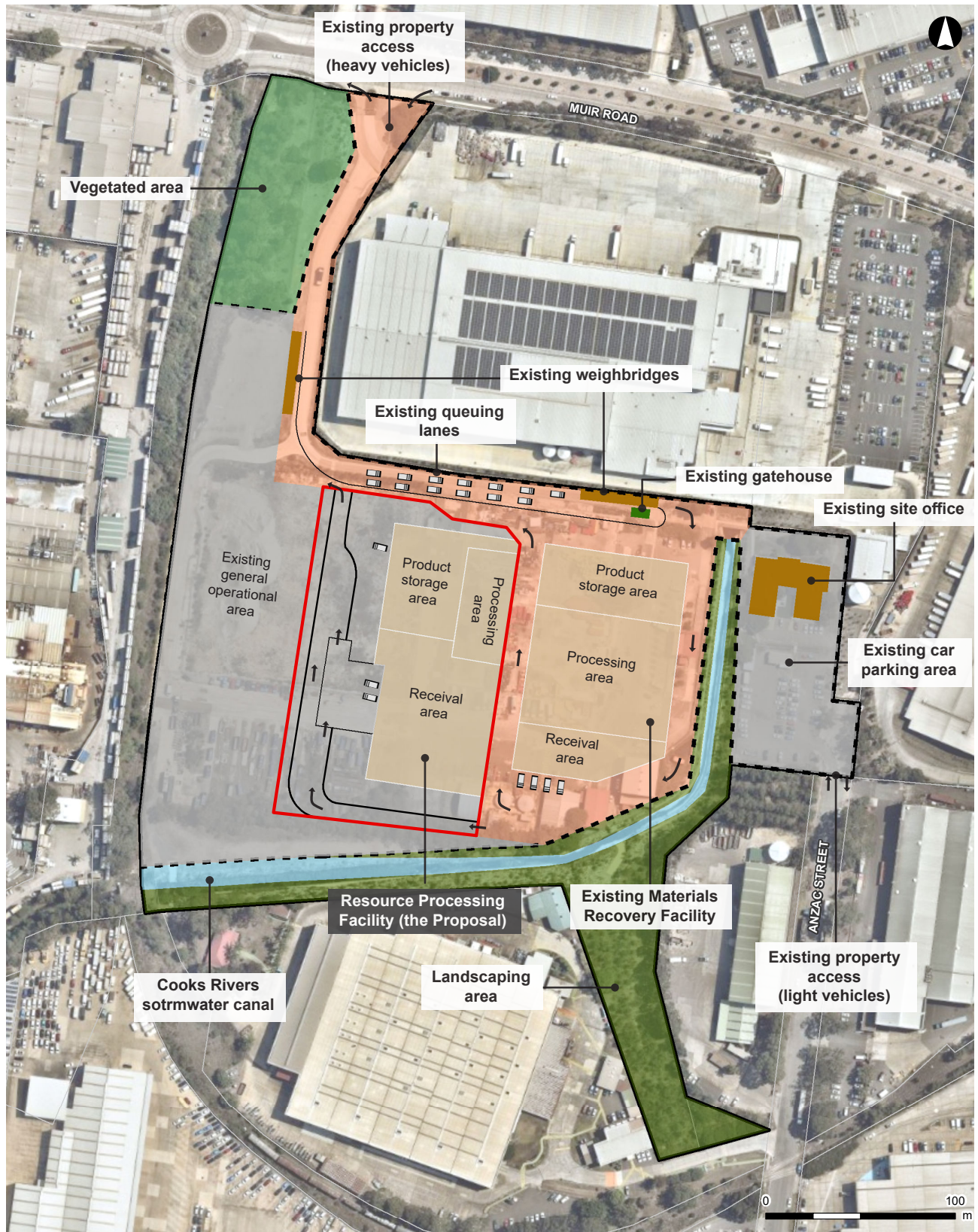
environment. This would usually require detailed consideration of biodiversity values under the *Biodiversity Conservation Act 2016* (BC Act), where appropriate.

As noted in the fact sheet 'How to apply for a BDAR waiver for a Major Project Application' (2019) by the Department of Planning, Industry and Environment (DPIE), the BC Act requires that an SSD application be accompanied by a BDAR unless the Planning/Environment Agency Head determine that the proposed development is not likely to have any significant impact on biodiversity values. This memo seeks to provide information to assist the Planning/Environment Agency Head in making this determination.

As outlined in this memo, the Proposal site does not contain any mapped biodiversity values, including no high biodiversity values mapped under the BC Regulation, on the Biodiversity Values Map (BV Map) and no mapped Plant Community Types (PCTs), as maintained under the BioMetric Vegetation Types database. The Proposal site is located within an established industrial hardstand area and no vegetation clearing or trimming would be required for the construction of the Proposal. This memo has been prepared from information from a brief site inspection by an Environmental Scientist and a desktop assessment.

