Decision Report

Application for works approval

Part V Division 3 of the *Environmental Protection Act 1986*

Works approval number	W6319/2019/1
Works approval holder	Brajkovich Landfill & Recycling Pty Ltd
ACN	161 973 931
DWER file number	DER2019/000536
Premises	Barrington Industrial Estate 200 Barrington Street BIBRA LAKE WA 6163 Legal description Part of Lots 39 and 40 on Deposited Plan 3699 Certificate of Title Volume 1135 Folio 866 As defined by the coordinates in Schedule 1 of the Works Approval As defined by the Premises maps attached to the issued Works Approval
Date of report	**10 June 2020**
Decision	**Granted**

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1. Definitions

Key terms relevant to this decision report and their associated definitions are listed in **Table 1**.

Table 1: Definitions

Term	Definition
ACM	Asbestos Containing Material
Applicant	Brajkovich Landfill & Recycling Pty Ltd
Category / categories	Categories of prescribed premises as set out in Schedule 1 of the EP Regulations.
Construction and Demolition Wastes	has the meaning defined in the *Landfill Definitions*
Damp	means material is moist to the touch
Decision Report	refers to this document.
Delegated Officer	An officer delegated under section 20 of the EP Act.
Department	The department established under section 35 of the *Public Sector Management Act 1994* and designated as responsible for the administration of Part V Division 3 of the EP Act.
DWER	Department of Water and Environmental Regulation As of 1 July 2017, the Department of Environment Regulation (DER), the Office of the Environmental Protection Authority (OEPA) and the Department of Water (DoW) amalgamated to form the Department of Water and Environmental Regulation (DWER). DWER was established under section 35 of the *Public Sector Management Act 1994* and is responsible for the administration of the *Environmental Protection Act 1986* along with other legislation.
DWER Asbestos Guidelines	means the document titled 'Guidelines for managing asbestos at construction and demolition waste facilities', published by the Department of Environment and Consevation. As amended from time to time.
Emission	has the same meaning given to that term under the EP Act.
EP Act	*Environmental Protection Act 1986* (WA)
EP Regulations	*Environmental Protection Regulations 1987* (WA)
Noise Regulations	*Environmental Protection (Noise) Regulations 1997* (WA)
Prescribed premises	This has the same meaning given to that term under the EP Act.
Premises	refers to the premises to which this Decision Report applies, as

Term	Definition
	specified at the front of this Decision Report
product	refers to Inert Waste Type 1 materials which have undergone processing or screening to create a usable recycled product and which conforms with the specifications of the Works Approval.
Risk Event	As described in *Guidance Statement: Risk Assessment*
waste	has the same meaning given to that term under the EP Act.
works approval	refers to this document, which evidences the grant of the works approval by the CEO under section 54 of the EP Act, subject to the conditions.

2. Purpose and scope of assessment

Brajkovich Landfill & Recycling Pty Ltd (the Applicant) are proposing to operate a construction and demolition waste recycling facility within a portion of 200 (Lots 39 and 40) Barrington Street, Bibra Lake (the Premises). Construction and demolition (C&D) waste will primarily be sourced from the demolition of buildings, structures and pavements. The throughput of waste which the Applicant is proposing to store and sort is in excess of threshold limits for Prescribed Premises category 62 as defined under Schedule 1 of the EP Regulations. This means that the Applicant must hold a Part V EP Act works approval to authorise the Premises to become prescribed and to authorise emissions and discharges to occur during construction (sections 52, 53 and 55 of the EP Act).

3. Application details

The Application was submitted on 12 September 2019 for works which would cause the Premises to become prescribed under category 62 of the EP Regulations (Table 3).

The Delegated Officer determined that aspects of the application were lacking and additional information was required to validate the application. The Applicant was formally requested to provide additional information on 3 October 2019. The Applicant provided the additional information in full, in response to this request on 6 November 2019.

A second formal request for additional information was provided to the Applicant on 7 January 2020, with a response received on 5 February 2020.

Further clarification was determined to be required and a third formal request for information was sent to the Applicant on 9 April 2020, with a response provided on 30 April 2020.

Table 2 lists the documents submitted during the assessment process.

Table 2: Documents and information submitted during the assessment process

Document/information description	Date received
Licence and Works Approval Application Report (SERS, 12 September 2019)	12 September 2019
Licence and Works Approval Application – Amendment (SERS, 6 November 2019)	6 November 2019
Application for a Works Approval – Amendment (SERS, 5 February 2020)	5 February 2020
Application for a Works Approval – Amendment (SERS, 30 April 2020)	30 April 2020

4. Overview of Premises

The Applicant is proposing to use the rear portion of the property for prescribed activities, which will be accessible utilising a sealed driveway from Barrington Street. The Premises is located approximately 18km southwest of the Perth CBD in an area zoned as 'Industrial', as defined by the City of Cockburn Town Planning Scheme No. 3.

The Applicant intends to store and sort inert C&D waste for the purpose of reuse by other agencies. C&D wastes accepted at the Premises will include concrete, bricks, rubble, asphalt, metals (ferrous and non-ferrous), timber, wallboard, glass plastics, soil and other building material and products. Inert waste type 1 received at the Premises will be processed and

recovered as recyclable building products such as road bases and aggregates. Any material that cannot be processed in this manner will be removed from site for disposal at an appropriately licenced facility.

The proposed throughput of C&D waste recycling activities will cause the Premises to become prescribed under the EP Act for the category as described in Table 3 below.

Table 3: Classification of premises and assessed design capacity

Category	Description	Assessed production or design capacity or throughput
Category 62	Solid waste depot: premises on which waste is sorted, or sorted, pending final disposal or re-use.	150,000 tonnes per annual period

5. Description of proposed activities

5.1 Construction works

The Applicant proposes to construct or modify the infrastructure as specified in Table 4 to enable future site operations. The Applicant has also included a list of equipment which will be used during Premises operation, which is also detailed in Table 4. A general overview of site layout is provided in Figure 1 and 2. Proposed construction works are expected to take approximately 1 month to complete and will be carried out between 7am and 7pm Monday to Saturday.

