VEOLIA
ENVIRONMENTAL SERVICES

Supporting Document

for

CAMELLIA RECYCLING CENTRE

37 Grand Avenue, Camellia

October 2011

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1. INTRODUCTION

1.1. Overview

Veolia Environmental Services (Australia) Pty Ltd (Veolia) is proposing to develop a Materials Recycling Facility (MRF) capable of processing up to 150,000 tonnes per annum (tpa) of non putrescible waste on land owned by Veolia in Camellia.

The Camellia Recycling Centre (CRC) would be designed to produce a range of recyclable material including plastics, paper, wood, metals and aggregates. The process would be a multi stage system including screens, density and shape separation, shredders and magnets, with the potential to produce a refuse derived fuel stream for energy recovery.

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.

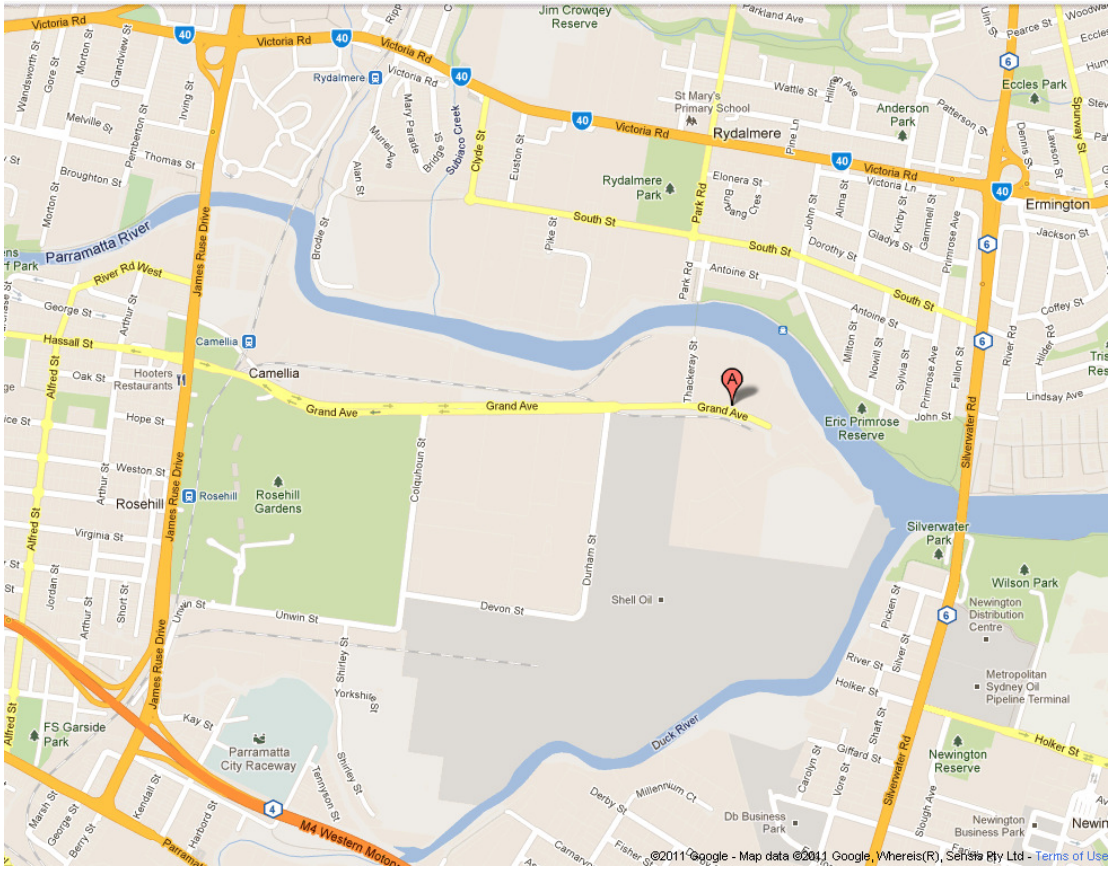
1.2. Proposed Site

1.2.1. Location

The proposed Site is owned by Veolia and is located at 37 Grand Avenue, Camellia, within the Parramatta City Council area (as shown in Figure 1). The Site falls within the Camellia Precinct of the *State Regional Environmental Plan No. 28 – Parramatta* (SREP 28), and is zoned Regional Enterprise.