This memo has been prepared to demonstrate that the Proposal would not impact on biodiversity values. As such, a BDAR is not required and the Proposal should be considered exempt from satisfying Clause (2) of Section 7.9 of the BC Act.

Chullora Resource Processing Facility

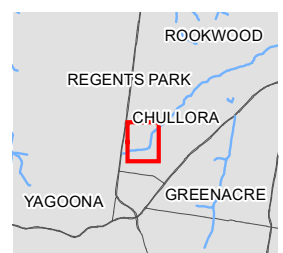


LEGEND

- Developable Area Boundary
- Chullora RRP site boundary
- Stage 1
- Proposal (Stage 2)
- Existing hardstand and flood storage
- Vegetated area
- Landscaping area
- Cook River stormwater channel

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 Date issued: February 18, 2020
 Aerial Imagery supplied NSW LPI

1:3,000 at A4



Appendix A Figure 1: The Proposal

Potential impacts to biodiversity values

As discussed above, the Proposal site would be located within an existing hardstand area, constructed for the earlier stages of the Chullora RRP development, and as such does not contain any vegetated areas. The broader Chullora RRP site is surrounded by a range of industrial developments including PFD Storage Warehouse, Tip Top Bakery, News Limited, Fairfax, Volkswagen Distribution Centre, Bluescope Steel and Veolia transfer station. Beyond this, the nearest residential sensitive receivers are located approximately 250 m to the south west, in the suburb of Yagoona.

Patches of vegetation are located to the northwest and southeast of the Proposal site, within the larger Chullora RRP development footprint (Figure 1). This vegetation will not be removed or trimmed as part of the Proposal.

Section 1.5 of the BC Act provides a description of biodiversity values, relevant to the Act that would normally require assessment within the relevant biodiversity assessment report (in this case, a BDAR). A description of additional biodiversity values is also provided in Section 1.4 of the *Biodiversity Conservation Regulation 2017* (BC Regulation).

Table 1 below provides an assessment of these defined biodiversity values, in relation to the Proposal site. This assessment has been undertaken by a suitable qualified person in accordance with the requirements in DPIE's fact sheet.

Table 1 Assessment of potential impacts of the Proposal on biodiversity values

Biodiversity value	Meaning	Relevance	Potential impacts
Vegetation abundance - 1.4(b) BC Regulation	Occurrence and abundance of vegetation at a particular site	NA	The entirety of the Proposal site is comprised of cleared areas and man-made structures. Vegetation is found in a very small part to the northwest and southeast of the Proposal site (refer to Figure 1). Flora and fauna assessments (Arcadis, 2020) classified the 0.36ha patch northwest of the Proposal site as Cooks River/Castlereagh Ironbark Forest in the Sydney Basin Bioregion, which is listed as an Endangered Ecological Community (EEC) under the NSW <i>Biodiversity Conservation Act 2016</i> (BC Act). It is noted that this patch of the Cooks River/Castlereagh Ironbark Forest is subject to weed invasion. The vegetation to the southeast of the Proposal site, located within a narrow strip of land between two industrial developments, is dominated by modified/planted native vegetation, including: • <i>Corymbia citriodora</i> (Lemon-scented Spotted Gum) • <i>Ligustrum lucidum</i> (Broad-leaved Privet)

Biodiversity value	Meaning	Relevance	Potential impacts
			• <i>Gomphocarpus fruticosus</i> (Narrow-leaved Cotton Bush) • <i>Asparagus aethiopicus</i> (Asparagus Fern) • <i>Lantana camara</i> (Lantana) • <i>Olea europaea subsp. Cuspidate</i> • <i>Ligustrum lucidum</i> • Planted natives not endemic to the area. The Proposal is limited to construction on an existing hardstand area. No vegetation clearing or removal works are necessary as the remaining vegetation is located outside the Proposal footprint. The Proposal is very unlikely to have a significant impact on vegetation abundance.
Vegetation integrity 1.5(2)(a) BC Act	Degree to which the composition, structure and function of vegetation at a particular site and the surrounding landscape has been altered from a near natural state	NA	No vegetation exists within the Proposal site and therefore, no Plant Community Types (PCT) vegetation would be directly impacted by the Proposal. The Proposal is not likely to have a significant impact on vegetation integrity.
Habitat suitability 1.5(2)(b) BC Act	Degree to which the habitat needs of threatened species are present at a particular site	NA	As noted above, no vegetation is located within the Proposal site. However, vegetation is located nearby to the northwest and southeast. This vegetation is noted as containing potential foraging habitat for the following threatened flora species: • <i>Pteropus poliocephalus</i> (Grey-headed Flying-fox) • <i>Miniopterus schreibersii oceanensis</i> (Eastern Bentwing-bat). The Proposal does not require any vegetation removal. Therefore, any foraging habitat occurring on the Proposal site or surrounds would not be lost.