Table 4: Proposed infrastructure and equipment

Infrastructure	Specification	Site reference
Wheel wash	Pre-fabricated Geowell Wash to be installed at the exit point of the Premises	As located in Figure 1.
Internal roads	Compressed, constructed using 13 mm crushed aggregate at a thickness of 300 mm	
Hardstand	Maintained in good working order	
Plastic and greenwaste storage area	Composed of a concrete hardstand surrounded by a compacted clay bund 0.5 m high	
Dust monitors	3 Dust Trak dust monitors (DRX Aerosol Monitor 8533 or similar) to be installed on each boundary of the Premises for daily dust monitoring. Dust Monitors to be located approximately mid-way along each Premises boundary.	
Sprinkler system	Constructed to ensure water sprays will cover a diameter of approximately 70 – 80m.	As located in Figures 1 and 2.
Drainage sumps	Excavated to the dimensions of 20m in length, 15m in width to a depth of 4m below ground level	
Rainwater tanks	100,000L Tank to be installed for retention of water for	

	use in dust suppression	
Noise bunds	To be constructed on the northern, eastern and southern boundaries of the Premises to a height of 4m. Comprised of earth or sea containers dependant on material availability. Where earth is used, bunds to be covered in a seeded hydromulch so as to prevent erosion and dust lift-off.	As located in Figure 1. Western bund pre-existing.
Equipment	**Specification**	**Site reference**
Screener – McCloskey R155	Utilised in Premises operational phase. In-built sprinkler system to operate whilst screening operations are occurring so as to adequately supress fugitive dust emissions	Located within the 'Processing area' as defined in Figure 1.
Loader – Komatsu 480	Utilised in Premises operational phase	
Excavator – Daewoo 225	Utilised in Premises operational phase	
Firefighting equipment	Fire extinguishers – also located within all equipment utilised on site	As located in Figures 1 and 2.
Sweeper truck	To be brought on site as required to sweep existing hardstand areas and driveway	N/A – mobile equipment.
Water cart	Located at the Premises for the suppression of fugitive dust	

