



Application for Works Approval

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

Works Approval Number	W6909/2024/1
Applicant	Brajkovich Landfill & Recycling (Muchea) Pty Ltd
ACN	663 397 555
File number	DER2023/000771
Premises	88 Caladenia Close LOWER CHITTERING WA 6084 Legal description - Lot 9001 on Deposited Plan 71254 Certificate of Title Volume 2789 Folio 776 As defined by the premises map in Schedule 1
Date of report	25 July 2024
Decision	Works approval granted

A/MANAGER WASTE INDUSTRIES REGULATORY SERVICES

an officer delegated under section 20 of the *Environmental Protection Act 1986* (WA)

Table of Contents

1. Decision summary	2
2. Scope of assessment	2
2.1 Regulatory framework	2
2.2 Application summary and overview of premises	2
2.2.1 Proposed construction activities	2
2.2.2 Proposed operational activities	3
3. Groundwater monitoring	5
4. Landfill closure and rehabilitation plan	5
5. Risk assessment	6
5.1 Source-pathways and receptors	6
5.1.1 Emissions and controls	6
5.1.2 Receptors	10
5.2 Risk ratings	12
6. Consultation	16
7. Conclusion	16
References	16
Appendix 1: Summary of applicant's comments on risk assessment and draft conditions	18
Appendix 2: Application validation summary	19
Table 1: Proposed applicant controls	6
Table 2: Sensitive human and environmental receptors and distance from prescribed activity	10
Table 3: Risk assessment of potential emissions and discharges from the premises during construction and operation	13
Table 4: Consultation	16
Figure 1: Infrastructure and operations layout	3
Figure 2: Location of landfilling phases	4

1. Decision summary

This decision report documents the assessment of potential risks to the environment and to public health from emissions and discharges during the construction and operation of the premises. As a result of this assessment, works approval W6909/2024/1 has been granted.

2. Scope of assessment

2.1 Regulatory framework

In completing the assessment documented in this decision report, the Department of Water and Environmental Regulation (the department; DWER) has considered and given due regard to its regulatory framework and relevant policy documents which are available at <https://dwer.wa.gov.au/regulatory-documents>.

2.2 Application summary and overview of premises

On 28 November 2023, the applicant submitted an application for a works approval to the department under section 54 of the *Environmental Protection Act 1986* (EP Act).

The application is to undertake works relating to the use of clay extraction pits on the premises for landfilling of inert waste materials. The premises was previously used for clay extraction from 1983 to 2020, leaving behind excavated cavities on the site. The premises is approximately 4 km south-west of the locality of Lower Chittering. The land immediately surrounding the site is bare, apart from the adjacent Muchea Landfill and Recycling Centre to the North. The Muchea Livestock Centre is approximately 500 m south-west of the proposed landfill, with the closest residence being approximately 620 m to the north-east.

2.2.1 Proposed construction activities

No construction activities for the landfill cells have been proposed. Existing pits where sand has historically been removed are proposed to be filled to replace the space with inert materials. The applicant has identified the soil across the site to be a Chromosol, defined as *"Broad valleys and undulating interfluvial areas with some discontinuous breakaways and occasional mesas; lateritic materials mantle the area: chief soils are sandy acidic yellow mottled soils, (Dy5.81) containing much ironstone gravel in the A horizons, and (Dy5.84), both forming a complex pattern with each other and with lateritic sandy gravels (KS-Uc2.12). Associated are leached sands (Uc2.21) underlain by lateritic gravels and mottled clays that occur at a progressively greater depth down a slope."* The base of the fill area is expected to sit greater than two metres above the water table and have in-situ clay material which is proposed to act as a natural low-permeable "liner".

A surface water management system has been proposed to be constructed to manage storm water runoff at the site. The system will include two sumps lined with 300 mm of compacted clay, achieving a permeability of 1×10^{-9} m/s. Sump 1 will be located adjacent to the northern boundary of the site to collect water from area 1. Sump 2 will act as a temporary sump which is proposed to be relocated as required within the south-east portion of the site with landfilling phases and based on clay extraction activities. Open stormwater channels will be constructed to direct stormwater to the sumps. The channels will be trapezoidal in shape and filled with aggregate. Channel gradients will be restricted to 1:3 to prevent scouring. Water collected in the sumps will be used for firefighting and dust suppression purposes. Perimeter bunds will be constructed from compacted clay with 300 mm thick layers on the inward to prevent runoff

from the site and assist in directing stormwater to the surface water management system. The layout of proposed infrastructure and operations is shown in Figure 1.