Biodiversity value	Meaning	Relevance	Potential impacts
			The proposal is very unlikely to have a significant impact on habitat suitability.
Threatened species abundance 1.4(a) BC Regulation	Occurrence and abundance of threatened species or threatened ecological communities, or their habitat, at a particular site	NA	Previous site surveys (Arcadis, 2020) identified no threatened flora or fauna species within or surrounding the Proposal site. Several trees of <i>Corymbia citriodora</i> surrounding the Proposal site could provide minimal, opportunistic foraging habitat for the Grey-headed Flying-fox, although this threatened fauna species was not recorded during previous surveys. The Proposal site would be located on a hardstand area, cleared of any remnant vegetation under SSD-10401. For this reason, the Proposal site is not considered to provide habitat for any threatened ecological communities or threatened species. The Proposal is not likely to have a significant impact on threatened species abundance.
Habitat connectivity 1.4(c) BC Regulation	Degree to which a particular site connects different areas of habitat of threatened species to facilitate the movement of those species across their range	NA	The Proposal site occurs in an already highly cleared and fragmented landscape. The Proposal would not involve any vegetation clearing activities as it will be constructed on an existing hardstand area. Therefore, the Proposal would not impact on native vegetation, located outside the construction and operational boundary, and therefore does not impact on habitat connectivity. In addition, no hollow-bearing trees have been identified surrounding the Proposal site. Therefore, the identified vegetation has lower value for fauna movement and therefore connectivity value. The Proposal is not likely to have a significant impact on habitat connectivity.
Threatened species movement 1.4(d) BC Regulation	Degree to which a particular site contributes to the movement of threatened species to	NA	Similar to habitat connectivity, the Proposal site provides no dispersal habitat that contributes to the movement of any threatened species.

Biodiversity value	Meaning	Relevance	Potential impacts
	maintain their lifecycle		Vegetation surrounding the Proposal site does provide foraging habitat for the following species: • <i>Pteropus poliocephalus</i> (Grey-headed Flying-fox) • <i>Miniopterus schreibersii oceanensis</i> (Eastern Bentwing-bat). This vegetation will not be cleared or directly impacted construction or operation of the Proposal. The Proposal is not likely to have a significant impact on threatened species movement.
Flight path integrity 1.4(e) BC Regulation	Degree to which the flight paths of protected animals over a particular site are free from interference	NA	It is possible that threatened species would fly over the Proposal site whilst moving within their home range or during migration. This is most likely the case for threatened bats and woodland birds. The Proposal site is located in an already highly modified landscape comprised of industrial units. The Proposal does not include any additional infrastructure that would increase interference with the flight path of any protected fauna. The Proposal is not likely to have a significant impact on flight path integrity.
Water sustainability 1.4(f) BC Regulation	Degree to which water quality, water bodies and hydrological processes sustain threatened species and threatened ecological communities at a particular site.	NA	The Proposal site does not contain any waterbodies. However, a channel that runs into the Cooks River is located to the immediate south of the Proposal site. The Proposal site would not involve any discharge into the River and if discharge of treated water is required, a trade waste agreement will be implemented. Therefore, the Proposal would not have any impacts on the Cooks River or surrounding water bodies. The Proposal is not likely to have a significant impact on water sustainability.

Summarising information from Table 1, it is considered unlikely that any threatened species or communities occur within the Proposal site, therefore it is unlikely that there would be a significant impact when considering the criteria in Section 1.5 of the BC Act and Section 1.4 of the BC Regulation.

Biodiversity Values Map

The Biodiversity Values Map (BV Map) has been produced by OEH and is used to identify land with high biodiversity value, as defined by the BC Regulation. It is used as one of the triggers for entry into the Biodiversity Offset Scheme (BOS) for proposals being assessed under Part 4 of the EP&A Act, except Division 4.1 SSD proposals. The biodiversity values map is a compilation of datasets that have been identified in Section 7.3 of the BC Regulation as being of high biodiversity value.

Querying the map is not typically required for SSD proposals since Section 7.9 of the BC Act requires entry into the BOS for all SSI and SSD proposals. Since the purpose of this memo is to demonstrate that a BDAR is not required for the Proposal, the BV map has been queried to confirm that no part of the Proposal site has been mapped as being of high biodiversity value.