The Site is identified as Lot 1 in DP 539890, and covers an area of approximately 16,880 square metres, and is approximately 80 metres wide (east-west) and 210 metres long (south-north).

Figure 1: Site Location



1.2.2. Surrounding Land

Surrounding land use is industrial and the Site is bounded by:

- North – Parramatta River;
- South – Grand Avenue;
- East – Asciano land currently unoccupied but previously operated as a shipping container yard; and,
- West – EarthPower food waste facility operating adjacent to the southern part of the Site and Concrete Recyclers operations adjacent to the northern part of the Site.

The Camellia Peninsula is known to have a wide spread problem of contamination of soil, groundwater and surface water by hexavalent chromium – Cr (VI). Consistent with this, the proposed Site was declared a remediation Site in 2005, under the *Contaminated Land Management Act 1997* (CLM Act). At the same time, the two properties to the east of the Site were declared investigation areas, and in 2009 the Asciano Site was also declared a remediation Site.

The majority of the land on the Camellia peninsula is zoned Regional Enterprise under the Camellia Precinct within SREP 28.

The suburb of Rydalmere is located across the Parramatta River to the north of the Site also falls within the SREP 28. The land in Rydalmere adjacent to the Parramatta River is zoned Technology and Enterprise.

The nearest residences are located to the north across the Parramatta River beyond the Technology and Enterprise zone in Rydalmere.

1.2.3. Site Description

The Site has been used over the past twenty years for a range of waste management operations, including liquid treatment, tanker washing, packaged waste storage and other ancillary activities such as truck parking and maintenance. The existing Site infrastructure comprises a liquid waste treatment plant, tanker wash, workshops, and other associated infrastructure.

The Site is currently approved to receive a range of waste types, including hazardous and dangerous goods, for storage and treatment. There are a number of development consents granted by Parramatta City Council that relate to the operation of waste management activities on Site. The Site also holds an Environment Protection Licence (EPL 4806) for waste storage and waste processing (non-thermal treatment) activities.

To prevent any contact with any contaminated soil or groundwater, the Site is sealed with concrete or asphalt, except for a small portion of land bordering the Parramatta River at the Northern boundary, which has been fenced off from the rest of the Site.

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.

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, Water, Heritage and the Arts is not considered warranted.

2.1. New South Wales Legislation

2.1.1. 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:

> *"(3) Development for the purpose of resource recovery or recycling facilities 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 and:*

(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."

2.1.2. 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:

- Resource recovery – Clause 34 defines the recovery of general waste as "*the receiving of waste (other than hazardous waste, restricted solid waste, liquid waste or special waste) from off site and processing, otherwise than for the recovery of energy*"; and
- 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 a resource recovery facility to be declared a schedule activity under Clause 34 is:

> *"involves processing more than 120 tonnes of waste per day or 30,000 tonnes of waste per year*
>
> *less than 50% by weight of the waste received in any year requires disposal after processing".*

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".*

2.1.3. Contaminated Land Management Act 1997

The Camellia site was declared a remediation site under Section 21 of the *Contaminated Land Management Act 1997* (CLM Act) in December 2005, based on a determination by the Environment Protection Authority (now part of the Office of Environment and Heritage) that the levels of hexavalent chromium on site represented a significant risk of harm to human health and the environment.

In 2009, a Site Specific Environmental Management Plan was prepared as part of a Voluntary Remediation Proposal, which outlines procedures to protect workers from any exposure to the contamination.

Any disturbance to the existing site cap during the construction phase of the proposed development is likely to require a new Remedial Action Plan to address the potential exposure to the contamination as a result of construction activities.

2.2. Regional and Local Environmental Planning Instruments

2.2.1. Sydney Regional Environmental Plan 28 - Parramatta

The *Sydney Regional Environmental Plan 28 – Parramatta* (SREP 28) applies to land known as the Parramatta Primary Centre, and creates eight precincts within this area. The Site is located within the Camellia Precinct, which defines land use zones and special areas. The Site predominantly lies within the "Regional Enterprise zone".

Resource recovery facilities are included in the list in Section 41C (2) (b) of SREP 28, as a development that may be carried out with development consent within this zone. SREP 28 defines a resource recovery facility as:

> *(a) a facility that collects, sorts, dismantles, salvages or temporarily stores non-putrescible materials capable of re-use and resale, or*
>
> *(b) a facility that recovers, recycles or re-uses materials or energy from waste or by-products.*

This proposal falls within the resource recovery facility definition in SREP 28, and is therefore a permissible within this land use zone.

The relevant development controls included in SREP 28 have been considered in the design of this proposal, in particular building height restrictions and setbacks along Site boundaries.

2.2.2. Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005

The Site is located within the Foreshores and Waterways Area as defined in the *Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005* (SREP 2005). The SREP 2005 is primarily concerned with the interface between the water and land.

This Site has an existing riparian zone area, including mangroves and grassland, which is separated from the remainder of the Site by a fence and provides an existing set back of the proposed development from the river. Therefore, the Site is generally consistent with the aims of the SREP 2005.

2.2.3. Local Floodplain Risk Management Policy 2006

The Parramatta City Council Local Floodplain Risk Management Policy 2006 (Flood Policy) applies the flood risk management principles of the NSW Government at a local level and establishes Council's approach to floodplain planning.

It is understood that the Site is located in a low to medium flood risk precinct under the Flood Policy. This proposal is defined as a resource recovery facility, and therefore is consider a suitable development in both a low and medium risk flood precinct. The relevant development controls included in the Flood Policy, such as minimum flood levels, would be applied to the design for this proposal.

2.2.4. Draft Parramatta Local Environmental Plan 2011

Parramatta City Council has prepared a draft Parramatta Local Environmental Plan 2011 (draft LEP) and draft Parramatta Development Control Plan 2011 (draft DCP) following several public consultation processes. These draft Plans have now been sent to the Department of Planning and Infrastructure for final endorsement and gazettal.

Under the draft LEP, the site is zoned IN3 Heavy Industrial. The development of the CRC on the Site would be consistent with the objectives of this zone, and would be considered permissible under this zone as it is not listed as a development permitted without consent, nor is it listed as a prohibited development.

2.3. Existing Approvals

There are several development consents that have been issued by Parramatta City Council under Part 4 of the *Environmental Planning and Assessment Act 1979*, which relate to various waste management activities on Site.

The facility is currently approved to receive, store, treat and transfer a range of wastes including dangerous and hazardous goods from a variety of industry, domestic and commercial sources.

The Site currently holds an Environment Protection Licence (EPL 4806), administered by the Office of Environment and Heritage under the *Protection of the Environment Operations Act 1997*, for the following premises based scheduled activities:

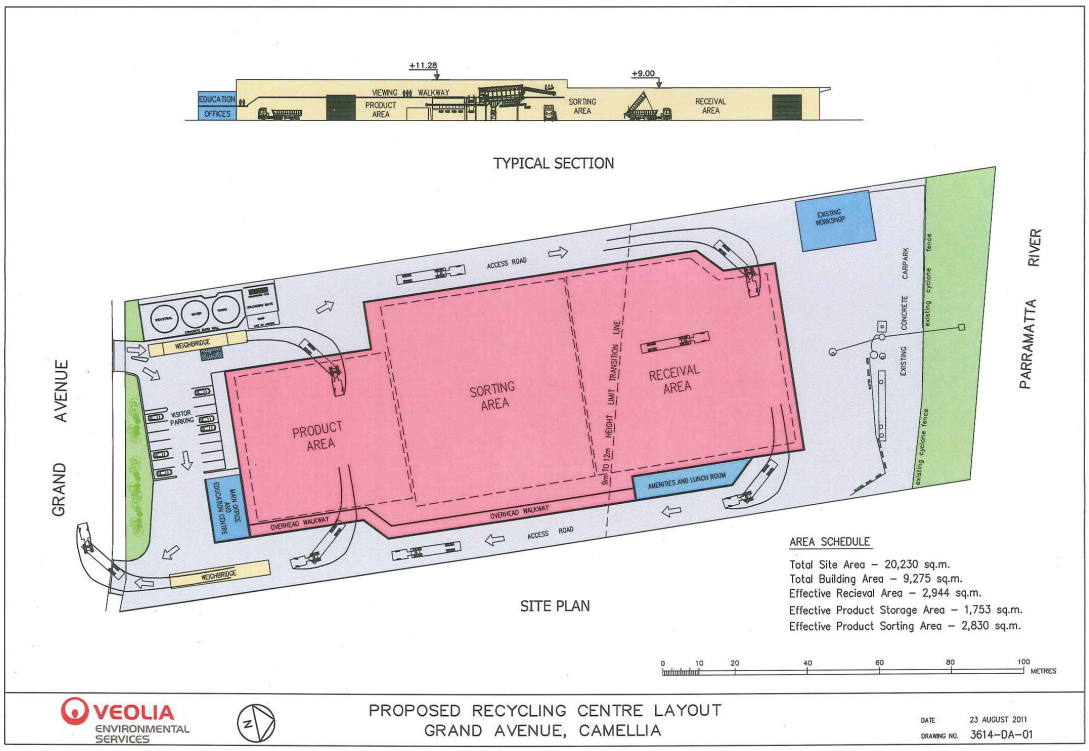
- Waste storage of hazardous waste, restricted solid waste, liquid waste, clinical or related waste or asbestos waste and,
- Waste processing (non-thermal treatment) of hazardous and other wastes.

3. PROPOSAL

3.1. Overview

Veolia is proposing to develop a Materials Recycling Facility (MRF) at Camellia, which would be capable of processing up to 150,000 tpa of non putrescible waste, primarily from the C&I waste sector, for reuse in secondary markets. Figure 2 shows a Site layout for this proposed facility.

Figure 2: Proposed Site Layout



The Camellia Recycling Centre (CRC) is expected to receive up to 80% of recoverable material, including plastics, paper, wood, ferrous and non-ferrous metals, and aggregates, suitable for recycling and subsequent use in the manufacturing of other products.

The proposed development would involve the construction of a new enclosed building to house a multi stage processing system, including combination of processing equipment designed to separate the waste into recyclables for transfer to secondary markets, with the potential to allow for a refuse derived fuel stream for energy recovery.

Residual material would be sent to a suitably licensed disposal facility, whilst recyclable materials would be sent out for sale in the commodities market.

To facilitate the new facility some of the existing infrastructure would need to be demolished. The existing infrastructure expected to remain on Site includes the weighbridge and liquid receival tanks at the front of the Site, and the car park area, maintenance workshop, and some parts of the underground stormwater system at the rear of the Site.

The majority of waste expected to be received at the facility would be from Veolia's existing non-putrescible waste Resource Recovery Centres at Port Botany and Greenacre, with the remaining waste being made up of deliveries direct to the facility from waste generators. Trucks would access the Site via Grand Avenue to the weighbridge and then be directed to the receival area within the building.

The proposed facility would contribute to the local area in terms of employment and expenditure. The proposed facilities would be expected to employ approximately 20 to 25 staff and would require an investment in the order of $20 million for the construction of the facility.

3.2. Proposed Infrastructure

The fully enclosed building that would be constructed to house the proposed facility would be separated into the three key processing areas:

1. Receival – waste unloading and initial screening for non-conforming waste
2. Sorting – mechanical separation equipment and manual sorting processes
3. Product – product baling and storage prior to collection and transport to secondary markets

The building would be designed to be consistent with development control measures and incorporate additional environmental control measures such as:

- dust suppression and extraction system within certain areas of the building;
- collection of rainwater in tanks for re-use in on-site processes; and,
- deployment of sustainable building design initiatives

The facility would also utilise some of the existing Site infrastructure, including the incoming weighbridge, a maintenance workshop, and some parts of the underground

stormwater management system. A new outgoing weighbridge would need to be constructed to weigh product and residual waste leaving the facility.

3.3. Process Description

3.3.1. Capacity

The facility would be designed to process a total of 150,000 tonnes per annum of non putrescible waste, with a process throughput capacity of 40 tonnes per hour. Based on this capacity, the facility would operate for up to 16 hours a day over two shifts, between the hours of 6am and 10pm.

The facility would directly employ approximately 20 staff, including a manager, pickers, supervisors, mechanics, and operators.

3.3.2. Technology

The proposed facility would include a fully enclosed mechanical processing system based on widely used and proven technology commonly employed for the extraction of recyclables from mixed non-putrescible waste streams. The process would involve a degree of size reduction, and the subsequent physical separation of component parts, baling of recyclable products and disposal of residual material to landfill.

The proposed technology is in use in many parts of the world and is designed to extract material that would have otherwise gone to landfill. The facility would separate suitable non putrescible waste into different recyclable products, the exact proportion of these recyclable products being dependant upon the waste characteristics and market conditions.

3.3.3. Process Flow

3.3.3.1. Receival

Only general solid waste (non putrescible) would be accepted at the facility. Material which is non-conforming will be extracted from the waste stream before crushing at the delivery point, and removed for disposal at a suitable licensed facility.

Trucks would access the facility via the existing Site weighbridge prior to entering the receival area within the building. Once inside the building the trucks would be directed to the tipping floor where waste would be checked for any non-conforming wastes which would be removed prior to processing.

Also at this stage, any wastes that are deemed unsuitable for further processing in the plant would be removed into bays and either recycled or removed to a suitable

facility. For example, items such as concrete and greenwaste together with wood would be segregated for recycling, and any large metal components would also be removed and directed to metals recycling bins.

A front end loader and excavator would then load the material into the processing area. The trucks would then leave via a new outgoing weighbridge.

3.3.3.2. Mechanical Sorting

Once the waste has been loaded into the shredder, waste would be mechanically sorted using a combination of processing equipment such as shredders, screens, density separators, magnets and optical sorters. Manual sorting would be utilised as a quality assurance stage throughout this processing area to ensure product quality.

Materials extracted during the processing stage would be sorted into separate bins to enable any further preparation, such as baling in the product area prior to transport to end users.

The processing equipment within this area would be designed to enable modifications to be made to the sorting process in the future, to adapt to changes in the characterisation of the incoming waste or to enable further segregation of materials as new secondary markets develop. For example, the facility has been designed to allow for a potential refuse derived fuel (RDF) stream for energy recovery in the future.

3.3.3.3. Products

The materials extracted from the waste stream may include mixed paper, wood, film plastics, hard plastics, ferrous and non-ferrous metals, and aggregates.

The recovered material would be stored in designated areas within the product area, or if required, baled ready for transport to end users. The balers would be able to handle paper, cardboard, and plastics together with potential future RDF as the market requires.

Material which is non-recoverable would be either reprocessed or sent to a suitably licensed disposal facility.

Products and residual waste would be removed from the Site via a new outgoing weighbridge.

4. PROJECT JUSTIFICATION

4.1. Policy Context

The proposed development is consistent with the objectives of the *Waste Avoidance and Resource Recovery Act 2001* and would contribute towards the achievement of actions and goals for the management of waste for the State as it would recover, sort and redirect certain commercial and industrial waste materials to productive reuse. In doing so, the proposal would divert a substantial volume of waste from landfill.

The development of this facility is also consistent with NSW waste strategies and measures identified in the *Waste Avoidance and Resource Recovery Strategy 2007* (WARR Strategy), and subsequent reports such as *Reducing Waste: Implementation Plan 2011-2015* (Implementation Plan).

The WARR Strategy sets targets for increasing the collection and recycling of materials, including recycling of 63% (C&I) and 65% (C&D) of waste, by 2014. The proposed development would support continual progress towards the recycling targets and reported recycling figures, with up to 80% of recoverable material expected to be received at the facility, primarily from the C&I waste sector, which has the potential to be diverted away from landfill.

The Implementation Plan proposes the five new focus areas including “Making it easier for businesses to separate and recover their waste” and “Facilitating investment in waste infrastructure”.

The Implementation Plan refers to refocusing waste funding by supporting the development of new facilities to maximise recovery of material from mixed C&I wastes as well as facilitating new waste infrastructure, through a range of initiatives including actively promoting and assisting new entrants to the waste infrastructure market.

Veolia fully supports these initiatives, and sees them as being essential to enabling further resource recovery development such as this proposal.

4.2. Need for Proposal

Veolia is committed to increasing the recovery of resources from non-putrescible waste, and in particular the Commercial and Industrial (C&I) waste stream, through this proposal for the development of a Materials Recycling Facility (MRF).

The development of the Camellia Recycling Centre (CRC) would ensure that significant quantities of recyclable material are recovered from the waste delivered to the facility and redirected for further reuse by recovering and diverting resources from the waste stream and facilitating utilisation of these materials.

Veolia operates two Resource Recovery Centres for non-putrescible waste at Port Botany and Greenacre. These centres target a range of material for recycling, separation and diversion from landfill, including paper / cardboard, plastics, steel, wood and brick / concrete. Residual waste from these centres is currently sent to the Horsley Park Waste Management Facility, where further recycling activities are undertaken, particularly for wood waste prior to disposal.

Veolia believes these operations are now close to the maximum achievable level of recovery for manual sorting processes. These recovery initiatives provide a good basis for moving into the next stage of recovery through the use of mechanical sorting processes.

Comprehensive waste composition audits have been undertaken at these facilities, which have confirmed the opportunity to separate significant volumes of recyclable material from the non putrescible waste stream. Analysis of this information has enabled Veolia to ensure the design incorporates processing technology that is best suited to the existing waste stream.

4.3. Alternatives

Veolia considered the suitability of a number of existing waste management facilities in Sydney owned and / or operated by Veolia for the development of a MRF.

Camellia was identified as a potential Site for future development based on a number of factors including its location in the geographic centre of Sydney, as well as the existing long term commitment that Veolia has to the management of contamination at this Site.

The development of the CRC would enable the life of existing landfills such as the Horsley Park Waste Management Facility to be extended through increased diversion of non putrescible waste from landfill.

5. CONSULTATION

Veolia will consult with a range of stakeholders regarding this proposed development to ensure all interested parties have the opportunity to understand the nature of the proposed development and identify any issues or concerns.

For the purpose of the consultation process, people potentially interested in the proposed development have been divided into the following key stakeholder groups:

- Local residents
- Local businesses and industry
- Government agencies

Consultation would be undertaken at the earliest opportunity in the development process to inform all potential stakeholders of the proposal and allow for the up-front identification of issues, providing opportunities throughout the approvals process for resolution of these issues. A stakeholder engagement strategy would be developed to address the matters specific to each of these interest groups.

5.1. Local Residents

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

5.2. Local Business and Industry

The Camellia Business Group was originally established in around 2005 to discuss issues common to all businesses on the peninsula, such as land contamination, traffic management, and emergency response procedures. Veolia has been a member of this group since its inception.

This group has met sporadically during this time, but particularly when there has been an issue of common interest. Veolia would seek to utilise this group as an initial point of contact for commencing discussions with other businesses on the peninsula regarding the proposed development.

The strategies developed for this group could also be used for other businesses located in the vicinity of the Site but not on the Camellia Peninsula, such as businesses across the Parramatta River in Rydalmere.

5.3. Government Agencies

The following government agencies, as a minimum, would be consulted initially regarding this proposal:

- Department of Planning and Infrastructure;
- Office of Environment and Heritage; and,
- Parramatta City Council.

These agencies would be briefed on the project and encouraged to raise issues, particularly regarding how the proposed development fits with any long term planning strategies for the area. Further consultation with other relevant agencies, as deemed appropriate, would be undertaken during future stages in the planning assessment 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 1 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 1: Key Environmental Aspects

Environmental Aspect	Considerations	Relevant Section
Air Quality	Dust impacts during construction and odour impacts during operation	6.1 – Air Quality
Noise	Noise impacts from the operations	6.2 – Noise
Water Quality	Surface water management from building and hardstand areas Potential to incorporate sustainable elements into facility design	6.3 – Water
Traffic	Truck movements for incoming waste as well as outgoing product	6.4 – Traffic
Visual Amenity	Visual aspect from across the river as well as the street Existing infrastructure and street landscaping requirements	6.5 – Visual
Energy	Power usage requirements for operations Potential to incorporate sustainable elements into facility design	6.6 – Energy
Soil	Exposure of workers to contaminated soil on Site	6.7 – Soil

Further information regarding the potential environmental impacts and mitigation measures for these key environmental aspects is provided in the following sections. A detailed assessment of the key issues, as well as consideration of further environmental aspects such as heritage, and flora and fauna, would be included in the Environmental Impact Statement.

Any potential environmental impacts associated with the proposed development would be 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). Some existing environmental and pollution controls measures at the Camellia Site would remain, with additional measures implemented as required.

6.1. Air Quality

An air quality assessment would 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 would 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. Therefore, any disturbance required to the subsurface would be undertaken in accordance with the existing control measures, provided in the Site-Specific Environmental Management Plan, which was prepared to protect workers from any potential exposure to contamination.

Dust mitigation measures such as water suppression, would be employed during the construction phase to minimise any potential airborne dust and subsequent impact on neighbouring sites.

Following the construction of the facility, the Site would again be fully sealed to prevent any contact with contaminated soil. The sealed Site would also assist in reducing the potential for dust impacts from the facility.

During operations, vehicles delivering waste to the facilities would be covered or enclosed to ensure dust impacts are minimised during transport of the waste. The processing of waste in an enclosed building would be supported by the installation of a dust suppression system. Therefore, it is not expected that the operation of the proposed facility would have significant dust impacts.

6.1.2. Odour

The proposed facility would only accept general solid waste (non putrescible), primarily from the C&I wastes sector, which is the same type of waste that is currently accepted at Veolia's Horsley Park Waste Management Facility, and the Port Botany and Greenacre Resource Recovery Centres. Based on experience at these facilities, it is not envisaged that the proposed facility will have any significant odour impacts on air quality.

Results from the air quality assessment would be used to determine any appropriate odour controls for the facility. These may include mitigation measures that may be considered as part of the proposed development would be rapid roller doors for the waste receival area.

6.2. Noise

During the construction of the proposed facility, a degree of noise would be generated. Some of the strategies that could be implemented during the construction phase may 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 24 hours, seven days a week, while the processing equipment would only operate from 6am to 10pm seven days per week to ensure the waste material can be processed effectively. Recyclable product would be collected from the Site from 6am to 6pm, seven days per week. Noise would be generated by plant and equipment as well as the truck vehicle movements.

A noise assessment would be undertaken as part of the Environmental Impact Statement to determine the impacts of the proposed facility, including processing equipment noise impacts as well as traffic noise impacts. Recommended mitigation measures from this assessment would be incorporated into the final design of the facility.

This may include features such as lining of chutes and conveyor belts within the plant for areas identified as having the potential for high noise levels, such as where large stones drop out of the process. Noise attenuating building design features may also be considered.

6.3. Water

The Site is considered to be in a low to medium flood risk precinct, according to the *Parramatta Local Floodplain Risk Management Policy 2006* (Flood Policy). The planning considerations discussed in the Flood Policy including floor level controls, building design, Site access and evacuation would be discussed further in the detailed environmental assessment process to ensure the appropriate flood controls are incorporated into the proposed development.

The Site has an existing storm water management system that consists of drainage lines that connect up to an underground storm water detention tank, and sediment

and oil water separator, prior to the discharge of storm water from the Site into the Parramatta River. This system would remain in place and be modified as required to suit any new site infrastructure.

Water management impacts resulting from the construction and operation of the proposed development would be considered further as part of the Environmental Impact Statement and would be incorporated into the design of the facility.

During the construction phase, an Erosion and Sediment Control Plan (ESCP) would be prepared and implemented to ensure any contaminated surface water is captured and managed appropriately. The ESCP would be an integral part of the CEMP for the proposed development. This plan would be prepared in accordance with the existing Site-Specific Environmental Management Plan, which was prepared to protect workers from any potential exposure to contamination.

The proposed building would be located in the centre of the Site, so the central drainage line would be disconnected from the existing storm water system. The building would 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 and in the processing activities.

6.4. Traffic

Since Veolia purchased the Site in 1993, there have been a range of different vehicles accessing the Site, from liquid tankers and packaged waste vehicles delivering waste to the facility, to tankers accessing the Site for cleaning, or vehicles returning to the Site for maintenance and overnight parking. At the peak of these operations, it is estimated that there were approximately 200 heavy vehicle movements per day.

Access to the Site from James Ruse Drive is via Grand Avenue and from Parramatta Road is via Wentworth Street, Unwin Street, Colquhoun Street and Grand Avenue. Access into the proposed facility would be via the existing weighbridge located at the main Site entrance. The existing car parking at the back of the Site, adjacent to the established riparian zone would remain and be utilised for parking during the construction and operational phases of the proposed facility, as required.

The majority of waste delivered to the proposed facility would be transported from Veolia's existing Resource Recovery Centres in Port Botany and Greenacre. This waste is consolidated at these facilities into walking floor trailers, with a capacity of

approximately 22 tonnes. The remaining waste would be delivered directly to the facility in waste collection vehicles with a smaller payload of up to 4 tonnes.

Vehicles would also be accessing the facility to collect product for delivery to secondary markets as well as to collect residual waste for disposal. The payload of these vehicles would vary depending on the product but an average of 10tonnes per load has been assumed.

The heavy vehicle movements resulting from the proposed development would be in the order of 190 vehicles delivering waste to the Site for processing and transporting product from the Site, which is comparable with the Veolia's other operations on Site.

A traffic assessment would be undertaken as part of the Environmental Impact Statement to determine the impacts of the proposed facility including both the construction and operational phases.

6.5. Visual

The construction of the proposed building would alter the visual context of the Site but only marginally, as the Site is situated in an industrial area on the Camellia Peninsula. The proposed development is compatible with the industrial context of the area.

The *Sydney Regional Environmental Plan 28 – Parramatta* provides a number of planning controls for proposed developments, including building height restrictions and landscaping requirements. These controls are designed to ensure that buildings have regard for the existing setting and views regarding the existing riparian zone and the streetscape.

A visual impact assessment would be undertaken for as part of the Environmental Impact Statement to consider the compatibility of the proposed development with the existing visual context.

6.6. Energy

The proposed development would be designed to incorporate sustainable features, including energy efficiency measures. An assessment of the potential electricity requirements for the proposed operations and consideration where efficiencies could be incorporated into the design would be included as part of the Environmental Impact Statement.

An assessment of the greenhouse gas emissions for the proposed development would also be undertaken.

6.7. Soil

The Site is contaminated with hexavalent chromium, as a result of past industrial activities conducted on the peninsula between the 1950s and 1970s. The contamination is found in the groundwater and fill material, and the Site was capped with a hardstand to contain the contamination, as approved by the Environment Protection Authority (now part of the Office of Environment and Heritage) at the time.

The potential for exposure to contamination on Site as a result of the operation of the proposed development is negligible as the Site is capped with concrete and asphalt. Any disturbance required to the subsurface during the construction phase would be undertaken in accordance with the existing control measures, provided in the Site-Specific Environmental Management Plan, which was prepared to protect workers from any potential exposure to contamination. As discussed in Section 2.1.3, it is likely that a Remedial Action Plan would need to be prepared to address any disturbance of the existing site cap during the construction phase.