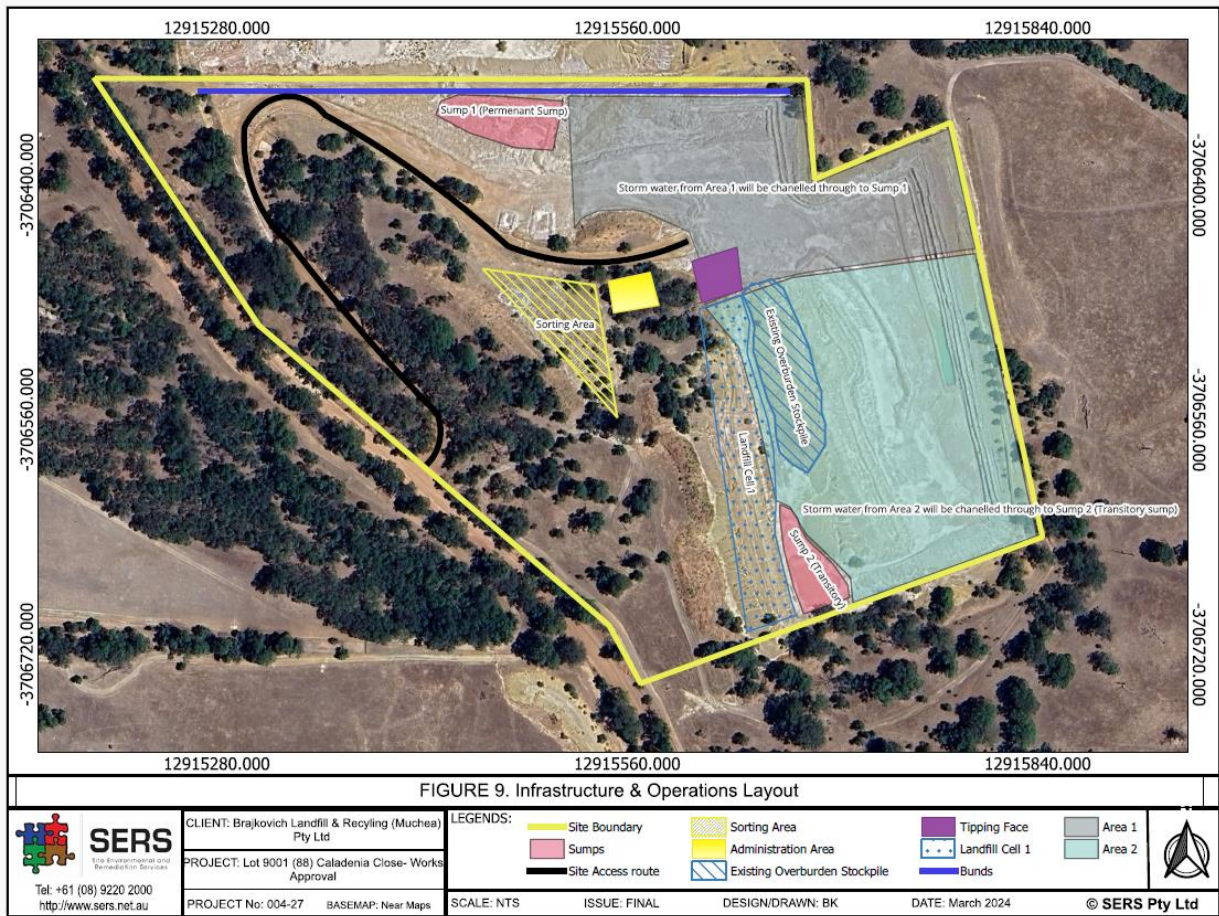


Figure 1: Infrastructure and operations layout

There is currently limited information available regarding the groundwater beneath the site. The site is at the top of the Darling Scarp over a fractured rock aquifer. Groundwater is likely to be present in weathered bedrock and fractures within fresh rock. Groundwater held within the weathered zone will flow in the direction of topography, with groundwater flow being generally to the west. The nearest minimum groundwater contour to the site is 60 m AHD and runs along the western boundary of the site. Statewide Topographical Contours across the site range from 130 m AHD to 150 m AHD which indicates that there is likely to be a significant depth to groundwater. Groundwater monitoring bores are proposed to be installed around the perimeter of the site for the purposes of conducting groundwater investigations to establish depth to groundwater, hydraulic gradient, and groundwater quality. Bores will be installed by a licensed groundwater bore driller, with a Quality Construction Report provided to the department on completion.

2.2.2 Proposed operational activities

The applicant has advised that landfilling will be undertaken in four phases as shown in Figure 2. Landfilling for Phase 1 is predicted to occur over approximately five years to fill the cell which will have a capacity of approximately 12,000 m². The Phase 1 cell will have a base level at approximately 140 m AHD, with a finished level predicted to reach 150 m AHD.

The Phase 2 cell will have a capacity of approximately 6,000 m², with a base level of 144 m AHD and completion level of 154 m AHD.

The Phase 3 cell will have a capacity of approximately 8,000 m², with a base level of 146 m

AHD and completion level of 156 m AHD.