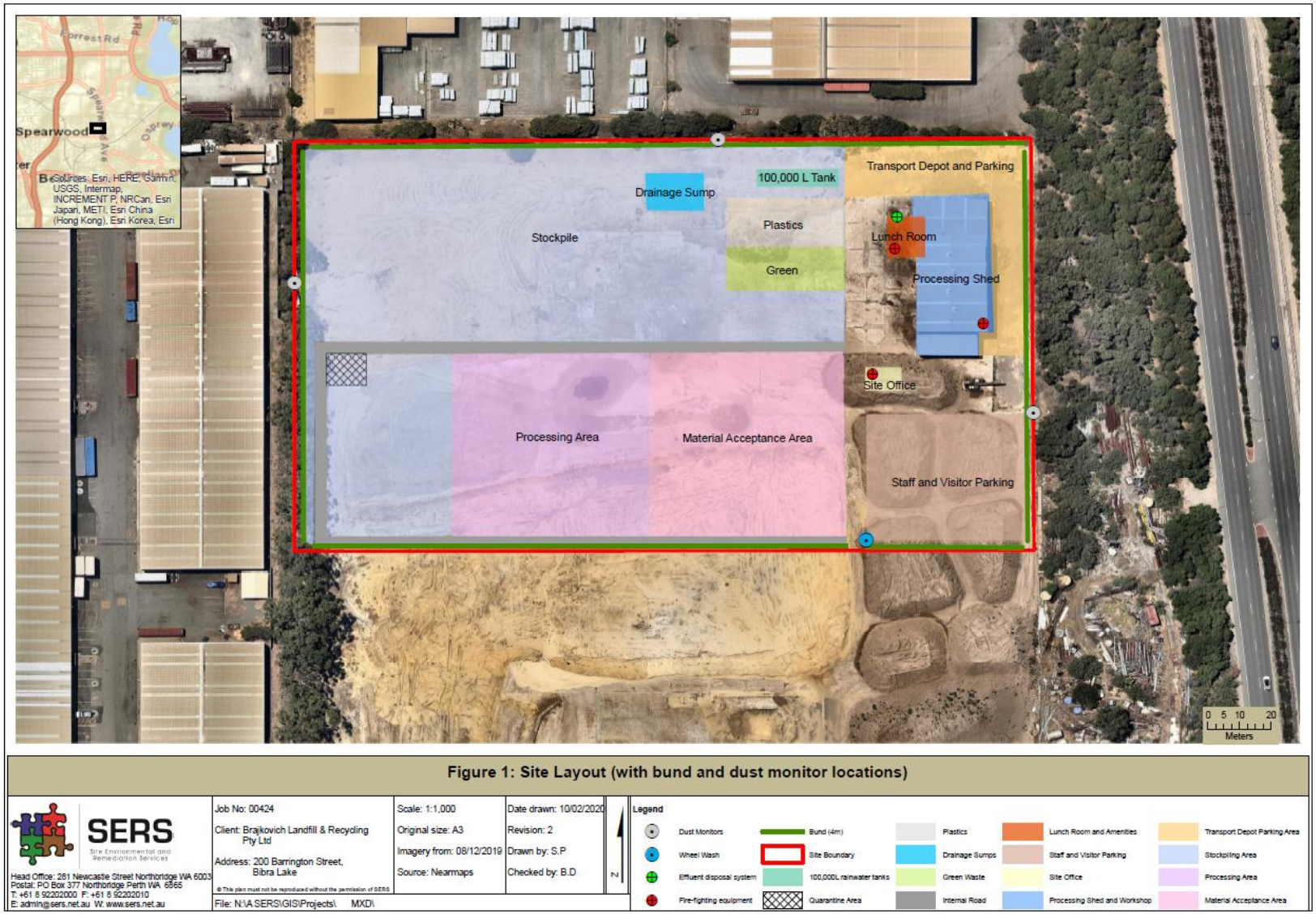

Figure 1: Site Layout Plan

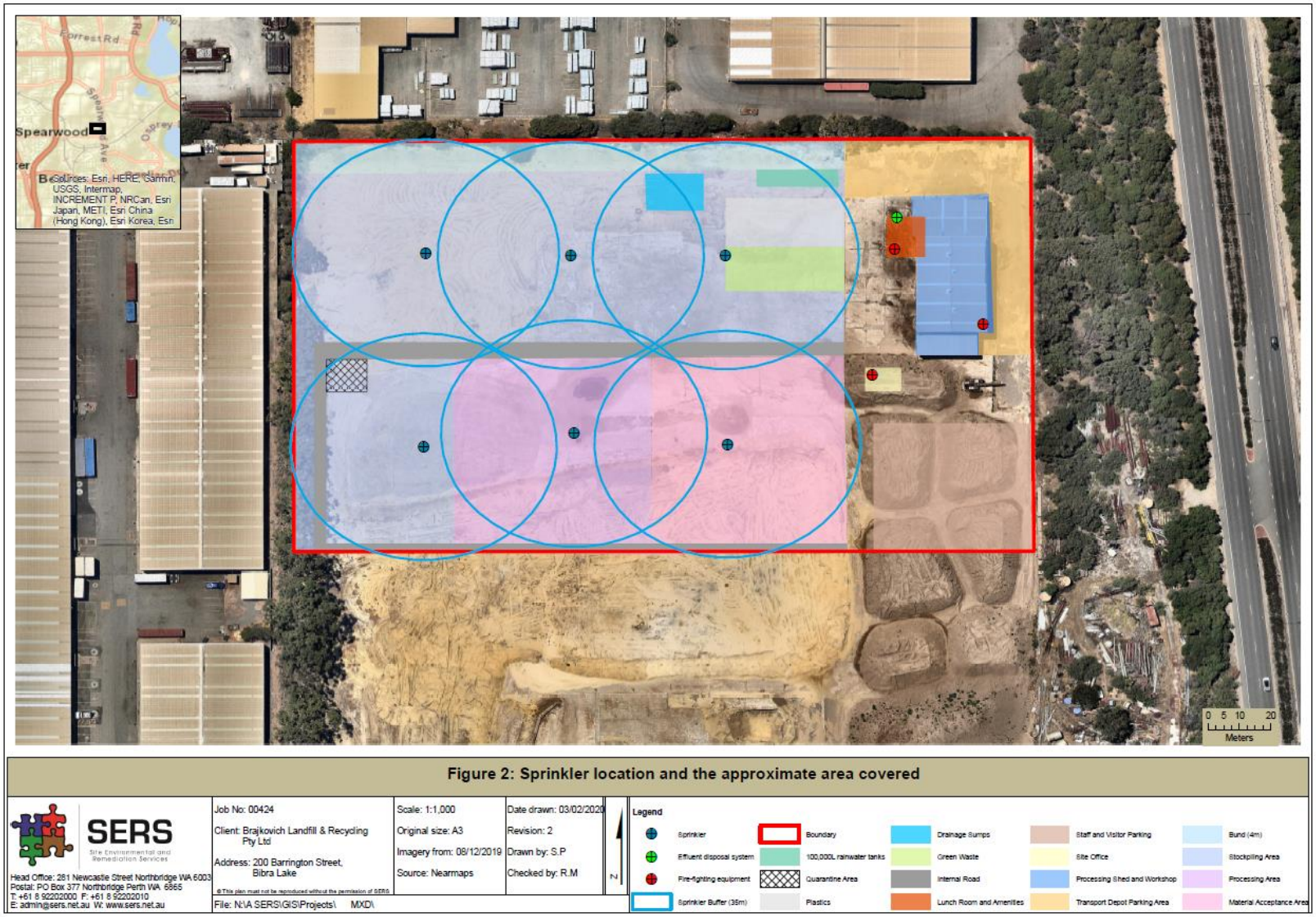

Figure 2: Location of emission controls

5.2 Waste acceptance

Vehicles arriving at the Premises will pass through a wheel wash, which is to be constructed at the entry point to the Premises. On arrival, vehicles will be inspected by site personnel and the volume of waste within vehicles calculated using vehicle dimension. For recording purposes, the volume of inert waste received (m^3) will be converted to tonnes using the conversion rate of 1.3 tonnes per m^3, in line with the guidance in the WA Waste Authority Guideline 6. The waste classification, waste quantity and time and date of waste acceptance will be recorded and records maintained at the Premises. Where non-conforming materials are identified in incoming loads the entire load is reject and removed from site.

Asbestos is not accepted at the Premises and if any asbestos is identified in an incoming load of waste, the load is immediately rejected and removed to an appropriately authorised facility for disposal. If asbestos is identified in an accepted load the suspected contaminated material will be isolated within a skip bin in the Premises quarantine area as defined in Figure 1. The load will be maintained in a damp state prior to removal off site as soon as is practicable. There will be no storage of asbestos or ACM on site. All loads will be classified on acceptance in accordance with the risk classification procedure outlined in Section 3.3 of the DWER *Guidelines for managing asbestos at construction and demolition waste facilities* (Asbestos Guidelines) and managed accordingly.

Once accepted, vehicles will be directed to the material acceptance area and waste deposited prior to further processing. Prior to unloading, wastes will be wet down to prevent the emission of fugitive dust. Any wastes identified as requiring screening will be moved to the processing area, while wastes not requiring screening will be moved to the stockpiling area of the Premises. C&D wastes which arrive at the Premises oversized will be taken off site and crushed at another facility. Plastics, timber and greenwaste will also be removed to their appropriate storage areas at this stage. Non-conforming wastes identified during sorting will be moved to the quarantine area of the Premises prior to removal off site for disposal at an appropriately authorised facility. An overview of the site layout is provided in Figure 1.

5.3 Waste processing

Screening activities will occur in the processing area of the Premises. Wastes requiring screening are inspected by the load operator for the presence of asbestos or ACM throughout the screening process. If asbestos is identified during screening machinery will immediately be stopped and the loading of material to the screener will cease. The screener and stockpile from where the ACM has originated will be further inspected and the waste will be reclassified in accordance with the Asbestos Guidelines. Where possible, manual handpicking of asbestos from stockpiles will occur, with any recovered asbestos transported to the quarantine area of the Premises prior to removal from site. The screener will also be cleaned prior to any further processing of wastes if the material is confirmed to be hazardous.

Screened product aggregate of will be collected in three separate piles for ≤10mm aggregate, ≤40mm aggregate and ≤100mm aggregate. Once processed, material will be transported to their corresponding stockpile within the stockpiling area of the Premises. Stockpiles will not exceed a maximum height of 5m.

All screened material will be tested to ensure that the content of asbestos does not exceed 0.001 w/w prior to leaving the Premises, in accordance with the Asbestos Guidelines. Throughout processing, material will be kept in at least three separate stockpile areas for unprocessed waste, products tested for ACM and products awaiting testing for ACM, to limit the possibility of cross contamination. All stockpiles on the Premises will be maintained in a damp state using a combination of a water truck and the sprinkler system installed on the site for this purpose, so as to prevent any lift-off of dust or asbestos fibres potentially contained within any stockpiled material.

Plastics, timber, greenwastes and any other non-conforming items identified during processing will be stored on the Premises to be removed from site for disposal at an appropriately licenced facility within 4 weeks of being identified.

6. Legislative context and other approvals

The Applicant has submitted an application for local government development approval as required for site construction and operation so as to be compliant with the City of Cockburn Town Planning Scheme No. 3. Details surrounding development approval are outlined in Table 5 below.

Table 5: Summary of emissions and applicant controls

Legislation	Number	Approval
Planning and Development Act 2005	DA19/0686 - 6018185	Development Approval granted by the City of Cockburn on 28 May 2020

7. Emission sources, receptors and pathways

7.1 Emissions

The potential for emissions to impact on sensitive receptors has been assessed in accordance with the Department's Risk Framework. The key emissions during premises construction which have been considered in this report are **noise and dust** from building activities including infrastructure placement and vehicle movements.

The Applicant has proposed measures to assist in controlling these emissions, where necessary. The control measures are outlined in Section 7.4 below and have been considered when undertaking the risk assessment detailed in Section 8.

Following completion and compliance with this works approval, a prescribed premises category 62 Licence under Part V of the EP Act will be required to authorise emissions associated with the operation of the premises. A risk assessment for the operational phase has been included in this Decision Report, however licence conditions will not be finalised until DWER assesses the licence application. The key emissions considered in during premises operation are **asbestos, noise, dust and potentially contaminated stormwater** from activities including vehicle movements, screening and the stockpiling of materials.

7.2 Environmental Receptors and Aspects

Risk is assessed as a combination of emission sources, the proximity and sensitivity of receptors to those emission sources and any pathways that can allow the emission to reach and potentially harm the receptor. Figure 3 and Table 6 below provides a summary of human and environmental receptors in proximity to the premises which have a potential to be impacted from site activities, and the risk assessment in Section 8 considers these receptors in the context of emissions and potential pathways.

Table 6: Distance to receptors

Human receptors	Distance from activity or prescribed premises
Industrial properties	Immediately adjacent to the north and east of Premises
Residential properties	542m south of Premises

Environmental receptors	Distance from activity / prescribed premises
Bushforever site 256 • Yangebup and Little Rush Lakes, Yangebup	1550m east of the Premises
Bushforever site 254 • South Lake	940m north east of Premises
Rights in Water and Irriation Act 1914 • Cockburn Groundwater Area • Groundwater is 35.8 metres below ground level at the Premises	Premises is mapped within proclaimed groundwater area
Threatened Ecological Communities • Banksia dominated woodlands of the Swan Coastal Plain IBRA region	Premises mapped within area
Threatened Priority Fauna • Quenda, southern brown bandicoot	80m south east of Premises
Geomorphic Wetlands – Surface water bodies • Yangebup lake • Little Rush Lake • South Lake	1760m east of the Premises (Yangebup Lake) 1570m north east of the Premises (Little Rush Lake) 1470 north east of the Premises (South Lake)

Figure 3: Distance to receptors - the Premises boundary is defined by the red line.

7.3 Pathways

7.3.1 Air

As asbestos, dust and noise are considered potential emissions, the prevailing wind speeds and direction have been considered.

The Wattelup weather station is located 6.13km south east of the Premises. The station measures wind speed and direction at a height of 3m above ground level. Using the Wattleup station's information for the 2018 – 2019 period, available through the Department of Primary Industries and Regional Development, the area has an average wind speed of 3km.h with an average maximum wind speed of 45 km/hr. Primary wind direction in the area is NE – E (9am) and SE (afternoon).

7.3.2 Stormwater and surface water runoff

As potentially contaminated stormwater is considered a potential emission, average yearly rainfall and site topography have been considered.

Using information available on the Bureau of Meteorology's website, the closest available recently active weather station for climate data is the Jandakot Aero weather station (No. 009172), located 5.57km from Bibra Lake. Based on the climate data for the Medina Research weather station (1972 – 2019), the average total annual rainfall is 824.2mm.

Topographic contours of the WA Groundwater Atlas indicate that the Premises topography is mostly flat. The surface geology consists of Tamala limestone, Aeolian calcarenite and variably lithified leached quartz sand.

These pathways have been considered in the risk assessment table in Section 8.

7.4 Applicant controls

The Applicant has proposed the following management controls as part of the application for the construction and operational phase of the Premises.

Table 7: Summary of emissions and applicant controls

Construction		
Emission (as identified above)	**Source**	**Proposed controls**
Dust	Vehicle movements, loading and unloading of building materials	Vegetation on the eastern boundary of the site is to be retained as a natural buffer Materials will be adequately wet down prior to loading and unloading All working areas to be maintained in a damp state during construction Truckloads of building materials will be securely covered with canvas material to prevent dust escaping, or will be wetted down prior to arrival 10km/h speed limit maintained throughout site Wind direction and speed monitoring analysis undertaken before works are started
Noise	Vehicle movements, operation of equipment	Site remediation works have reduced the sites

	to be utilised for construction	ground level to 6m below neighbouring properties Silencing devices to be installed on vehicles if required Construction works to occur between 7am and 7pm Monday to Saturday Where possible, construction works to be conducted during hours that least adversely affect sensitive receptors Complaints register to be maintained The Applicant has submitted an acoustic assessment performed by Herring Storer Acoustics, which comfirms that Premises activities during construction will be in compliance with the *Environmental Protection (Noise) Regulations 1997* (Noise Regulations).
Operations		
Emission (as identified above)	**Source**	**Proposed controls**
Asbestos	Airborne fibres resulting from the stockpiling or screening of asbestos or ACM, asbestos or ACM present in final product	Materials will be adequately wet down prior to loading and unloading Accepted loads will be visually inspected for asbestos, if asbestos is identified it is either manually picked from the load or the entire load is removed from site for disposal No asbestos will be stored on site Material will be wet down prior to screening Material will be visually inspected for asbestos prior to entering the screener If asbestos is identified during screening activities, screening will cease, the screener will be cleaned and the whole load will be removed for disposal Reticulation systems surrounding stockpiles to maintain material in a damp state On site water cart to maintain operational areas including stockpiles in a damp state
Dust	Vehicle movements, tipping and stockpiling of materials, lift-off from stockpiles and/or stored product, loading of materials and screening activities	Vegetation on the boundary of the site is to be retained as a natural buffer 4m high bund walls to be constructed on all Premises boundaries from the base of ground level at the Premises. Bund to be constructed of earth (dependant on quantities available) or sea containers. If earth is used, the bund will be covered with a seeded hydromulch to prevent erosion and dust lift-off. Materials will be adequately wet down prior to loading and unloading 10km/h speed limit maintained throughout site

		Wind direction and speed monitoring analysis undertaken before operations are started Internal aggregate roads will be maintained in a damp state Hardstand will be regularly swept Material will be wet down prior to screening using on site water cart In-built dust suppression on screener will be operated when screener is operated Stockpiling area is located away from the site boundary All stockpiles will be no more than 5m in height Reticulation systems surrounding stockpiles to maintain material in a damp state Installation of dust monitors on 3 boundaries – please refer to section 7.4.1 for proposed monitoring Schedule 1. On site water cart to maintain operational areas including stockpiles in a damp state All material acceptance and processing occurs on a concrete hardstand Truckloads of building materials will be securely covered with canvas material to prevent dust escaping Vehicles to pass through a wheel wash when entering and exiting the Premises
Noise	Vehicle movements, screening activities, operation of other site equipment, loading and unloading of materials, stockpiling of materials	Site remediation have reduced the sites ground level to 6 m below neighbouring properties Bunds constructed to 4 m in height on all Premises boundaries Silencing devices to be installed on vehicles if required Operations to occur between 7am and 7pm Monday to Saturday Strategic positioning of shredder to ensure activities are occurring in an area so as to minimally impact sensitive receptors Complaints register to be maintained The Applicant has submitted an acoustic assessment performed by Herring Storer Acoustics, which confirms that Premises activities during operation will be in compliance with the Noise Regulations.
Potentially contaminated stormwater	Contact of stormwater with stockpiled materials	Non-conforming wastes will be stored on a concrete hardstand prior to removal offsite Greenwaste, timber and plastic will be stored on a clay bunded concrete hardstand prior to removal offsite

		Greenwaste, timber, plastic and non-conforming wastes will be removed from site within 4 weeks of identification Stormwater will be directed to drainage sumps for retention on site from the greenwaste and plastic storage area through pipewor. Stormwater direction onsite is illustrated in Figure 4 below. Pre-existing hardstand at the Premises is graded towards the drainage sump

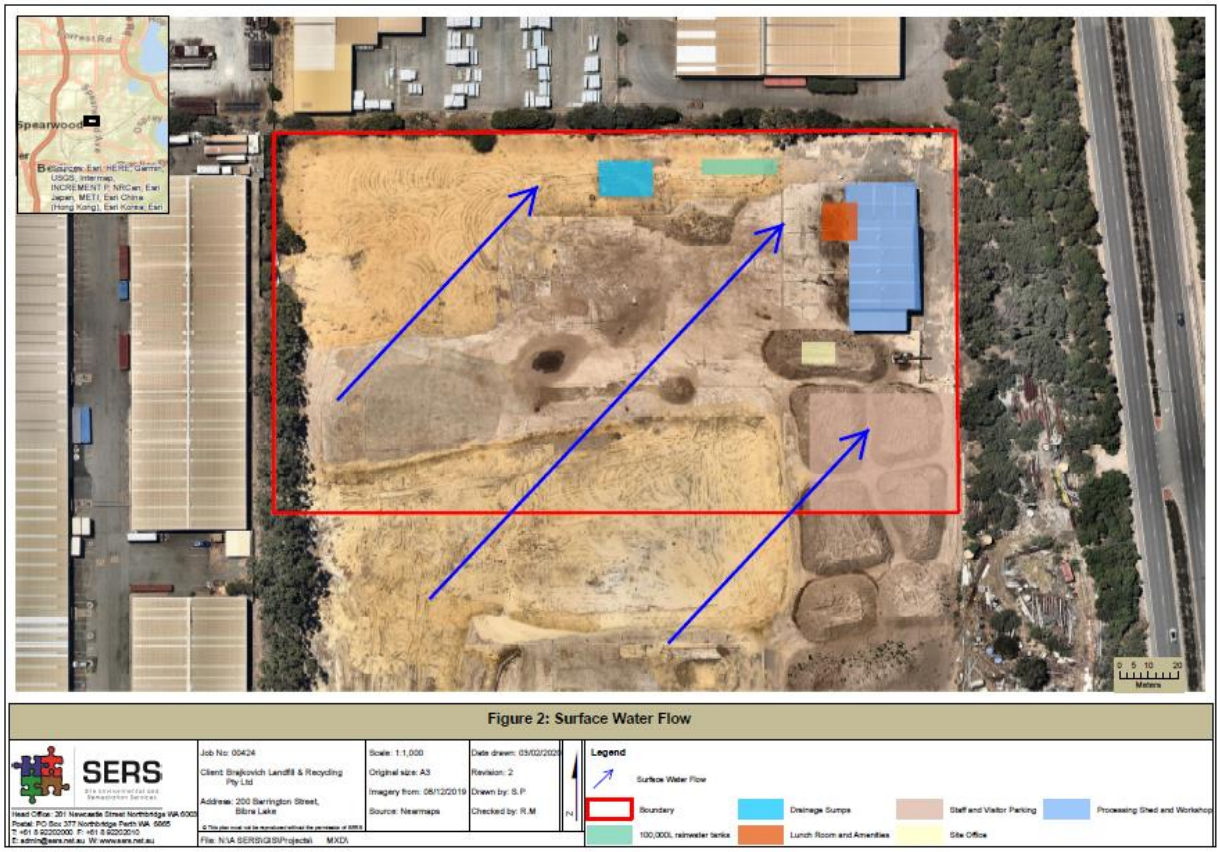

Figure 4: Stormwater direction at the Premises

7.4.1 Dust management

The Applicant has submitted a dust management plan, and commissioned Site Environmental and Remediation Services (SERS) to undertake dust emission monitoring during the Premises operation phase. Dust is proposed to be measured using DustTrak Monitors placed on three boundaries of the Premises. Dust monitors will be subject to a zero calibration on a fortnightly bases, to ensure readings are accurate and the monitors are performing effectively.

On behalf on the Applicant, SERS plan to assess dust emissions under the *National Environmental Protection (Ambient Air Quality) Measure 1994* (NEPM) criteria standard. The standards for particulate matter (derived from the NEPM) at which the applicant will take management actions are detailed in Table 8 below.

Table 8: NEPM Standards for pollutants

Pollutant	Averaging Period	Maximum Concentration	Maximum allowance Exceedances

Particles as PM_{10}	1 day	50 µg/m^3	None
	1 year	25 µg/m^3	
Particles as $PM_{2.5}$	1 day	25 µg/m^3	None
	1 year	8 µg/m^3	

SERS have advised that they will assign the trigger value used for assessment so as to correspond with the daily averaging period as shown in Table 8. When an exceedance of these trigger values is recorded, the Applicant has proposed that site operations will immediately cease and the site sprinklers will be engaged to supress emissions of fugitive dust.

Key Findings

1. The proposed monitoring is considered to be boundary monitoring only, which is fundamentally different to ambient monitoring as the dust emissions are not being measured at the receptor. Additionally, the DustTrack monitors to be utilised will only provide an indication of PM_{10} rather than definitive values. Therefore, the Delegated Officer notes that the proposed boundary monitoring cannot be used to demonstrate compliance with the NEPM, however it gives an indication of potential off-site impacts and is therefore considered appropriate as a licence control.
2. The proposal to install three monitors only, excluding a monitor on the southern boundary may result in dust emissions to the south being excluded. The Delegated Officer considers that a fourth boundary installed at the south of the Premises is necessary to appropriately monitor for dust emissions from the Premises. This monitor is to be located as shown in Figure 5 below.
3. The Delegated Officer considers that trigger values over daily and yearly averaging periods do not provide sufficient notification for action to be taken within an appropriate period of time if excessive dust emissions are occurring during day to day operations. The Delegated Officer considers that an additional trigger action value over a 5-minute period is appropriate in order to manage dust emissions during operations. An action criterion for PM_{10} of 100 µg/m^3 (5-minute average), and $PM_{2.5}$ of 50 µg/m^3 is considered appropriate and is likely to be the values conditioned on the licence.
4. The Delegated Officer notes that trigger values are used to ensure appropriate management of dust emissions, and may be subject to review during operation to ensure actions are taken at appropriate times.

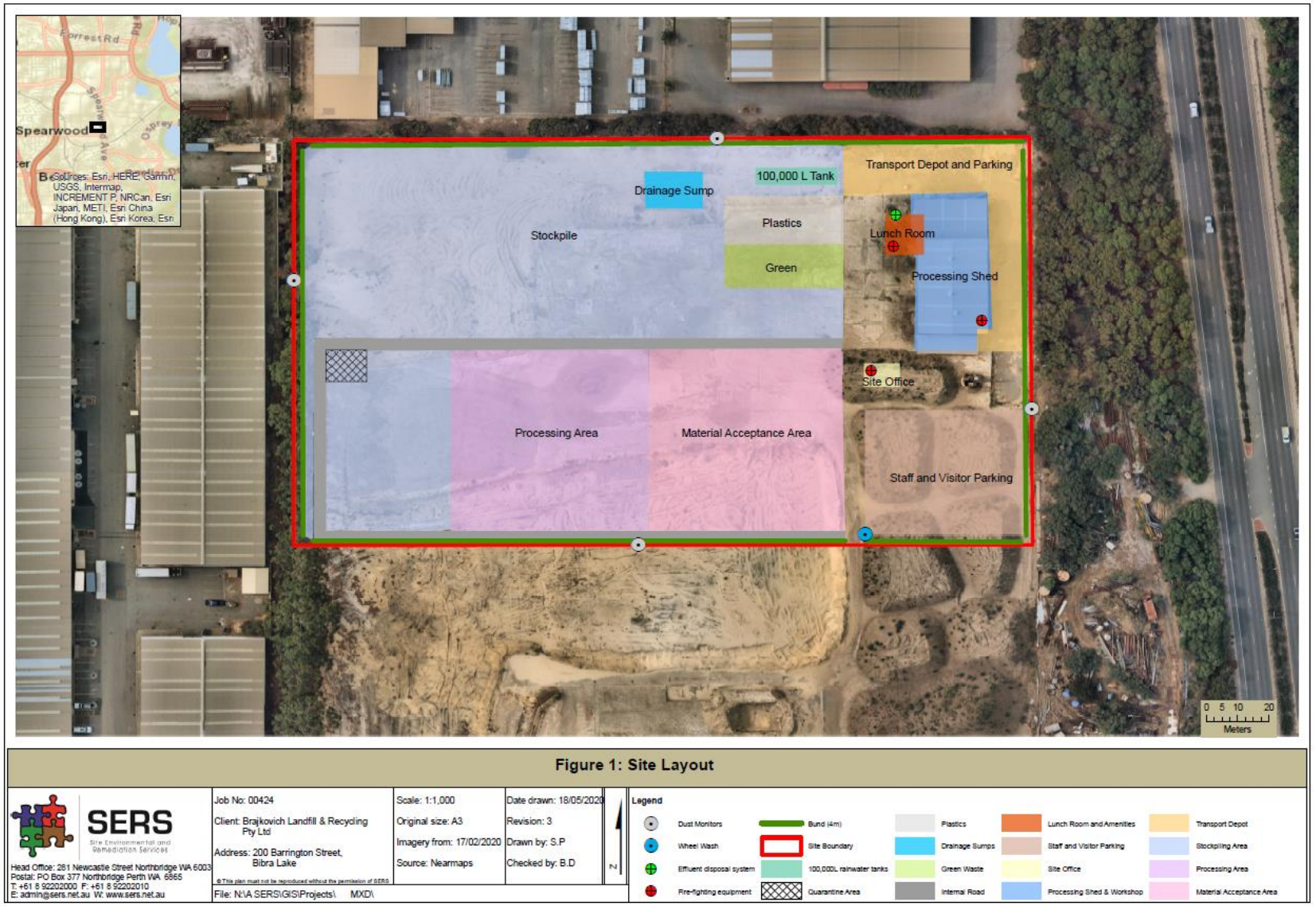

Figure 5: Premises map including location of fourth dust monitor

8. Risk assessment

The identification of the sources, pathways and receptors to determine Risk Events are set out in Tables 10 and 11 below.Risk ratings have been assessed for each key emission source and take into account potential source-pathway-receptor linkages. The mitigation measures / controls proposed by the Applicant have been considered in determining the risk rating. Emissions during construction and operation have been assessed separately to allow clear delineation of activity phases.

The conditions in the issued Works Approval, as outlined in Table 10, have been determined in accordance with the *Guidance Statement: Setting Conditions*.

8.1 Risk assessment – construction

Table 10: Identification of emissions, pathway and receptors during construction

Risk Event					Consequence rating[1]	Likelihood rating[1]	Risk[1]	Reasoning	Regulatory controls (refer to conditions of the granted instrument)
Source/Activities	**Potential emissions**	**Potential receptors and impact**	**Potential pathway**	**Applicant controls**					
Construction of Premises infrastructure and placement of equipment	**Dust:** excavation of drainage sumps, placement/installation of infrastructure and equipment, vehicle movements	**Air:** health and amenity impacts	Industrial premises adjacent to the north and east of Premises Residential properties 542m south of Premises Threatened priority fauna (Quenda) 80m south of Premises	As outlined in Section 7.4	Slight	Unlikely	Low	The Delegated Officer considered that minor construction works (equipment placement and excavation) of 1 month's duration are not expected to generate significant dust emissions. The Applicants proposed controls are expected to be sufficient to mitigate any fugitive emissions of dust.	Works Approval Condition 4: dust emission controls
	Noise: excavation of drainage sumps, placement/installation of infrastructure and equipment, vehicle movements				Minor	Unlikely	Low	The Delegated Officer does not expect that receptors will be impacted by noise emissions arising as a result of minor construction works. Noise arising from site construction will be subject to the EP Noise Regulations.	Works Approval Condition 1: construction/installation requirements Noise emissions must comply with the EP Noise Regulations

Note 1: Consequence ratings, likelihood ratings and risk descriptions are detailed in the Department's Guidance Statement: Risk Assessments (February 2017)

8.2 Risk assessment – operation

Table 11: Identification of emissions, pathway and receptors during full operation.

Risk Event					Consequence rating[1]	Likelihood rating[1]	Risk[1]	Reasoning	Regulatory controls (refer to conditions of the granted instrument)
Source/Activities	**Potential emissions**	**Potential receptors and impact**	**Potential pathway**	**Applicant controls**					
All operational areas of the Premises, acceptance, handling, screening and stockpiling of accepted wastes and products	**Asbestos:** fibres released into the air through screening, handling and stockpiling of asbestos contaminated C&D wastes	**Air:** health and amenity impacts	Industrial premises adjacent to the north and east of Premises Residential properties 542m south of Premises	As outlined in Section 7.4	Severe	Rare	High	Asbestos is not accepted to the Premises with any asbestos identified in an incoming load ensuring the load is rejected. C&D wastes accepted for screening purposes are continuously inspected for the presence of asbestos throughout processing. If any suspected asbestos is identified screening will cease, the screener will be cleaned and the whole load will be removed for disposal. The applicant will ensure that materials remain damp whilst screening is occurring. Operational areas of the Premises, including waste and product stockpiles, will also be maintain in a damp state through use of the reticulation system and will additional wet down materials where required utilising the onsite water cart. The Delegated Officer considers that the risk of activities relation to the potential release of asbestos fibres is acceptable subject to regulatory controls.	Works Approval Condition 4: dust emission controls. The Applicant will be required to install a dust monitor on the southern boundary to ensure dust emissions from the Premises are appropriately captured. Licence Conditions to be determined following a licence application and assessment. Conditions on the licence are likely to include action criteria for dust measurements of 5-minute averages.
	Dust: generated from screening activities, movement of vehicles and stockpiling of both		Industrial premises adjacent to the north and east of		Slight	Unlikely	Low	The Applicant will ensure that C&D wastes will be maintained in a damp state at all stages of operations through use of the reticulation system and will additional wet	Licence Conditions to be determined following a licence application and assessment.

	processed and unprocessed material		Premises Residential properties 542m south of Premises Threatened priority fauna (Quenda) 80m south of Premises Bushforever sites 256 and 254 – 1550m east and 940m north east of the Premises Threatened ecological communities – Premises mapped within area					down materials where required utilising the onsite water cart. These measures will also ensure that all operational areas of the Premises will be retained in a damp state. Vehicles will be restricted to 10km/h and internal access roads will be maintained in a damp state by the on-site water cart. Hardstand areas of the Premises will be regularity swept and vehicles will pass through a wheel wash where required to prevent the tracking of dust to and from the Premises. Stockpile height will be limited to 5m and the entire Premises will be surrounded by 4m high bund walls. Site remediation works reducing ground level to 6m below that of the neighbouring properties will also assist in containing fugitive dust to within the Premises boundary. The Applicant will also monitor any fugitive emissions of dust utilising the dust monitors installed on the Premises boundaries. The Delegated Officer considers that the Applicants mitigation strategies should be sufficient to control the emission of fugitive dust.	
	Noise: generated from screening equipment, movement of vehicles (including reversing alarms) and movement of wastes.				Minor	Unlikely	Low	Premises operations will be restricted to between 7am and 7pm Monday – Saturday. The Applicant will install and maintain 4m high acoustic bunds on all four Premises boundaries to assist with the mitigation of noise emissions. The Applicant has also submitted an acoustic assessment which confirms that the installation of the acoustic bunds will be effective in reducing noise emissions from the Premises. The Delegated Officer considers that the Applicants proposed controls are sufficient to ensure that Premises operations will comply with the EP Noise Regulations.	Licence Conditions to be determined following a licence application and assessment.
Rainfall events at the Premises	**Stormwater:** potential contamination with leachate from stored wastes	**Stormwater and surface water run-off:** potential to infiltrate groundwater	Industrial premises adjacent to the north and east of Premises Residential properties 542m south of Premises Cockburn groundwater area – Premises mapped within area Geomorphic wetlands – 1760m east of the		Minor	Unlikely	Low	The majority of wastes received at the Premises are inert and will not generate leachate. Any sediments carried in stormwater will be retained on the Premises in the drainage swales. Small quantities of putrescible and non-conforming wastes may generate minor leachate. These wastes are temporarily stored on a bunded concrete hardstand, with all stormwater from this area also diverted in the drainage swales. The Delegated Officer considers that stormwater contained within drainage swales will be suitable for use as dust suppression on the Premises as the impact to stormwater from prescribed activities is expected to be	Licence Conditions to be determined following a licence application and assessment.

			Premises, 1570m north east of the Premises and 1470m north east of the Premises					minimal.	

Note 1: Consequence ratings, likelihood ratings and risk descriptions are detailed in the Department's Guidance Statement: Risk Assessments (February 2017)

9. Consultation

Table 12: Summary of consultation

Method	Comments received	DWER response
Application advertised on DWER website (7 January 2020)	None received	N/A
City of Cockburn advised of proposal (13 January 2020)	The City of Cockburn has spoken to the Applicant who is happy for the Planning Approval and Works Approval to be aligned.	DWER recognises the importance of land use planning in the context of the delivery of appropriate public health and environmental outcomes and will have regard to the processes and views of other authorities in its decision making process. It is noted that Development Approval was granted to the Applicant on 28 Mat 2020.
Applicant referred draft documents (7 May 2020)	The assessed production/design capacity for the solid waste depot was originally set for 150,000 tonnes per annual period. The Applicant would like to increase this to 200,000 tonnes per annual period if possible.	The Applicant is advised to seek an increase in Premises throughput as a part of the Licence application which will need to be submitted prior to waste being accepted to the site. This will ensure the increase in throughput is considered through a risk assessment prior to approval.
	Rather than constructed the Geowell wash at the entry way to the Premises, it will be established and used for trucks leaving the site. Wheel washes are commonly installed at site exits as it effectively ensures that dirt/mud/sand/sully and other pollutants are not being tracked off site on the wheels of trucks. This therefore reduces the potential for dust to be dragged onto the main road (Barrington Street). This will be used as required.	The Delegated Officer considers that other dust controls in place at the Premises will act to suppress dust emissions arising from vehicle movements, and does not consider that the removal of the requirement for trucks to pass through the wheel wash on arrival at the Premises will significantly impact dust emissions. Reference to the construction/location of the wheel wash has been changed to reflect the exit point of the Premises in the Works Approval and Decision report.
	In the event that water is unavailable in the rainwater tanks or drainage sumps, water will be sourced from the already established groundwater bore, meter 61402499. Following discussions with DWER, the total allocation wold be 2,300kL (this is the amount already allocated to the previous owner on the	Water licences are unable to be transferred to a new licence holder once 30 days after the land sale has passed. As the current holder of the water licence has relocated, the water licence may be terminated. As no current water licence is held for the bore by the Applicant, the

	water licence) or otherwise increase this allocation through water trading.	Delegated Officer cannot consider the use of this bore within the Works Approval. The Applicant is advised to submit an application to the Department for a new water licence if they would like to utilise the bore for dust suppression on site. Any new licence obtained may be submitted for inclusion within the Licence amendment application which will need to be submitted prior to site operations commencing. It is the responsibility of the Applicant to ensure that any action or activity referred to in the Works Approval is permitted by, and is carried out in compliance with, other statutory requirements.
	The updated site map, indicating the location of the fourth dust monitor on the southern Premises boundary, is attached.	Updated site map included within the Works Approval.
	Upon closer inspection, the conversion rate for the calculation of waste throughput will be 1.2 tonnes per m^3, but rather 1.3 tonnes per m^3. This has been established from the WA Waste Authority (2010) Guideline 6.	Reference to the conversion rate has been updated to reflect the change to 1.3 m^3.
	Non-conforming wastes identified during sorting will be moved to the quarantine area of the Premises prior to removal offsite for disposal at an appropriately authorised facility.	Noted.
	The Development Approval was approved on 28 May 2020 by the City of Cockburn and has been provided to DWER.	Issue date of Development Approval reflected in the Decision report.
	Truckloads of building materials will be secured using either a tarp, or will be wetted down prior to arrival.	Noted – updated dust control reflected in the Decision report (Section 7.4, Table 7).
	Non-conforming wastes will be stored on a concrete hardstand prior to removal offsite.	Noted.
	I can confirm the pre-existing hardstand is graded towards the drainage sump, with an updated figure to illustrate the direction in which the water will flow.	Reference to the grading of the hardstand has been included within the Decision Report. Updated figure demonstrating stormwater flow also included within the Decision report.

10. Conclusion

Based on the assessment in this decision report, the Delegated Officer has determined that a works approval will be granted, subject to conditions commensurate with the determined controls and necessary for administration and reporting requirements.

Melissa Chamberlain

Digitally signed by Melissa Chamberlain
Date: 2020.06.10 11:14:01 +08'00'

Melissa Chamberlain
A/MANAGER WASTE INDUSTRIES
REGULATORY SERVICES

An officer delegated by the CEO under section 20 of the EP Act

Appendix 1: Key documents

Document title	Availability
DER, July 2015. *Guidance Statement: Regulatory principles.* Department of Environment Regulation, Perth.	accessed at www.dwer.wa.gov.au
DER, October 2015. *Guidance Statement: Setting conditions.* Department of Environment Regulation, Perth.	
DER, August 2016. *Guidance Statement: Licence duration.* Department of Environment Regulation, Perth.	
DER, February 2017. *Guidance Statement: Risk Assessments*. Department of Environment Regulation, Perth.	
DWER, June 2019. *Guideline: Decision Making*. Department of Water and Environment Regulation, Perth.	
DWER, June 2019. *Guideline: Industry Regulation Guide to Licensing.* Department of Water and Environment Regulation, Perth.	
DEC, December 2012 *Guidelines for managing asbestos at construction and demolition waste facilities.* Department of Environment and Conservation, Perth	
Waste Authority, 2012. *Guideline 6 – Converting volumes to tonnes,* Waste Authority, Perth.	accessed at www.wasteauthority.wa.gov.au