Figure 2 below demonstrates that no biodiversity values have been mapped within the Proposal site. The nearest mapped biodiversity value is approximately 80 metres west of the Proposal site, located within the narrow strip of land owned by the Rail Corporation New South Wales (RailCorp). The vegetation is identified as *'threatened species or communities with potential for serious and irreversible impacts'*. The specific vegetation type and reason for high biodiversity value was not identified by OEH on the BV Map. However, this vegetation has been identified as *PCT 725 Broad-leaved Ironbark - Melaleuca decora shrubby open forest on clay soils of the Cumberland Plain, Sydney Basin Bioregion* in The Native Vegetation of the Sydney Metropolitan Area. Volume 2: Vegetation Community Profiles (Version 3.0) (OEH, 2016). This PCT corresponds to the *Cooks River/Castlereagh Ironbark Forest in the Sydney Basin Bioregion* which is listed as endangered under the BC Act.

Chullora Resource Processing Facility



LEGEND



Developable site boundary



Chullora RRP site boundary



Proposal site boundary



Biodiversity values (OEH, 2019)



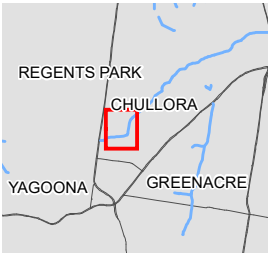
Existing Stage 0 and Stage 1 area



Cooks River stormwater channel

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Aerial imagery supplied NSW LPI

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Appendix A: Figure 2 Biodiversity values mapped near the Proposal site

Conclusion/Recommendation

This memo has considered the potential impacts of the Proposal on biodiversity values prescribed in Section 1.5 of the BC Act, Section 1.4 of the BC Regulation and the BV Map. The Proposal would have no impact on these biodiversity values or PCTs.

The Proposal is located on a previously cleared area of existing hardstand therefore there is no requirement for vegetation clearing. There are also unlikely to be any prescribed impacts, as defined under the BC Regulation.

The Proposal site does not contain any land mapped as being of high biodiversity value on the BV Map and no PCTs are mapped on the Proposal site. The nearest mapped biodiversity value is approximately 80 metres west of the Proposal site, located within the narrow strip of land owned by the RailCorp.

In light of the above findings, it is requested that the Proposal be considered exempt from Clause (2) of Section 7.9 of the BC Act, meaning that the EIS need not be accompanied by a BDAR, prepared in accordance with the *Biodiversity Assessment Method 2017*.

References

- Arcadis (2020), *Appendix P Biodiversity Development Assessment Report*, Chullora Materials Recovery Facility Environmental Impact Statement, prepared for SUEZ Recycling & Recovery Pty Ltd.
- Department of Planning, Industry and Environment (DPIE) (2019) *Fact Sheet: How to apply for a BDAR waiver for a Major Project Application*. NSW Government, October 2019.
- Eco Logical Australia (ELA) (2016) *Ecological Constraints Assessment – Chullora Resource Recovery Centre Lot 21 DP 860283 and Lot 374 DP 1084113*. Prepared for SUEZ Recycling and Recovery Australia, January 2016.
- Eco Logical Australia (ELA) (2016) *Chullora Resource Recovery Park Proposed Access Road – Flora and Fauna Assessment*. Prepared for SUEZ Recycling and Recovery Australia, February 2016.
- Office of Environment and Heritage (OEH) (2019) *Biodiversity Value Map and Threshold Tool*. Accessed on 9 December 2019 from:
<https://www.lmbc.nsw.gov.au/Maps/index.html?viewer=BVMap>
- Office of Environment and Heritage (OEH) (2016), *The Native Vegetation of the Sydney Metropolitan Area. Volume 2: Vegetation Community Profiles (Version 3.0)*. Accessed on 24 January 2020 at: <https://www.environment.nsw.gov.au/surveys/VegetationSydMetro.htm>

APPENDIX B ABORIGINAL AND NON-ABORIGINAL HERITAGE ASSESSMENT WAIVER APPLICATION

Chullora Resource Processing Facility: Aboriginal and Non-Aboriginal Heritage Waiver Application

Introduction

SUEZ Pty Ltd (the Applicant) are proposing to develop a Resource Processing Facility (RPF) facility as part of the broader Chullora Resource Recovery Park (RRP) at 21 Muir Road, Chullora (the Proposal site). The Proposal site is shown in Figure 1.

This memo has been prepared to provide an assessment of impacts to Aboriginal and non-Aboriginal cultural heritage values associated with the Proposal and to support an Aboriginal Cultural Heritage Assessment Report (ACHAR) waiver application.

Background

The Applicant is seeking approval to develop the second phase of the Chullora RRP a bespoke Resource Processing Facility to process up to 250,000 tonnes per annum of non-putrescible material to recover recyclables and produce an alternative fuel source that can be supplied to the proposed Botany Cogeneration Plant.

The Proposal is located on the site of the former Chullora Resource Recovery Centre (RRC) which included a Transfer Station, Materials Recycling Facility (MRF), Garden Organics platform and building used for glass processing. This site was subject to a fire in 2017 and subsequently demolished.

The Proposal would form the second stage of a broader site redevelopment, known as the Chullora RRP (refer to Figure 1), to replace the former Chullora RRC. The first two stages of the Chullora RRP are currently under development (SSD 10401) and comprise:

- early works and site establishment
- Construction and operation of a MRF.

Through implementation of the first phase of the Chullora RRP development, new baseline site conditions for the Proposal site will be established, which would be cleared of vegetation, levelled for construction, a hardstand area paved, and with internal road infrastructure and site access from Muir Road.

The Proposal is considered State Significant Development (SSD) under Schedule 1, Clause 23 (Waste and Resource Management Facilities) of the *State Environmental Planning Policy (State and Regional Development) 2011* (State and Regional SEPP). Schedule 1 of the State and Regional SEPP describes development which is considered to be SSD and this includes any waste and resource management facility handling greater than 100,000 tpa. Accordingly, Part 4, Division 4.1 of the *Environmental Planning and Assessment Act 1979* (EP&A Act) requires that an Environmental Impact Statement (EIS) be prepared to assess the potential impacts of the Proposal on the environment.

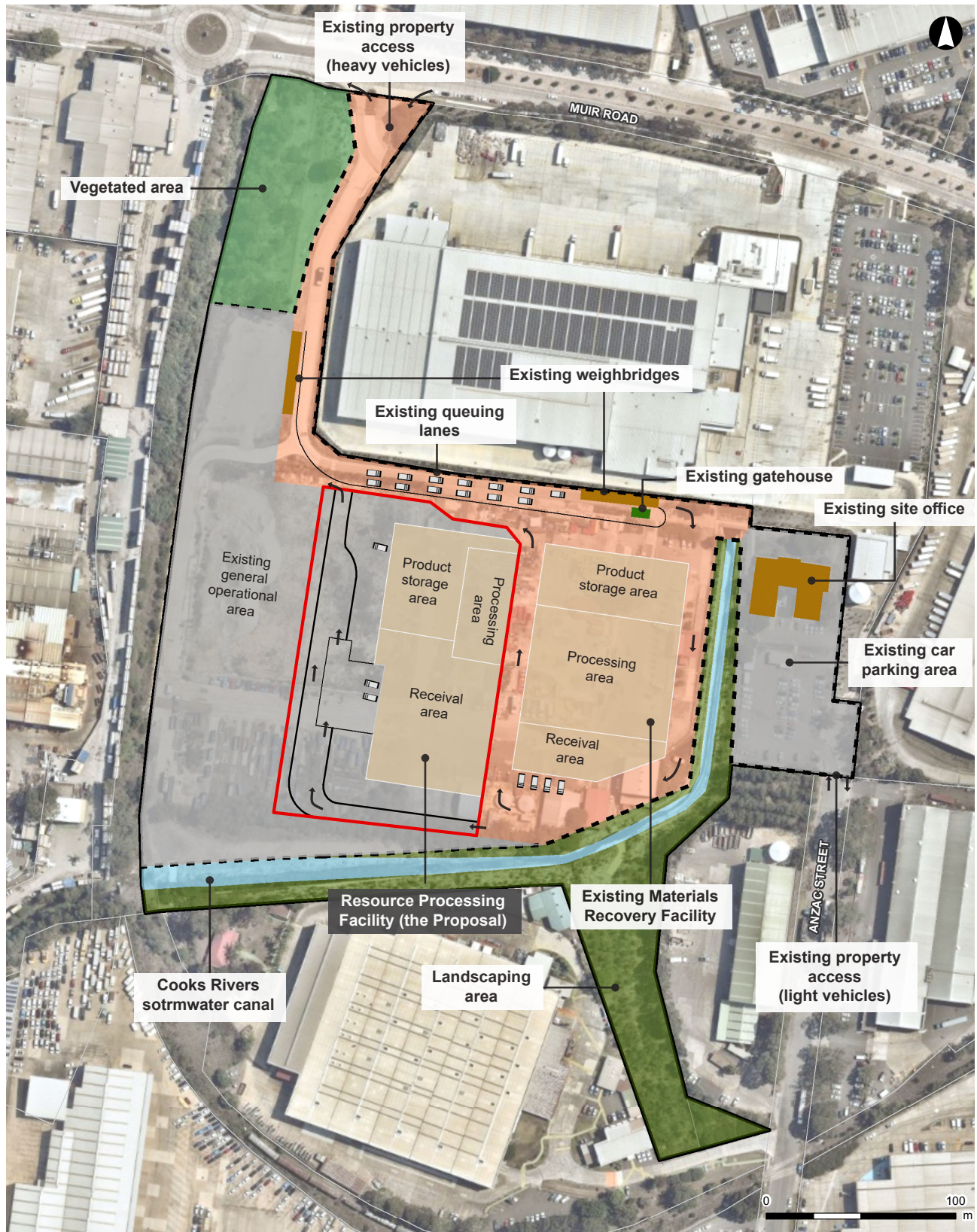
As noted by the Office of Environment and Heritage (OEH) in the document 'Guidance for Aboriginal cultural heritage impact assessment for SSD/SSI' (2019), the EIS must consider the requirements of the

Environmental Planning and Assessment Regulation 2000 (EP&A Regs) including any additional requirements issued by the Secretary (SEARs), which may include the preparation of an ACHAR.

As outlined in this memo, no known objects or places of Aboriginal or non-Aboriginal heritage significance were identified within the Proposal site or immediate surrounds. The Proposal site is located within an established industrial area and earthworks or excavations would be required for the Proposal. Therefore, it is unlikely that objects or places of Aboriginal and non-Aboriginal heritage significance would be impacted by the Proposal.

This Aboriginal heritage assessment waiver has been undertaken in reference to the Department of Planning, Industry and Environment (DPIE) (formerly Office of Environment and Heritage [OEH] *Due Diligence Code of Practice for the Protection of Aboriginal Objects in New South Wales* (OEH 2010). This memo has also been prepared to demonstrate that the Proposal would not impact on Aboriginal cultural heritage values, and as such, an ACHAR is not required.

Chullora Resource Processing Facility

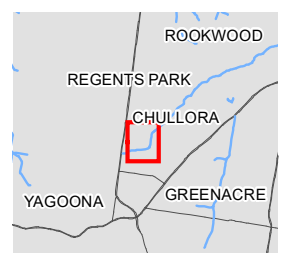


LEGEND

- Developable Area Boundary
- Chullora RRP site boundary
- Stage 1
- Proposal (Stage 2)
- Existing hardstand and flood storage
- Vegetated area
- Landscaping area
- Cook River stormwater channel

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1:3,000 at A4



Appendix B Figure 1: The Proposal

Methodology

This assessment has followed a method of assessment which is designed to provide a baseline level of information outlining opportunities and constraints related to heritage. The assessment was undertaken on 19 November 2019 and included:

- Database searches, including:
 - OEH Aboriginal Heritage Information Management System (AHIMS) database
 - *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) Protected Matters Search
 - OEH 'Search for NSW heritage'
 - Rail Corp 's.170 Heritage and Conservation Register'
- Schedule 5 of the Bankstown Local Environmental Plan (LEP) 2015 and the Auburn LEP 2010
- Landscape assessment
- Desktop assessment.

These searches were undertaken to identify any Aboriginal, places or areas within a one km radius of the Proposal site. Although not expressly required consideration has also been given to on-Aboriginal heritage items as well.

An Aboriginal Heritage Due Diligence Assessment was prepared by Artefact (2020) to determine the archaeological sensitivity of the Proposal site as part of the first stage of the Chullora RRP redevelopment (under SSD 10401). This assessment was reviewed and the results were used to inform the discussion of impacts in the sections below.

Construction and operation impacts related to Aboriginal and non-Aboriginal heritage have been assessed to evaluate any key Aboriginal and non-Aboriginal heritage-related risks for the Proposal.

Site Description

The Proposal site is located within an existing hardstand area, constructed for the earlier stages of the Chullora RRP development, and as such does not contain any vegetated areas. The Proposal site is surrounded by a range of industrial developments including PFD Storage Warehouse, Tip Top Bakery, Volkswagen Distribution Centre, Bluescope Steel and Veolia transfer station. Beyond this, the nearest residential sensitive receivers are located approximately 250 m to the south west, in the suburb of Yagoona.

Patches of vegetation are located to the northwest and southeast of the Proposal site, within the larger Chullora RRP development footprint. This vegetation is not subject to any clearing or removal as part of the Proposal.

Impacts to Aboriginal and non-Aboriginal cultural heritage values

As the Proposal would not disturb the ground surface or alter the structure of the Proposal site, there is no potential for impact to non-recorded Aboriginal or non-Aboriginal heritage values (i.e. unexpected finds).

An assessment of the Proposal of the potential impacts to Aboriginal and non-Aboriginal cultural heritage values against the Federal and State legislative requirements is presented in Table 1.

Table 1 Impacts to Aboriginal cultural heritage values

Relevant Legislation	Potential Impacts	Approval or Assessment Requirement
<i>Environment Protection and Biodiversity Conservation Act 1999</i>	Disturbance to any object that is of national heritage significance	The EPBC Act provides a legal framework to protect and manage nationally and internationally important flora, fauna, ecological communities and heritage places and control certain actions as defined in the EPBC Act as Matters of National Environmental Significance (MNES). World heritage properties and national heritage places are among those defined as an MNES. In accordance with Section 67 and 67A of the EPBC Act, any works that have the potential to result in an impact on any MNES are considered 'controlled actions' and would require a referral to the Federal Minister for the Environment for approval.
<i>Environmental Planning and Assessment Act 1979</i>	Disturbance to any object that is of state or local heritage significance	The EP&A Act consists of three main parts of direct relevance to Aboriginal culture heritage: Part 3 governs the preparation of planning instruments, Part 4 relates to the development assessment process for local government (consent) authorities, and Part 5 which relates to activity approvals by governing (determining) authorities. Planning decisions with the Local Government Authorities (LGA) are guided by the Local Environmental Plans (LEPs). Each LGA is required to develop and maintain an LEP that includes Aboriginal and historical heritage items which are protected under the EP&A Act and Heritage Act 1977 (Heritage Act). The study area is located in the boundaries of the Canterbury-Bankstown LGA, and is covered by the Bankstown LEP 2015. The Proposal will be assessed as SSD under Part 4 Division 4.7 of the EP&A Act and therefore the Minister will determine consent with regard to the development application.
<i>National Parks and Wildlife Act 1974 (NPW Act)</i>	Disturbance of any objects or places of Aboriginal heritage significance	Under Section 4.41 of the EP&A Act development applications assessed as SSD do not require an Aboriginal heritage impact permit (AHIP) (under Section 90 of the NPW Act). Given the existing site is extensively disturbed, it is highly unlikely that objects or places of Aboriginal heritage significance would be impacted by the Proposal.

Relevant Legislation	Potential Impacts	Approval or Assessment Requirement
<i>Heritage Act 1977</i> (Heritage Act)	Disturbance to any object that is of state or local heritage significance	N/A The Proposal would not directly impact on any item of heritage significance (Aboriginal or non-Aboriginal).

Heritage mapping

Aboriginal Heritage Information Management System

Extensive searches of the AHIMS and EPBC Act PMST revealed there were no Aboriginal archaeological or non-Aboriginal heritage sites within one km of the Proposal site.

The Eora language group originally occupied parts of Western Sydney. The Proposal site is located within the boundaries of the Metropolitan Local Aboriginal Land Council, in an area occupied originally by the Eora language group. The Proposal site has not been identified by the Eora group as a site of Aboriginal heritage significance.

State Heritage Register & s.170 Registers

A 'Search for NSW heritage' (OEH) was undertaken on 19 November 2019. No Aboriginal places or items were identified at the Proposal site or immediate surrounds. Three state listed non-Aboriginal heritage items and places were identified within one kilometre (km) of the Proposal site:

- Potts Hill Reservoirs 1 and 2 and site (HR# 01333)
- Pressure Tunnel, Shaft No 1 and associated infrastructure (HR# 01334)
- Former Lidcombe Hospital Site (Heritage Conservation Area) (HR# C07144).

A search of the 'Rail Corp s.170 Heritage and Conservation Register' also revealed one state listed heritage site, the 'Chullora Railway Workshops'.

Local Environmental Plans

An online search of Schedule 5 (Environmental Heritage) of the Bankstown LEP 2015 revealed one State-listed heritage item (Pressure Tunnel, Shaft No 1 and associated infrastructure) and two locally listed heritage items. The locally listed items included 'Carinya House' (Item I39) and Royal Arms Inn archaeological site (A2).

A secondary search of Schedule 5 (Environmental Heritage) of the Auburn LEP 2010 was also undertaken as the local government boundary is within one km of the Proposal site. This revealed a locally listed heritage item (Item I36) 'Minali Special School' located 500m north of the Proposal site.

Landscape

The Proposal site's landscape is generally level; sloping slightly from the west to the east. The Proposal site is located in the upper catchment of the Cooks River. The Proposal site is subject to occasional flooding, which historically may have displaced any heritage items previously deposited in the area.

Geologically, the Proposal site is underlain by Bringelly Shale of the Wiannamatta Group comprising shale, carbonaceous claystone, laminate and fine to medium grained sandstone (eSPADE, 2019). The underlying geology of the Proposal site consists of silty clay fill that generally comprise medium plasticity which indicates the soils could be subjected to shrink or swell movements, depending on soil moisture changes. The silty clay fill is present up to 0.5 metres (m) overlying light brown/grey sandy clay soil of firm to very stiff consistency to a depth of 3.5m.

Previous work indicates groundwater is located at a depth of between 1.0m and 3.4m below surface level and is likely to flow to the Cooks River.

Land Use

Historical

Historical land use records and aerial photography indicate that the Proposal site was associated with the former Chullora Railway Workshop complex, which opened in 1923. The Proposal site has been identified as being the site of the Electric Car (ELCAR) workshops. Development of the Chullora Railway Workshops continued up until the 1940s, where the workshops covered a 200 hectare area and comprised of three major branches which included 10 specialist workshops.

During WWII the Chullora Railway Workshops were utilised as aircraft and military tank production facilities. In 1948, the 18-hectare Chullora Railway Workers Camp was established at the corner of The Hume Highway and Brunner Street, to southwest of the Proposal site. This camp was a temporary housing precinct which came to provide housing to the over 2000 post war migrants. The Chullora Rail Workshops continued to operate into the 1990s but was subject to significant surrounding land use change as heavy industrial precincts were moved into the Greater Western Sydney region. The ELCAR operations ceased in 1994.

These activities identified above would have caused significant disturbance and/or removal of a wide range of Aboriginal archaeological sites (if any had previously been present) including artefact scatters, scarred trees and stone arrangements. Further, the Proposal site was subject to a fire in 2017 that further reduces the likelihood of intact objects being present on site. The Due Diligence Assessment (Artefact, 2020) concluded that due to the existing levels of disturbance and subsurface exposure, the Proposal site is not associated with any areas of archaeological sensitivity.

Current and Future

As mentioned above, the Proposal would form the second phase of the Chullora RRP as the first two stages are currently under development (SSD-10401).. Through implementation of the first phase of the redevelopment new baseline site conditions for the Proposal site will be established, which would be cleared of vegetation, levelled for construction, a hardstand area paved, and with internal road infrastructure and site access from Muir Road. If any heritage items were to be disturbed on the Proposal site, it is much more likely that this would occur during the previous stages of the Chullora RRP, which do not form part of this waiver.

The entire Proposal site has been previously disturbed by high impact activities that would have removed or displaced any potential archaeological deposits, with the exception of the vegetated patch in the northeast of the site which is not proposed to be impacted by the Proposal.

OEH guidance for Aboriginal cultural heritage impact assessment for SSD/SSI

The Proposal would utilise existing approved infrastructure developed for the previous stages of the Chullora RRP and no ground disturbance would be required for either construction or operation. Therefore, an ACHAR is not considered necessary for the Proposal.

Part 5 of OEH's 'Guidance for Aboriginal cultural heritage impact assessment for SSD/SSI' outlines limited situations where an ACHAR is not necessary for an SSD/SSI application. Specifically, when:

“Development of an existing building or structure that does not exceed the current building footprint and does not involve disturbing the ground surface”

The Proposal would not alter the Proposal site footprint, would not disturb the ground surface and is not a declared Aboriginal place.

As noted above, no Aboriginal cultural heritage values have been identified within the Proposal site or immediate surrounds. Therefore, an exemption from preparing an ACHAR should be considered based on the above criteria.

Conclusion

This memo has considered the potential impacts of the Proposal on Aboriginal and non-Aboriginal cultural heritage values prescribed in the NPW Act and relevant heritage mapping database, including AHIMS and SHR.

Based on the above Aboriginal and non-Aboriginal heritage search, no known objects or places of Aboriginal heritage significance were identified within the Proposal site. Several non-Aboriginal heritage items have been identified within one km of the Proposal site, however, it is highly unlikely that any construction or operational activities would impact these items.

The Proposal site is located within an established industrial area at Chullora, NSW. Therefore, it is unlikely that objects or places of Aboriginal heritage significance would be impacted by the Proposal. Contemporary land use practices have led to high levels of ground disturbance that would have removed or displaced any isolated archaeological material that may have been present. As the Proposal does not require any ground disturbance activities to be undertaken during either construction or operation, it is improbable that any items of Aboriginal or non-Aboriginal heritage significance would be uncovered as a result of either construction or operation.

References

Department of Environment, Climate Change and Water (DECCW) (2010), *Due Diligence Code of Practice for the Protection of Aboriginal Objects in NSW*. Sydney South: DECCW.

Department of Planning, Industry and Environment (DPIE) (2019) *Kings Park Waste Facility*. Major Projects – State Significant Development. Accessed on 18 November 2019 from: <https://www.planningportal.nsw.gov.au/major-projects/project/5191>

eSpade (2019), Office of Environment and Heritage, eSPADE, online, viewed 19 November 2019, <https://www.environment.nsw.gov.au/eSpade2WebApp>

Office of Environment and Heritage (OEH) (2019) *Guidance for Aboriginal cultural heritage impact assessment for state significant development and state significant infrastructure*. March 2019.

Office of Environment and Heritage (OEH) (2019) *Search for NSW heritage – Search Aboriginal Places & State Heritage Register*. Blacktown LGA – Deerubbin LALC. Accessed on 18 November 2019 from: <https://www.environment.nsw.gov.au/heritageapp/heritagesearch.aspx>