Lastly, the Phase 4 cell will have a capacity of approximately 10,000 m², with a base level of 136 m AHD and finished level of 146 m AHD.

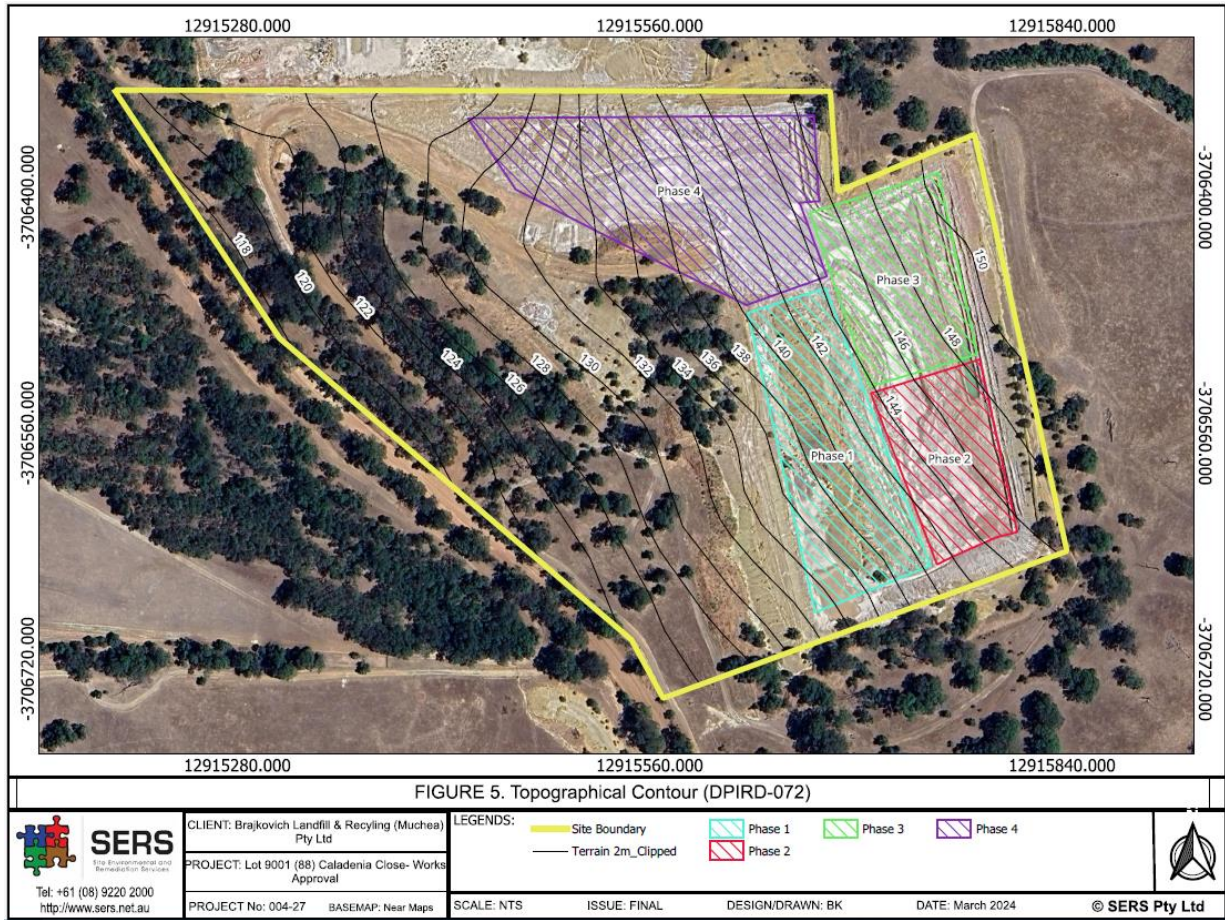


Figure 2: Location of landfilling phases

Phases 2, 3, and 4 are predicted to subsequently take a further five years each to complete. Therefore, time-limited operation of these cells will not be considered in this works approval. Time-limited operations will be assessed for Phase 1 landfilling activities only.

Landfilling operations are proposed to occur Monday to Friday from 7.00am to 7.00pm and on Saturday from 7.00am to 3.00pm.

Only Inert Waste Type 1 will be accepted for landfilling at the premises. This will mainly be construction and demolition (C&D) waste consisting of broken bricks, concrete, tiles, ceramics, glass, asphalt, and virgin extracted soil or clay. All received waste will be sorted and salvageable materials will be transported off-site for re-use. Material for landfilling will be thoroughly inspected during tipping. Any non-conforming waste identified will be placed in skip bins in a quarantined area prior to being transferred to an appropriate landfill facility for disposal.

Clean fill and crushed aggregate will be brought to the premises for compaction and to provide structural integrity to the landfill. The materials will be placed in the landfill, spread, and compacted with a compactor to an even density (0.95-1.5 t/m³). Virgin excavated sand will be used as cover material and applied periodically to assist with stability of the landfill. A 300 mm cover of sand shall be placed over any part of the site which is inactive for a timeframe of greater than 90 days.

The premises relates to the category and assessed design capacity under Schedule 1 of the *Environmental Protection Regulations 1987* (EP Regulations) which are defined in works

approval W6909/2024/1. The infrastructure and equipment relating to the premises category and any associated activities which the department has considered in line with *Guideline: Risk Assessments* (DWER 2020) are outlined in works approval W6909/2024/1.

3. Groundwater monitoring

Groundwater monitoring is proposed to be conducted prior to any filling of the landfill cells and then biannually thereafter. An unnamed surface water body south of the site will also be monitored at the same time as groundwater monitoring is conducted. Groundwater and surface testing for the following is proposed:

- Standing water level m(AHD)
- pH
- Electrical conductivity
- Aluminium, Arsenic, Cadmium and Chromium
- Copper, Iron, Mercury, Lead
- Manganese, Nickel, Zinc, Potassium, Selenium, Chloride, Sulphate
- Total acidity, Total alkalinity, Total aluminium, Total iron
- Total nitrogen, Total phosphorus
- Total Dissolved Solids (TDS)
- Organochlorine pesticides BTEX (benzene, toluene, ethylbenzene, xylene)
- Polycyclic aromatic hydrocarbons (PAHs)

Post-closure of the landfill, groundwater and surface water is proposed to be monitored biannually for a further two years.

4. Landfill closure and rehabilitation plan

A Landfill Closure and Rehabilitation Plan (LCRP), dated 7 February 2023, has been prepared by Site Environmental & Remediation Services Pty Ltd (SERS) for the premises.

The objectives of the LCRP are as follows:

- To contain buried waste material
- To restore sufficient material to emulate natural pre-excavation hill contours
- Install capping to minimise infiltration of rainwater, reducing leachate generation
- Facilitate the construction of long-term drainage systems requiring little to no future maintenance.
- Replace top-soil suitable for supporting vegetative growth
- Re-planting capping to a mixture of pasture and some vegetation endemic to the area.
- Provide a suitable platform for the re-use of the site as pasture.
- Comply with licence conditions to implement site rehabilitation and maintenance measures.

The LCRP states that the site will be actively rehabilitated on completion of each cell. Capping will consist of the following layers:

- Seal-bearing surface: gradient <5% towards defined drainage point

- Sealing layer of clay: >500 mm permeability 10^{-8} m/s
- Infiltration drainage layer: 300 mm of permeability $>10^{-5}$ m/s
- Topsoil layer: >100 mm (to support native vegetation)

It is anticipated that the capped landfill will settle by up to 30% over a five-year period.

5. Risk assessment

The department assesses the risks of emissions from prescribed premises and identifies the potential source, pathway and impact to receptors in accordance with the *Guideline: Risk Assessments* (DWER 2020).

To establish a risk event there must be an emission, a receptor which may be exposed to that emission through an identified actual or likely pathway, and a potential adverse effect to the receptor from exposure to that emission.

5.1 Source-pathways and receptors

5.1.1 Emissions and controls

The key emissions and associated actual or likely pathway during premises construction and operation which have been considered in this decision report are detailed in Table 1 below. Table 1 also details the control measures the applicant has proposed to assist in controlling these emissions, where necessary.

Table 1: Proposed applicant controls

Emission	Sources	Potential pathways	Proposed controls
Construction			
Dust	Earthworks for surface water management system and vehicle movements	Air/windborne pathway	<ul style="list-style-type: none"> • Vehicle speeds will be limited to less than 10km/hr. • Frequent passes by the water cart on all roads in use by heavy vehicles and machinery. • An integrated response to complaints and installation of boundary monitors on the site perimeter if required. • Additional sprinkler use throughout dry and windy conditions
Noise			<ul style="list-style-type: none"> • Careful selection of machinery will be done to minimise the level of emitting noise. • Bunds will be constructed as required.
Operation			
Dust	Vehicle movements, tipping of waste and lift-off from landfill and stockpiles	Air/windborne pathway	<ul style="list-style-type: none"> • Runoff from the site shall be retained in sumps/ponds for irrigation for dust management. • Water will be carted onsite in the drier months if there is insufficient water

Emission	Sources	Potential pathways	Proposed controls
			<p>available in ponds.</p> <ul style="list-style-type: none"> • Vehicle speeds will be limited to less than 10km/hr. • Frequent passes by a 12,000 L capacity water cart on all roads in use by heavy vehicles and machinery. • At the end of each working day, the cart will clean haul roads to prevent dust generation outside operational hours. • Supervision of tipping, loading, and compaction. • Wetting down of waste loads during tipping. • Reducing tipping heights. • Compacting completed areas. • Ensuring vehicles are well maintained to control emissions. • An integrated response to complaints and installation of boundary monitors on the site perimeter if required. • Sprinklers will be used in addition to the water cart to wet down stockpiles and will continue out of hours to prevent dust emissions when the premises is not in operation. • Hydro-mulch covers shall be maintained as necessary to prevent windblown dust from stockpiles and bunds/screens. • Additional watering will occur during dry or windy conditions. • Real-time monitoring of PM₁₀ will be implemented if dust is observed crossing site boundaries, with notification of exceedance to occur via an email alert and text messages to on-site staff should the level exceed 450 µg/m over any 15-minute period. • Application of biodegradable liquid copolymer is to be used for watering down designated haul roads. • The watering cart also acts as a pumper truck and has a fire house application fitted which will be utilised for additional dust control. • Machinery and equipment will be relocated at wind speeds above 25 knots to provide the largest possible on-site

Emission	Sources	Potential pathways	Proposed controls
			<p>area for any dust generation to settle out prior to reaching site boundaries.</p> <ul style="list-style-type: none"> Activities shall cease at wind speeds above 35 knots.
Noise	<p>Receival of waste, stockpiling, and removal and burial of inert waste stockpiles, vehicle movements</p>		<ul style="list-style-type: none"> Careful selection of machinery will be done to minimise the level of emitting noise. Bunds will be constructed as required. The area for Phase 1 of the landfill is located between 700 and 800 metres from the nearest four residences. Reversing beepers will be de-activated during more sensitive times of the day. A one-way traffic system will be used to prevent the need for reversing beepers. Mufflers will be used on machinery where possible. Vehicle speeds, use of airbrakes and excessive reversing will be restricted. Operating hours are restricted to Monday to Friday 7.00am to 7.00pm and Saturday 7.00am to 3.00pm. A groundwater licence will be sought to provide additional water to the site.
Asbestos fibres	<p>Unintentional receival of ACM in C&D waste</p>		<ul style="list-style-type: none"> Asbestos will not be accepted. Any asbestos identified on site will be handled in accordance with the <i>Health (Asbestos) Regulations 1992</i> and removed to an appropriate waste facility.
Contaminated stormwater	<p>Receival of waste, stockpiling, and removal and burial of inert waste stockpiles</p> <p>Temporary storage of non-conforming and residual wastes</p>	Overland runoff	<ul style="list-style-type: none"> Two sumps will manage stormwater from the clay extraction area during the wet season (Sump 1 and Sump 2). Sump 1 will be located to the northern boundary to collect water from area 1. Sump 2 will be a temporary sump and will be relocated within the south-eastern area as dictated by clay extraction activities. The surface water management system will prevent on-site water entering the road reserve, surrounding properties or stormwater drains. Slope of the angle of the capping layer will be enhanced, doming will be utilised and drainage channels will be installed Erosion and sedimentation will be

Emission	Sources	Potential pathways	Proposed controls
			<p>prevented using intermediate capping on flanks of the landfill, draining channels and contour drains.</p> <ul style="list-style-type: none"> • Bunds will be utilised to inhibit surface water flows and maintained to ensure that they are free of erosion. • Sedimentation will be controlled by ensuring clay particles entrained in surface runoff are diverted to holding ponds. • Due to the nature of materials being landfilled at the site, the likelihood of rainwater infiltrating through the waste containing contaminants is predicted to be negligible. • Inspection of batters and capacity of holding ponds during heavy storm events. • Drainage channels shall be trapezoidal open channels filled with drainage aggregate or piped drains of 300-500 mm diameter. Channels shall pass through restored areas and have gradients restricted to between 1:1.5 and 1:5 to prevent scouring. • Non-conforming waste will be stored in skip-bins
Smoke	Fire in non-conforming or residual waste stockpiles	Air/Windborne pathway	<ul style="list-style-type: none"> • Water available onsite for dust suppression will also be available for fire-control. • Water cart will be fitted with a firehose application. • A 1.8 m wire mesh fence will be constructed around the site perimeter to prevent unauthorised entry. • All machinery is to have a fire extinguisher installed either in the cab or within reach of the cab. • Fire extinguishers to be available at the gatehouse and wherever fuel is stored. • The works approval holder will be applying for a licence to extract groundwater to use for fire-fighting purposes.
Fire-fighting wash water		Overland runoff and seepage to groundwater	<ul style="list-style-type: none"> • Contained within the stormwater management system. • Water will be carted onsite for dust suppression if stormwater in ponds

Emission	Sources	Potential pathways	Proposed controls
			becomes contaminated
Leachate	Landfilling of inert materials Temporary storage of non-conforming and residual wastes	Seepage to soil and groundwater	<ul style="list-style-type: none"> • A detailed site-specific Sampling and Analysis Plan shall be submitted to DWER for review prior to commencement of landfilling. • Due to inert nature of materials proposed for landfilling, leachate is not expected to be an issue. • No inert material shall be placed within 2 m of groundwater. • Four perimeter bores will be installed for ongoing groundwater investigations to enable the assessment of an appropriate groundwater monitoring regime. • Monitoring of groundwater will commence prior to filling and occur 6 monthly thereafter. Longitudinal quality comparisons will occur between samples taken in the same year. • The water body located within 150 m south of the site will be tested at the same time as groundwater. • All material will be inspected upon tipping. Unacceptable material will be quarantined in skip bins for removal off-site. • Details of the load shall be noted and the supplier notified that the load shall be re-directed to an appropriate licensed disposal facility. • Non-conforming waste will be stored in skip bins.

5.1.2 Receptors

In accordance with the *Guideline: Risk Assessment* (DWER 2020), the Delegated Officer has excluded the applicant’s employees, visitors, and contractors from its assessment. Protection of these parties often involves different exposure risks and prevention strategies and is provided for under other state legislation.

Table 2 below provides a summary of potential human and environmental receptors that may be impacted as a result of activities upon or emission and discharges from the prescribed premises (*Guideline: Environmental Siting* (DWER 2020)).

Table 2: Sensitive human and environmental receptors and distance from prescribed activity

Human receptors	Distance from activity / prescribed premises
Residential Premises	Appx. 620 m north-east of proposed landfill

	Appx. 720 m east of proposed landfill
	Appx. 840 m south-east of proposed landfill
	Appx. 720 m south of proposed landfill
	Appx 1,500 m north north-west of proposed landfill
Muchea Livestock Centre (Agricultural)	Appx 500 m west south-west of proposed landfill
Environmental receptors	Distance from activity / prescribed premises
<p><u>Surface Water:</u> Minor watercourse (intersects the Chandalla Brook to the north and the Ellen Brook to the south) Multi-use palusplain Resource enhancement wetland</p>	<p>Premises is located within the Swan River System Rights in Water and Irrigation Act 1914 (RIWI Act) proclaimed Surface Water Area Minor watercourse is located approximately 116 m to the west of the proposed landfill Multi-use palusplain is appx. 680 m north of the proposed landfill Resource enhancement wetland is appx 1.1 km north-west of the proposed landfill</p>
Underlying groundwater (non-potable purposes)	<p>Premises is located within the RIWI Act proclaimed Gingin Groundwater Area Groundwater salinity is 1000-3000 mg/L Applicant states that groundwater is appx. 30 mbgl and flows in a south-westerly direction Closest downgradient water bore is 710 m south-west of the landfill</p>
Soil and Geology	<p>The site is located on the Dandaragan Plateau, characterised by Cretaceous marine sediments that are mantled by sands and laterites.</p> <p>SERS identified soil across the whole site to be Chromosol "<i>Broad valleys and undulating interfluvial areas with some discontinuous breakaways and occasional mesas; lateritic materials mantle the area: chief soils are sandy acidic yellow mottled soils, (Dy5.81) containing much ironstone gravel in the A horizons, and (Dy5.84), both forming a complex pattern with each other and with lateritic sandy gravels (KS-Uc2.12). Associated are leached sands (Uc2.21) underlain by lateritic gravels and mottled clays that occur at a progressively greater depth down a slope.</i>" (Atlas of Australian Soil)</p>
Threatened Ecological Communities Banksia Woodlands of the Swan Coastal Plain	Within 200 m of the proposed landfill
Aboriginal Sites and Heritage Places Ellen Brook: Upper Swan mythological site	Within the premises boundary

5.2 Risk ratings

Risk ratings have been assessed in accordance with the *Guideline: Risk Assessments* (DWER 2020) for each identified emission source and takes into account potential source-pathway and receptor linkages as identified in Section 5.1. Where linkages are in-complete they have not been considered further in the risk assessment.

Where the applicant has proposed mitigation measures/controls (as detailed in Section 5.1), these have been considered when determining the final risk rating. Where the delegated officer considers the applicant's proposed controls to be critical to maintaining an acceptable level of risk, these will be incorporated into the works approval as regulatory controls.

Additional regulatory controls may be imposed where the applicant's controls are not deemed sufficient. Where this is the case the need for additional controls will be documented and justified in Table 3.

Works approval W6909/2024/1 that accompanies this decision report authorises construction and time-limited operations. The conditions in the issued works approval, as outlined in Table 3 have been determined in accordance with *Guidance Statement: Setting Conditions* (DER 2015).

A licence is required following the time-limited operational phase authorised under the works approval to authorise emissions associated with the ongoing 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 the department assesses the licence application.

Table 3: Risk assessment of potential emissions and discharges from the premises during construction and operation

Risk events					Risk rating ¹ C = consequence L = likelihood	Applicant controls sufficient?	Conditions ² of works approval	Justification for additional regulatory controls
Sources / activities	Potential emission	Potential pathways and impact	Receptors	Applicant controls				
Construction								
Earthworks for landfill cell, surface water management system and vehicle movements	Dust	Air/windborne pathway causing impacts to health and amenity	Surrounding Residential and agricultural premises	Refer to Section 3.1	C = Moderate L = Possible Medium Risk	N	Condition 3 Condition 2	A regulatory control has been included in the works approval requiring that sufficient water be made available onsite at all times for effective dust control. The Delegated Officer notes that there is currently no groundwater licence issued on the property. Therefore, water will need to be carted onsite.
	Noise				C = Moderate L = Possible Medium Risk	Y	N/A	Construction works are required to comply with the requirements of the <i>Environmental Protection (Noise) Regulations 1997</i> (EP Noise Regulations)
Operation (including time-limited-operations operations)								
Vehicle movements, tipping of waste and lift-off from landfill	Dust	Air/windborne pathway causing impacts to health and amenity	Surrounding Residential and agricultural premises	Refer to Section 3.1	C = Moderate L = Possible Medium Risk	Y	Condition 1, 8, 9, 10, 11	N/A
Receival of waste materials, stockpiling, and removal and burial of inert waste stockpiles, vehicle movements	Noise				C = Minor L = Possible Medium Risk	N	Condition 8 Condition 22, 23, 24 and 25	The Delegated Officer considers that noise verification monitoring is required to verify that the ongoing operation of the landfill will comply with the EP Noise Regulations.

Works approval: W6909/2024/1

Risk events					Risk rating ¹ C = consequence L = likelihood	Applicant controls sufficient?	Conditions ² of works approval	Justification for additional regulatory controls
Sources / activities	Potential emission	Potential pathways and impact	Receptors	Applicant controls				
Unintentional receipt of ACM in C&D waste	Asbestos fibres				C = Severe L = Rare High Risk	Y	Condition 12, 13, 14, 15, and 16	N/A
Receipt of waste materials, stockpiling, and removal and burial of inert waste stockpiles	Sediment-laden/contaminated stormwater	Overland runoff potentially causing ecosystem disturbance or impacting surface water quality	Minor watercourse	Refer to Section 3.1	C = Minor L = Unlikely Medium Risk	Y	Condition 1, 4, 5, 8	N/A
Landfilling of inert materials Temporary storage of non-conforming and residual wastes	Leachate	Seepage to soil and groundwater causing ecosystem disturbance and degradation to the beneficial uses of groundwater	Down-gradient groundwater dependent ecosystems Beneficial uses of groundwater	Refer to Section 3.1	C = Minor L = Unlikely Medium Risk	N	Condition 4, 5, 8, 12, 14, 15, 20 and 21 <u>Condition 1 and 19</u>	The Delegated Officer considers the location of proposed groundwater monitoring bores 1 and 2 to be appropriate to show upstream groundwater conditions. Proposed Bore 3 and Bore 4 are nominally downstream. However, an additional bore between Bore 3 and Bore 4 would be useful to monitor groundwater coming from the middle of the site. An additional bore in this location has been included as a regulatory control within the works approval.
Fire in non-conforming or residual waste	Smoke	Air/windborne pathway causing impacts to health and amenity	Surrounding Residential and agricultural premises	Refer to Section 3.1	C = Major L = Unlikely Medium Risk	N	Condition 8, 12, 13, 14, and 15 <u>Condition 1</u>	The Delegated Officer considers it appropriate to specify a buffer around the quarantine storage area to ensure that it is accessible for firefighting purposes and fire-fighting vehicles in accordance with Guidance Note: GN03 Fire Safety Considerations for Open

Works approval: W6909/2024/1

Risk events					Risk rating ¹	Applicant controls sufficient?	Conditions ² of works approval	Justification for additional regulatory controls
Sources / activities	Potential emission	Potential pathways and impact	Receptors	Applicant controls	C = consequence L = likelihood			
								Yard Storage (DFES, 2020)
	Firefighting wash water	Overland runoff potentially causing ecosystem disturbance or impacting surface water quality	Minor watercourse Down-gradient groundwater-dependent ecosystems Beneficial uses of groundwater	Refer to Section 3.1	C = Moderate L = Unlikely Medium Risk	Y	Condition 1, 8, 19, 20, 21	N/A

Note 1: Consequence ratings, likelihood ratings and risk descriptions are detailed in the *Guideline: Risk Assessments* (DWER 2020).

Note 2: Proposed applicant controls are depicted by standard text. **Additional regulatory controls** depicts additional regulatory controls imposed by department.

6. Consultation

Table 4 provides a summary of the consultation undertaken by the department.

Table 4: Consultation

Consultation method	Comments received	Department response
Application advertised on Department's website on 19 April 2024	None received	N/A
Local Government Authority advised of proposal on 19 April 2024	The Shire of Chittering replied on 1 May 2024 confirming that the proposed works had received Development Approval, and that the application appeared to be consistent with the Development Approval granted. The Shire had no comments in relation to or objections to the proposal.	N/A
Department of Planning, Lands and Heritage (DPLH) advised of proposal on 19 April 2024	No comments received	N/A
Applicant was provided with draft documents on 17 July 2024	Refer to Appendix 1	Refer to Appendix 1

7. 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.

It is noted that the works approval holder intends to install wells and to abstract groundwater to assist with dust management and firefighting on the premises. As the premises is located within proclaimed ground and surface water areas, licences to construct or alter wells and to take water are required under the *Rights in Water and Irrigation Act 1914* prior to the commencement of these works.

References

1. Department of Environment Regulation (DER) 2015, *Guidance Statement: Setting Conditions*, Perth, Western Australia.
2. Department of Fire and Emergency Services (DFES) 2020, *Guidance Note: GN03 Fire Safety Considerations for Open Yard Storage*, Perth, Western Australia.
3. Department of Health 2021, *Guidelines for Assessment, Remediation and Management of Asbestos Contaminated Sites in Western Australia*.
4. Department of Water and Environmental Regulation (DWER) 2020, *Guideline: Environmental Siting*, Perth, Western Australia.

5. DWER 2020, *Guideline: Risk Assessments*, Perth, Western Australia.
6. Landfill Waste Classification and Waste Definitions 1996 (as amended 2019).
7. Site Environmental and Remediation Services (SERS) 2024, *Dust Management Plan Lot 9001 (88) Caladenia Close, Lower Chittering Western Australia 6084*, Northbridge, Western Australia
8. SERS 2023, *Noise Management Plan Lot 9001 (88) Caladenia Close, Lower Chittering Western Australia 6084*, Northbridge, Western Australia
9. SERS, *Works Application Class 1 Landfill, Lot 9001 (88) Caladenia Close, Lower Chittering Western Australia 6084*, Northbridge, Western Australia

Appendix 1: Summary of applicant's comments on risk assessment and draft conditions

Condition	Summary of applicant's comment	Department's response
1	<p>Comments from the applicant in relation to the draft works approval and draft decision report were received on 22 July 2024.</p> <p>The applicant advised that the stormwater drainage plan originally provided was incorrect. The stone pitch detail in the embankment design is problematic from an ongoing management perspective. A new stormwater drainage plan was provided by the applicant without the stone pitch embankment as a replacement. Confirmation from a civil engineer has been provided to DWER to confirm that stone pitching is not necessary in the construction of the drainage basins.</p> <p>The applicant confirmed that the removal of the requirement for stone pitching was the only requested change and the balance of the works approval was acceptable.</p>	<p>The requested change does not change the overall risk profile of the premise. Therefore, the Delegated Officer has resolved to remove the requirement for the basin embankments to be stone pitched.</p>

Appendix 2: Application validation summary

SECTION 1: APPLICATION SUMMARY						
Application type						
Works approval	<input checked="" type="checkbox"/>					
Licence	<input type="checkbox"/>	Relevant works approval number:		None	<input type="checkbox"/>	
		Has the works approval been complied with?	Yes <input type="checkbox"/>		No <input type="checkbox"/>	
		Has time limited operations under the works approval demonstrated acceptable operations?	Yes <input type="checkbox"/>		No <input type="checkbox"/>	N/A <input type="checkbox"/>
		Environmental Compliance Report / Critical Containment Infrastructure Report submitted?	Yes <input type="checkbox"/>		No <input type="checkbox"/>	
		Date Report received:				
Renewal	<input type="checkbox"/>	Current licence number:				
Amendment to works approval	<input type="checkbox"/>	Current works approval number:				
Amendment to licence	<input type="checkbox"/>	Current licence number:				
		Relevant works approval number:		N/A	<input type="checkbox"/>	
Registration	<input type="checkbox"/>	Current works approval number:		None	<input type="checkbox"/>	
Date application received						
Applicant and Premises details						
Applicant name/s (full legal name/s)		Brajkovich Landfill & Recycling (Muchea) Pty Ltd				
Premises name		N/A				
Premises location		Lot 9001 on Deposited Plan 71254 (88) Caladenia Close, Lower Chittering WA 6084 Volume 2789 Folio 776				
Local Government Authority		Shire of Chittering				
Application documents						
HPCM file reference number:		DER2023/000771				
Key application documents (additional to application form):		<i>Premises maps Map of Sensitive receptors Works Approval application Report Environmental Monitoring and Management Plan Dust Management Plan Noise Management Plan Landfill Closure and Rehabilitation Plan</i>				
Scope of application/assessment						

Summary of proposed activities or changes to existing operations.	<p><i>Works approval</i></p> <p>Operation of a Category 63, