

Supporting Document
for
BANKSMEADOW TRANSFER TERMINAL

14 Beauchamp Rd, Banksmeadow

March 2013

THIS PAGE INTENTIONALLY LEFT BLANK



TABLE OF CONTENTS

1. INTRODUCTION	1
1.1. Overview.....	1
1.2. Proposed Site	1
1.2.1. Location	1
1.2.2. Site Description	2
1.2.3. Surrounding Land	3
1.3. Related Putrescible Waste Facilities	4
1.3.1. Clyde Transfer Terminal	6
1.3.2. Crisps Creek Intermodal Facility	6
1.3.3. Woodlawn Bioreactor	7
1.3.4. Woodlawn Mechanical Biological Treatment (MBT) Facility	7
2. PLANNING CONSIDERATIONS.....	8
2.1. Commonwealth Legislation.....	8
2.2. New South Wales Legislation	8
2.2.1. Environmental Planning and Assessment Act 1979	8
2.2.2. Protection of the Environment Operations Act 1997	9
2.2.3. Contaminated Land Management Act 1997	9
2.2.4. State Environmental Planning Policy (Major Development) 2005.....	10
2.3. Local Planning Instruments.....	10
3. PROPOSAL.....	11
3.1. Overview.....	11
3.2. Proposed Infrastructure	14
3.3. Proposed Operations	14
3.3.1. Site Access	14
3.3.2. Putrescible Waste Operations	15
3.3.3. Non-Putrescible Waste Operations	15
3.3.4. Rail Activities	16
4. PROJECT JUSTIFICATION.....	17
4.1. Policy Context.....	17
4.2. Need for Proposal.....	18
4.3. Alternatives.....	18
5. CONSULTATION	19
5.1. Local Community	19
5.2. Government Agencies	20
6. KEY ENVIRONMENTAL CONSIDERATIONS.....	21
6.1. Air Quality	22
6.1.1. Dust	22
6.1.2. Odour.....	22
6.2. Noise & Vibration	23
6.3. Hazards & Risks	23
6.4. Soil & Water.....	24
6.4.1. Water	24
6.4.2. Soil.....	24
6.5. Traffic & Access.....	25
6.6. Greenhouse Gas	26



1. INTRODUCTION

1.1. Overview

Veolia Environmental Services (Australia) Pty Ltd (Veolia) is proposing to develop the Banksmeadow Transfer Terminal and associated rail infrastructure, which will be capable of processing up to 400,000 tonnes per annum of putrescible waste and up to 100,000 tonnes per annum of non putrescible waste at Banksmeadow, for transfer to various waste processing facilities.

The Banksmeadow Transfer Terminal will be designed to containerise the putrescible waste for rail haulage to Woodlawn for treatment, recycling and energy recovery, and consolidate loads of non-putrescible waste in to semi-trailers for transfer to resource recovery facilities such as the proposed Camellia Recycling Centre for further recovery of recyclable material.

This background document has been prepared to support a request to the Department of Planning and Infrastructure for Director-General's Requirements (DGRs) for the preparation of an Environmental Impact Statement under Part 4 of the *Environmental Planning and Assessment Act 1979* (EP&A Act).

This report provides an outline of the existing site operations, statutory approvals and a description of the proposed development and identification of key potential environmental issue that may be associated with the proposed development.

1.2. Proposed Site

1.2.1. Location

The proposed site is situated in Banksmeadow, on the western side of Beauchamp Road, and the northern side of McPherson Street. It includes part of the land owned by Asciano at 14 Beauchamp Road as well as land owned by Keith Engineering at 34-36 McPherson Street. Veolia has in principle agreements with both land owners regarding the proposed development.

The site is located mainly within the City of Botany Bay local government area, however the proposed entry at the intersection between Beauchamp Road and Perry Street is located in the Randwick Council area. The site is listed as a state significant site under the *State Environmental Planning Policy (Major Development)* 2005, as it is located within the Port Botany Site, and is zoned IN1, General Industrial.



The proposed site is approximately 2.5 hectares and includes the following lot and DP numbers:

- Lot 1 in DP435497,
- Lot A and B in DP366725, and
- Part of Lot 2 in DP1006865.

Figure 1: Proposed Site Location



Source: Spatial Information eXchange, Land & Property Information

1.2.2. Site Description

The proposed site currently comprises a number of buildings, including a large warehouse building, some smaller factory and office buildings, mostly along the western portion of the site, and some existing rail yard infrastructure along the eastern portion of the site, including several rail sidings.

Rail activities on the eastern portion of the site commenced in 1924, and prior to this the land would have been vacant. This portion of the site was owned by the State Rail Authority (and its former identity) until 1996, with it was vested to Freight Rail



Corporation. In 2002, ownership transferred to Pacific National (now part of Asciano) via an asset sale by the NSW Government.

Currently this land is occasionally used for rolling stock storage, however past rail terminal activities also included train shunting, minor wagon maintenance, container transfer between road and rail, and locomotive refuelling.

Based on historical information (anecdotal information, historical title deeds and aerial photographs), the western portion of the site is understood to have been used for rural / agricultural purposes prior to 1949, when industrial activities commenced on the site.

Aerial photographs indicate that by the 1950s, there were several large commercial / industrial buildings on the site, and the existing buildings were in place by the end of the 1970s. There have been a number of industrial owners during this time, however Keith Engineering purchased the land in 1972.

Based on the nature of the past owners, the site is understood to have been used for activities such as die casting (a process involving metal casting with molten metals), metal fabrication and potentially the manufacture and/ or storage of sealants. This portion of the site also features a small substation and an underground gas line.

1.2.3. Surrounding Land

The surrounding land is generally industrial land, which is dominated by transport operations that support Port Botany, such as rail land and container depots, as well as land associated with Orica activities.

The proposed site and surrounding land fall within the contaminated groundwater zone, which was declared a remediation area by the Environment Protection Authority in 2005 under the *Contaminated Land Management Act 1997*, due to contamination from previous activities on Orica's Botany site.

To the north of the site is more of Asciano's rail yard, followed by Orica's Botany Industrial Park site. Beyond Orica's Botany Industrial Park, on the opposite side of Denison Street is the suburb of Hillside, which is the nearest residential area, located approximately 400 metres from the site.

Adjacent to the site on McPherson Street is a construction and demolition recycling yard, which is bounded by the proposed site to the west and north. Further to the east of the site, on the opposite side of Beauchamp Road are more industrial units and warehouses, which are located in the Randwick council area. Beyond the



industrial area within Randwick Council area to the east of the site, is the another residential area within Matraville, which is located approximated 600 metres from the site.

To the south of the site, on the opposite side of McPherson Street is the Botany Bay Industrial Estate, owned by Goodman, and comprising several warehouse and office units. Beyond this estate is Botany Road, followed by the Port Botany Container Terminal.

To the west of the site is the main freight rail line into Port Botany and the continuation of McPherson Street. The land directly across the main railway line to is Orica's Southland site, which is currently undergoing remediation works. Across the main railway line and on the other side of McPherson Street is a Toll shipping container depot.

1.3. Related Putrescible Waste Facilities

The proposed Banksmeadow Transfer Terminal is linked to a number of existing and planned waste and resource recovery facilities owned and operated by Veolia. The following section provides an overview approved Veolia facilities receiving putrescible waste that are linked to the proposed Banksmeadow Transfer Terminal. A summary of these facilities and their approved capacities is provided in Table 1 below.

Table 1: Related Putrescible Waste Facilities

Facility	Approved Capacity / Consent No.
Clyde Transfer Terminal – existing rail transfer facility in Sydney	500,000 tonnes per annum DA 205-08-01
Crisps Creek Intermodal Facility – existing rail transfer point near Woodlawn	1,180,000 tonnes per annum MP_10_0012
Woodlawn Bioreactor – existing disposal facility	1,130,000 tonnes per annum MP_10_0012
Woodlawn Mechanical Biological Treatment (MBT) Facility – planned alternative waste treatment facility	280,000 tonnes per annum DA 06-0239



Figure 2: Map of proposal Banksmeadow Transfer Terminal and related putrescible waste facilities

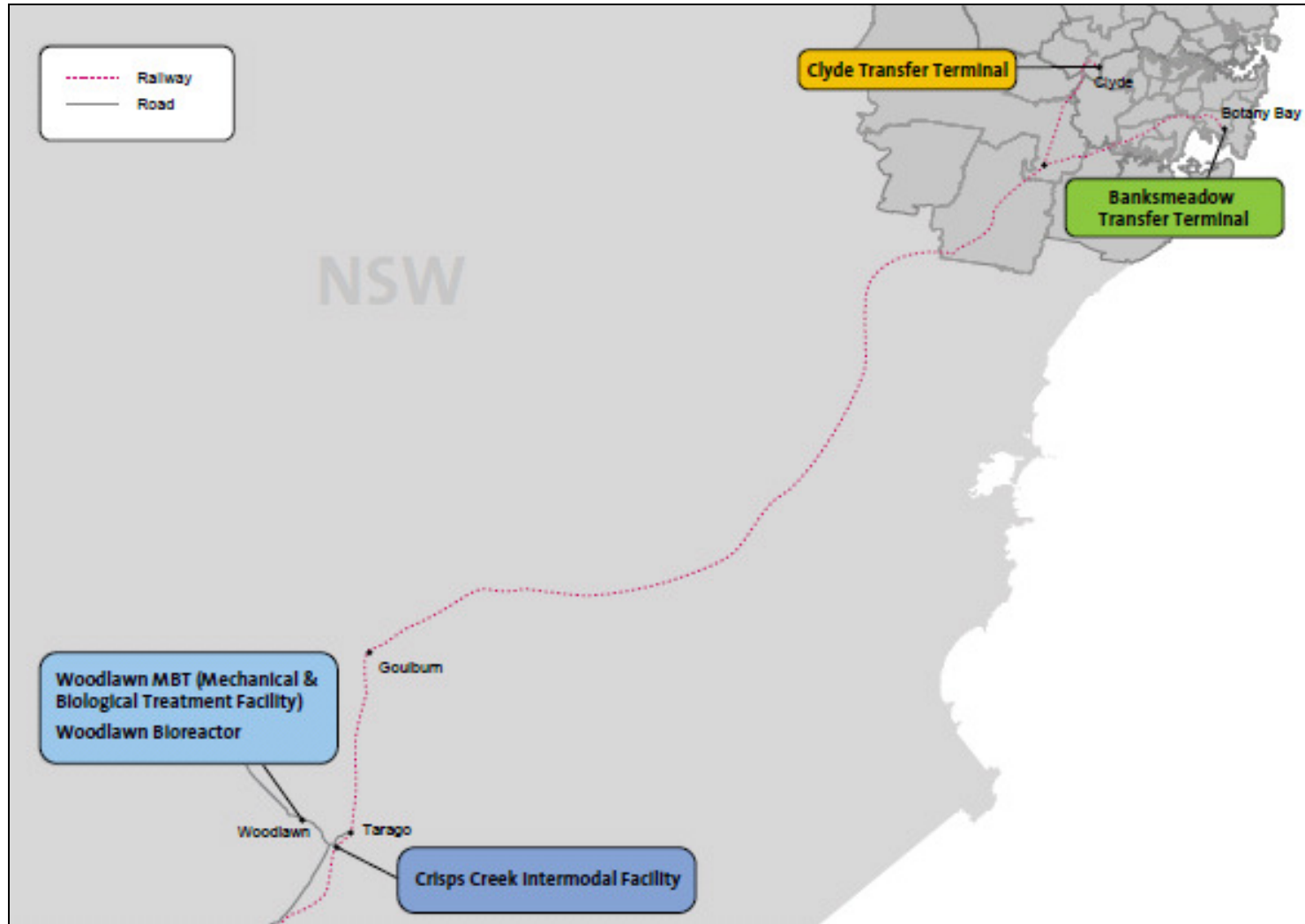




Figure 2 shows the location of all of these related putrescible waste facilities as well as the proposed Banksmeadow Transfer Terminal.

1.3.1. Clyde Transfer Terminal

This terminal commenced operations in 2004, and currently receives approximately 500,000 tonnes per annum of putrescible waste, which is the maximum annual input rate for the facility. Waste is compacted in to purpose built sealed shipping containers for transfer by rail to the Crisps Creek Intermodal Facility prior to road transfer to Woodlawn.

In 2008 the odour control system was upgraded to reflect best practice odour management at this facility. The site operates in accordance with its conditions of consent and independent odour audits conducted every 6 months have demonstrated that the facility is operating with minimal impact on surrounding properties.

The proposed Banksmeadow Transfer Terminal will enable additional volume of waste to be transferred from Sydney to Crisps Creek by rail prior to road transfer to Woodlawn for processing and treatment at the Woodlawn Bioreactor and the Woodlawn Mechanical Biological Treatment (MBT) Facility.

1.3.2. Crisps Creek Intermodal Facility

This facility currently receives approximately 500,000 tpa of containerised waste by rail from the Clyde Transfer Terminal for road transfer to the Woodlawn Bioreactor, which equates to approximately one train per day, up to six days per week. Containers remain sealed at this site and are loaded on to trucks for road transfer to Woodlawn, which is located approximately 10 kilometres from this site.

The facility operates within its conditions of consent and no formal complaints have been received regarding these operations.

In 2011, under the Woodlawn Bioreactor consent, approval was granted to receive up to 1,180,000 tonnes per annum of waste by rail from Sydney, including transfer of up to 900,000 tpa to the Woodlawn Bioreactor and up to 280,000 tpa to the Woodlawn MBT Facility.

The proposed Banksmeadow Transfer Terminal will enable additional volume to be transported by rail to this facility, prior to transfer to Woodlawn for processing at either the Woodlawn Bioreactor or the planned Woodlawn MBT Facility.



1.3.3. Woodlawn Bioreactor

This facility currently receives approximately 500,000 tonnes per annum (tpa) of containerised waste by road from the Crisps Creek Intermodal Facility after rail transport from the Clyde Transfer Terminal in Sydney. Waste received at the Woodlawn Bioreactor from Sydney is transported by rail and a small volume of regional waste is also delivered to the site by road.

Once on site, waste is unloaded into the existing mine void where optimal conditions for waste degradation are maintained to maximise the production of landfill gas. This gas is captured via an extensive network of pipes and fed into internal combustion engines that convert the gas into renewable energy for sale back into the grid.

Veolia has been working closely with the local community through the existing community liaison committee to identify and resolve issues that may impact on the local community. Through this process, operational improvements have been made on site, including re-development and installation of additional infrastructure to more effectively manage any potential environmental issues. In recent times, a reporting process has been implemented for the community to monitor the gas capture performance of the facility to ensure compliance with the existing approval.

In 2011 approval was granted to increase the maximum annual input rate at this facility to 1,130,000 tpa. The increased capacity includes 900,000 tpa of waste from Sydney by rail, 100,000 tpa of residual waste from the planned Woodlawn MBT Facility and up to 130,000 tpa of regional waste by road.

The proposed Banksmeadow Transfer Terminal will enable additional volume to be received at this facility from Sydney by rail via the Crisps Creek Intermodal Facility.

1.3.4. Woodlawn Mechanical Biological Treatment (MBT) Facility

This facility was approved in 2007 to receive up to 280,000 tonnes per annum of containerised waste from Sydney by rail, via the Crisps Creek Intermodal Facility, for treatment and processing to produce compost for mine site rehabilitation. This includes up to 240,000 tpa of mixed waste and 40,000 tpa of green waste.

Veolia has recently entered into an agreement with the Southern Sydney Region of Councils for the transfer of waste from the southern Sydney region to Woodlawn for processing at this facility.

The proposed Banksmeadow Transfer Terminal will enable waste from this region to be containerised and transferred by rail via the Crisps Creek Intermodal Facility to this facility for processing.



2. PLANNING CONSIDERATIONS

The following section provides an overview of the key legislation, planning instruments and existing approvals regarding the proposed development. A detailed assessment of all the relevant legislation would be undertaken as part of the Environmental Impact Statement.

2.1. Commonwealth Legislation

An initial assessment of the project against matters of National Environmental Significance under the *Environment Protection and Biodiversity Conservation Act 1999*, suggests that the proposed development would not have a significant impact upon these matters and therefore referral to the Commonwealth Minister for the Environment, Heritage and the Arts is not considered warranted.

2.2. New South Wales Legislation

2.2.1. Environmental Planning and Assessment Act 1979

Based on the recent changes to the *Environmental Planning and Assessment Act 1979* (EP&A Act), it is our understanding that the proposed development would now fall under the provisions of Part 4 of the EP&A Act.

The proposed development would be considered a 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:

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

The proposed development would also be considered designated development under Clause 32 (waste management facilities or works) of Schedule 3 of the *Environmental Planning and Assessment Regulation 2000*, which refers to:

- “(1) *Waste management facilities or works that store, treat, purify or dispose of waste or sort, process, recycle, recover, use or reuse material from waste and:*



(b) *that sort, consolidate or temporarily store waste at transfer stations or materials recycling facilities for transfer to another site for final disposal, permanent storage, reprocessing, recycling, use or reuse:*

(iii) *that have an intended handling capacity of more than 30,000 tonnes per year of waste such as glass, plastic, paper, wood, metal, rubber or building demolition material.”*

2.2.2. Protection of the Environment Operations Act 1997

In accordance with Schedule 1 of the *Protection of the Environment Operations Act 1997*, the proposed development would require an Environment Protection Licence based on the following scheduled activities:

- Waste processing (non-thermal treatment of general waste) – Clause 41 defines the non-thermal treatment of general waste as *“the receiving of waste (other than hazardous waste, restricted solid waste, liquid waste or special waste) from off site and its processing otherwise than by thermal treatment”*;
- Waste storage – Clause 42 defines waste storage as *“the receiving from off site and storing (including storage for transfer) of waste”*.

The relevant criteria for waste processing to be declared a schedule activity under Clause 41 is:

“involves having on site at any time more than 2,500 tonnes, or 2,500 cubic metres, whichever is the lesser, of general waste

involves processing more than 120 tonnes per day, or 30,000 tonnes per year, of general waste”

The relevant criteria for waste storage to be a declared a schedule activity under Clause 42 is:

“receiving more than 30,000 tonnes of waste per year from off-site”.

2.2.3. Contaminated Land Management Act 1997

The proposed site and surrounding land fall within the contaminated groundwater zone, which was declared a remediation area by the Environment Protection Authority (EPA) in 2005 under the *Contaminated Land Management Act 1997*, due to contamination from previous activities on Orica’s Botany site.

Based on this declaration, the groundwater beneath the site has elevated levels of various organic contaminants, including but not limited to chlorinated hydrocarbons



and semi-volatile chlorinated hydrocarbons. As a result, the site falls within the groundwater extraction exclusion area.

This remediation area is currently the subject of a Voluntary Management Proposal, which was approved by the EPA in 2010, and remediation works are being managed through extraction wells and a groundwater treatment plant located within other parts of the declared area.

2.2.4. State Environmental Planning Policy (Major Development) 2005

The site is located within the Port Botany Site, which forms part of the Three Ports Site, which is listed as a State Significant Site under Schedule 3 of the *State Environmental Planning Policy (Major Development) 2005*. The site is zoned IN1 General Industrial under this SEPP and the proposed development is consistent with the objectives of this zone, which are:

- (a) to provide a wide range of industrial and warehouse land uses*
- (b) to encourage employment opportunities,*
- (c) to minimise any adverse effect of industry on other land uses,*
- (d) to facilitate and encourage port related industries that will contribute to the growth and diversification of trade through the port,*
- (e) to enable development for the purposes of retailing or commercial offices only where it is associated with, and ancillary to, port related activities or ancillary to industrial use of the same land,*
- (f) to encourage ecologically sustainable development.*

The proposed development is permissible on this site as waste or resource management facilities and freight transport facilities are listed as permissible with development consent within this zone.

2.3. Local Planning Instruments

The relevant local planning instrument is the *Botany Local Environmental Plan 1995*, however there is a draft Botany LEP 2012, which is currently with the Department of Planning and Infrastructure for review and gazettal. Consideration will also be given to any current local planning controls that may be relevant for the proposed site, such as Development Control Plan (DCP) No. 30 – Botany / Randwick Industrial Area, DCP No. 33 – Industrial Development and DCP No. 34 – Contaminated Land.



3. PROPOSAL

3.1. Overview

Veolia is proposing to develop a waste transfer terminal and associated rail infrastructure, with the capacity to transfer up to 500,000 tonnes per annum of general solid waste (putrescible and non-putrescible) to resource recovery facilities.

Up to 400,000 tonnes per annum of putrescible waste will be containerised and loaded on to rail wagons for transportation to Woodlawn for treatment, recycling and energy recovery.

Up to 100,000 tonnes per annum of non-putrescible waste will be consolidated into semi-trailers and transferred to resource recovery facilities such as the proposed Camellia Recycling Centre for recovery of recyclables prior to re-processing.

The Banksmeadow Transfer Terminal will be open to receive waste twenty four hours a day, seven days a week. This timing of the train operations will be dependent on availability of train pathways on the main railway line.

It is proposed that waste will be delivered to the site via existing traffic signals at the intersection between Beauchamp Road and Perry Street, pending further discussions with Asciano. It is expected that the majority of waste received at the facility will be sourced from the surrounding southern Sydney region.

The proposed facility will involve the development of a new transfer building, and associated road and rail infrastructure, including:

- a dedicated access road for waste trucks entering and exiting the facility;
- incoming and outgoing weighbridges to check the waste type and weight of the waste being delivered to the facility;
- an enclosed building for the unloading and transfer of waste, with environmental controls such as dust suppression and odour management systems;
- a hardstand area for temporary storage and manoeuvring of full and empty sealed shipping containers prior to loading on to trains, and
- realignment of two existing rail sidings for the loading of containers onto trains for rail transport to Woodlawn.







Figure 3 and Figure 4 show detailed regarding the proposed layout for the site including access roads, rail yard and the concept layout for the transfer building.

The equipment to be utilised on site will include loaders and excavators within the building, compaction units for the containerisation of putrescible waste, and container handlers for transferring containers between the compactor area, hardstand and rail sidings.

The proposed facility will contribute to the local area in terms of employment and expenditure. The proposed facilities will be expected to employ approximately 30 to 40 staff and would require an investment in the order of \$20 million for the construction of the facility.

3.2. *Proposed Infrastructure*

There are currently several industrial buildings on the site as well as a number of rail sidings. The existing buildings will be demolished prior to the development of the site, and the rail sidings will be realigned to fit in with the layout of the proposed development.

A new enclosed building will be constructed on site to house the transfer activities for both putrescible and non-putrescible waste. The building will be divided into two areas to manage the two waste types separately. Each area will include dust suppression and fire deluge system, and the putrescible waste area will also incorporate an odour control system. This will ensure that operations in each area are not affected by the other during normal operating conditions.

Additional site infrastructure to be installed on site includes incoming and outgoing weighbridges, access road, carpark area, office and hardstand area.

The office and car park areas will be located adjacent to the transfer building. The weighbridges will be located along the access road, adjacent to the rail sidings and hardstand area will be located between the transfer building and the rail sidings.

3.3. *Proposed Operations*

3.3.1. *Site Access*

It is proposed that heavy vehicles will access the site via the existing traffic signals at the intersection of Beauchamp Road and Perry Street, pending further discussions with Asciano. The exception to this will be the transfer trailers collecting non-putrescible waste for transfer to resource recovery facilities, which will enter the site



via McPherson Street. Car access to the site for employees, visitors and contractors will be via McPherson Street.

Vehicles delivering waste to the facility will include commercial waste collection vehicles ranging from small tipper trucks to larger collection vehicles such as front lift trucks with payloads of approximately 10 tonnes.

All these vehicles will stop at the incoming weighbridge, where they will be directed to proceed to the appropriate area within the transfer building, based on the type of waste being delivered to the facility.

Once the waste has been unloaded within the building, trucks will return to the outgoing weighbridge prior to exiting the site via the same traffic signals.

Trucks entering the facility to be loaded with non-putrescible waste for transfer to the resource recovery facilities such as the proposed Camellia Recycling Centre will proceed directly to the loading point located adjacent to the transfer building.

3.3.2. Putrescible Waste Operations

Trucks delivering putrescible waste to the facility will be directed via the weighbridge to the northern part of the building for unloading. Waste will be checked to ensure there is no non-conforming waste prior to being pushed on to a conveyor that feeds the compaction units.

Any bulky or easily extracted recyclable material will be removed from the waste stream at this stage, and transferred to the appropriate bay or bin within the non-putrescible waste area.

The unloading area will also be able to separate loads depending on which facility at Woodlawn the waste is to be delivered. This will ensure that waste being delivered to Banksmeadow for processing at the Woodlawn Mechanical Biological Treatment (MBT) Facility is kept separate from waste being transferred to the Woodlawn Bioreactor for energy recovery.

Waste will then be fed via conveyors in to one of the two compaction units and compacted into pre-determined bale sizes for loading into purpose built shipping containers. These containers will be sealed ready for transfer to the rail area.

3.3.3. Non-Putrescible Waste Operations

Trucks delivering non-putrescible waste to the facility will be directed via the weighbridge to the southern part of the building for unloading. Waste will be checked



to ensure there is no non-conforming waste prior as well as to separate easily extracted recyclable material.

Any putrescible waste identified in this area would be transferred directly to the putrescible waste operations area for containerisation and rail haulage to Woodlawn.

Recyclable material extracted in this area would be transferred to designated bays or bins for temporary storage prior to transfer to an appropriate resource recovery facility.

Source separate material received at the facility, such as green waste or e-waste loads would also be delivered to the non-putrescible waste operations for unloading directly into the appropriate area.

The remaining non-putrescible material would be stockpiled ready for loading into semi trailers for transfer to a resource recovery facility such as the proposed Camellia Recycling Centre.

3.3.4. Rail Activities

Once containers have been sealed, they will be transferred to the rail area using a container handler, and they will remain sealed until being delivered to Woodlawn for unloading.

The rail area will consist of two rail sidings with a hardstand area between the two sidings for manoeuvring containers on and off the rail wagons. There will also be an area between the rail sidings and the transfer building for temporary storage of containers on site.

When a train arrives on site, the train will be split in two and shunted into the two rail sidings. Empty containers will be unloaded from the rail wagons and replaced with full containers until the train is fully loaded and ready for rail transportation back to Woodlawn.

It is expected that one train per day six days a week will transport the containers by rail transportation to the existing Crisps Creek Intermodal Facility. Containers will be transferred to trucks for the short road haul to Woodlawn for treatment, recycling or recovery.

Containers will be delivered to the Woodlawn Mechanical Biological Treatment (MBT) Facility for recovery of organics to produce compost for mine site rehabilitation or to the Woodlawn Bioreactor for energy recovery.



4. PROJECT JUSTIFICATION

4.1. *Policy Context*

The proposed development will be a critical piece of waste infrastructure within NSW which is consistent with government policy, utilising the freight rail network for transport and facilitating greater resource recovery from waste, by opening up access to remote waste treatment solutions to form part of Sydney's long-term waste strategy.

Veolia and the Southern Sydney Region of Councils (SSROC) have entered into a Memorandum of Understanding for the provision of an Advanced Waste Treatment service, and the proposed development forms part of this solution.

The proposed development is consistent with the *NSW Waste Avoidance and Resource Recovery Strategy 2007* (WARR Strategy) and will assist the NSW Government in meeting its resource recovery targets for municipal and commercial and industrial waste of 66% and 63% by 2014 by increasing the recovery and use of secondary materials by providing access to new resource recovery facilities.

The WARR Strategy is supported by the *Reducing Waste: Implementation Strategy 2011-2015*, which identifies new focus areas including two relating to *making it easier for households and businesses to separate and recover their waste*.

The proposed development would assist in recovering, sorting and redirecting waste materials to productive reuse by providing a transfer point within the southern Sydney region to two new resource recovery facilities that will service both households and businesses, namely the proposed Camellia Recycling Centre for recovery of recyclables from non-putrescible waste and Woodlawn for organics and energy recovery from putrescible waste.

In doing so, the proposal would divert a substantial volume of waste from landfill.

The proposed development is also consistent with the draft NSW Long Term Transport Master Plan and the draft Freight and Ports Strategy by utilising the existing rail freight network to transport waste from the southern Sydney region. This transfer of consolidated waste transport from road to rail will result in a reduction of approximately 30,000 heavy vehicle movements across Sydney per year, helping to reduce congestion on Sydney's roads, with the added benefit of greenhouse gas emissions savings of rail compared with road transport.



4.2. Need for Proposal

The proposed facility will provide choice and competition for the southern Sydney region, delivering a much needed sustainable, alternative waste management solution.

This facility will enable an increase in the recovery of resources from the municipal, and commercial and industrial waste sectors, by creating a transfer point for waste to be delivered to other treatment and recovery facilities.

This facility will be able to respond to local government and commercial demands now and into the future, resulting in improved environmental outcomes for waste generators in the region and help the NSW Government meet their resource recovery targets for municipal and commercial and industrial waste.

The development of this facility will also result in a significant reduction of heavy vehicle movements across Sydney, by transporting the putrescible waste by rail to Woodlawn.

4.3. Alternatives

Veolia undertook a comprehensive investigation of sites across the Sydney metropolitan area to find a suitable site for the proposed development. The proposed site was identified as the most suitable for a number of reasons including accessibility to the freight rail network, good road access for heavy vehicles, appropriate industrial use zoning, proximity to residential and commercial waste generation sources in the Sydney region, and lack of current alternatives in the region.

The alternative to the proposed development is to do nothing, and rely on the existing waste infrastructure to service the needs of the region into the future without having an adverse impact on the surrounding community and environment. This would mean that there continues to be no competition in the region for municipal waste, thereby limiting the resource recovery options available and making it difficult for the resource recovery targets to be met with no opportunity to increase recovery from the region.



5. CONSULTATION

Veolia is committed to engaging with the local community and other stakeholders regarding this proposed development. This will ensure all interested parties have the opportunity to understand the nature of the proposed development and can provide informed feedback.

For the purpose of the consultation process, individuals and organisations with potential interest in the proposed development have been divided into the following key stakeholder groups:

- Local community;
- Business and neighbours in the Port Botany precinct; and
- Government agencies.

To inform stakeholders of the proposal and allow for the up-front identification of issues, consultation will be undertaken at the earliest opportunity in the development process. This will provide opportunities, prior to and during public exhibition, for resolution of issues.

As part of the initial communications plan, a fact sheet and Q&A have been drafted for the proposed development and a number of communication tools have been established, including a section on Veolia's website about the Banksmeadow Transfer Terminal, a 1800 free call community information phone number and a dedicated email address.

A stakeholder engagement strategy has also been developed to help identify potential stakeholders and consider how best to engage them.

5.1. Local Community

A community consultation program will be developed as part of the overall stakeholder engagement strategy to ensure local residents and businesses are provided with clear information regarding the proposed development. This will include further information regarding potential issues that may be raised and proposed measures to address these issues.

The nearest residential area is the suburb of Hillside, which is located to the north east of the site. Other nearby residents include Matraville to the east of the site.



Veolia has commenced discussion with neighbouring properties and will continue to consult with interested local businesses, industry and community members regarding this proposal.

5.2. Government Agencies

The following government agencies have been advised of the proposal to develop a transfer terminal at Banksmeadow:

- Department of Planning and Infrastructure;
- Environment Protection Authority;
- City of Botany Bay Council; and,
- Randwick Council.

Agencies with an interest in the proposal will continue to be briefed on the project and encouraged to provide comment and feedback regarding the proposed development and to discuss the alignment of the proposed development with any long term planning strategies for the area. Further consultation with other relevant agencies will be undertaken during future stages in the planning process.



6. KEY ENVIRONMENTAL CONSIDERATIONS

A preliminary assessment has been undertaken to identify key environmental risks associated with the establishment of the proposed development. Table 2 provides a list of the key environmental aspects that are likely to relate to the proposed development, and a reference to relevant section in this background document.

Table 2: Key Environmental Aspects

Environmental Aspect	Considerations	Relevant Section
Air Quality	Dust from traffic and rail operations Odour from waste operations	Section 6.1
Noise & Vibration	Noise from traffic, waste and rail operations Vibration from rail operations	Section 6.2
Hazards & Risks	Potential fire hazards	Section 6.3
Soil & Water	Surface water and groundwater management Soil conditions and contamination	Section 6.4
Traffic & Access	Truck movements on surrounding intersections and roads	Section 6.5
Greenhouse Gas	Power and fuel usage requirements for operations	Section 6.6

All potential environmental impacts will be considered as part of the Environmental Impact Statement, including a detailed assessment of the key issues outlined above, as well as consideration of further environmental aspects such as socio-economics, visual amenity, heritage, and flora and fauna.

Potential environmental impacts associated with the proposed development will be considered and if required, managed through the implementation of appropriate mitigation and control measures, and would be covered by either the Construction Environmental Management Plan (CEMP) or Operational Environmental Management Plan (OEMP).

Further information regarding the potential environmental impacts and mitigation measures for the key environmental aspects is provided in the following sections.



6.1. Air Quality

An air quality assessment will be carried out as part of the Environmental Impact Statement to determine the impacts of the proposed facility, including dust impacts during construction, as well as dust and odour impacts during operations. Recommended mitigation measures from this assessment will be incorporated into the final design of the facility.

6.1.1. Dust

There is the potential for some dust to be generated during the construction phase and also during operation from the rail activities.

During construction, appropriate controls, such as water suppression, will need to be established to ensure the health and safety of workers on site is not adversely affected to minimise any potential airborne dust impacts on neighbouring sites.

During operations, vehicles delivering waste to the facilities will be covered or enclosed to ensure dust impacts are minimised during transport of the waste. All waste activities will be undertaken within an enclosed building and a dust suppression system will be installed within the building. All access roads and hardstand areas will be paved to minimise dust during operations. Therefore, it is not expected that the operation of the proposed facility will have significant dust impacts.

6.1.2. Odour

The receipt of putrescible waste at the proposed facility has the potential to generate odour, and therefore requires appropriate control measures to effectively manage any potential odour. The putrescible waste and non-putrescible waste areas within the building will be separated, minimising the area that is likely to require odour control to the putrescible waste area only.

The putrescible area within the building will require some form of odour control, such as a forced air extraction system, similar to that in place at Veolia's Clyde Transfer Terminal. This will be considered further as part of the EIS and incorporated into the design of this facility for the putrescible waste processing area.

Based on experience operating non-putrescible facilities, it is not expected that any odour controls will be required as part of the non-putrescible waste processing area.

It is not envisaged that the proposed facility will have any significant odour impacts on air quality, as long as appropriate measures are implemented for the putrescible waste area.



6.2. Noise & Vibration

A noise and vibration assessment will be undertaken as part of the Environmental Impact Statement to determine the potential impacts of the proposed facility, both during construction and operations.

During the construction of the proposed facility, a degree of noise will be generated. Some of the strategies that may be considered during the construction phase could include limiting the construction hours and ensuring the plant and equipment are maintained and operated in a proper and efficient manner.

Once operational, it is proposed that the facility would be open to receive waste twenty four hours a day, seven days a week. Noise would be generated by plant and equipment as well as the truck vehicle movements and rail activities. The rail activities also have the potential to generate vibration impacts.

Mitigation measures identified as part of the noise assessment will be considered as part of the design of the facility to ensure noise levels from the proposed development are within acceptable levels. If required, this may include noise attenuating building design features.

6.3. Hazards & Risks

The potential hazards and risks associated with the proposed development will be considered as part of the Environmental Impact Statement. This may include a preliminary hazard analysis to identify and hazards that require specific controls.

The site is located within the Botany / Randwick Industrial Area, which contains several land uses which are potentially hazardous in nature. NSW Government has undertaken a number of studies to ascertain the risks associated with adjoining / nearby land uses, including:

- 'Risk Assessment Study for the Botany / Randwick Industrial Complex and Port Botany' (1985);
- the 'Botany / Randwick Industrial Area Land Use Safety Study' (2001); and,
- the 'Port Botany Land Use Safety Study' (1996)

Fire is a potential hazard for waste facilities, particular for non-putrescible waste, which is very dry in nature. There layout of the building incorporates a physical separation between the two waste areas, for putrescible waste and non-putrescible



waste, which will act as a fire separation wall, should any waste catch fire on site. Each area will also have its own fire deluge system to manage any such event.

Consideration will be given to the potential risks regarding the adjoining land use including transport as well as potential hazards on site such as fire in the EIS, and where appropriate additional control measures will be included.

6.4. Soil & Water

6.4.1. Water

Water management impacts resulting from the construction and operation of the proposed development will be considered in detail as part of the Environmental Impact Statement. Water management issues to be considered will include erosion, storm water and leachate management, potential flooding, as the site may be affected by flooding, and salinity issues. Mitigation measures identified as part of the assessment process will be incorporated into the design of the facility, as required.

During the construction phase, an Erosion and Sediment Control Plan (ESCP) will be prepared and implemented to ensure any contaminated surface water is captured and managed appropriately. The ESCP will be an integral part of the CEMP for the proposed development, and have consideration for the presence of contaminated groundwater underneath the site.

During operations, the building will be designed to collect rainwater via roof guttering and building down pipes into rainwater tanks for reuse on site for activities such as dust suppression.

6.4.2. Soil

As discussed previously the site falls within the declared remediation area based on elevated levels of various organic contaminants due to previous activities on the nearby Orica Botany site. As a result, the site falls within the groundwater extraction exclusion area.

Preliminary contamination investigations on the south western portion of the site have been undertaken to assess potential contamination as a result of past industrial activities the on site. The results of these investigations suggest some remediation works may be required prior to redevelopment of the site. This includes the removal of underground storage tanks and surrounding contaminated soil, appropriate controls for the removal and management of asbestos from the buildings, and remediation of the light non-aqueous phase liquid detected in one area on the site.



It is likely that a Remedial Action Plan will need to be prepared to address the existing site contamination and consideration will also need to be given to the existing remediation measures in place to manage the groundwater contamination from the Orica site. This information will form part of the Environmental Impact Statement.

The Botany Bay Acid Sulphate Soil Risk Map identifies the site as Class 4 with respect to acid sulphate soil risk. As such, the Environmental Impact Statement will consider this risk further, and if required an Acid Sulphate Soil Management Plan will be prepared to manage any excavation works that have the potential to impact on acid sulphate soils.

6.5. Traffic & Access

A traffic assessment will be undertaken as part of the Environmental Impact Statement to determine the impacts of the proposed facility including both the construction and operational phases. This will include an assessment of the existing flows and the current road capacities surrounding the site, including consideration of potential cumulative impacts associated with the proposed development given its proximity to Port Botany.

Vehicles delivering waste to the facility will include commercial waste collection vehicles ranging from small tipper trucks to larger collection vehicles such as front lift trucks with payloads of approximately 10 tonnes. Vehicles transferring non-putrescible waste to resource recovery facilities from the site will include vehicles transporting separated waste in bulk bins as well as semi-trailers transporting mixed waste.

It is expected that heavy vehicles will enter and exit the site from Beauchamp Road via the existing traffic signals at the intersection with Perry Street, pending further discussions with Asciano. The exception to this will be the transfer trailers transferring non-putrescible waste to resource recovery facilities, which will enter the site via McPherson Street. It is estimated that approximately 450 truck movements per day will be generated through these traffic lights and approximately 15 truck movements will enter the site via McPherson Street.

Further details will be considered regarding potential peak periods and volumes from traffic movements associated within the proposed development. Based on existing operations, the peak period for waste facilities does not tender to coincide with peak commuter traffic, particularly for facilities that are open 24 hours a day.



It is expected that there will be one train per day, six days a week transporting putrescible waste from the site by rail to Woodlawn. This represents a reduction of approximately 30,000 heavy vehicle movements transporting waste across Sydney per year.

A car parking area will be located to the south of the transfer building adjacent to McPherson Street, and cars will access the site from McPherson Street.

6.6. Greenhouse Gas

An assessment of the greenhouse gas emissions for the proposed development, including potential electricity requirements for the operations and consideration where efficiencies could be incorporated into the design will be included as part of the Environmental Impact Statement.

The key considerations in terms of greenhouse gas emissions will relate to energy and fuel usage. The main sources of energy consumption are likely to include the compaction units and the odour control system, and for fuel usage, mobile equipment, trucks and locomotives.

One of the key components of this proposed development will be the utilisation of rail transportation for the transfer of putrescible waste from the site, which produces less greenhouse gas emissions than road transportation.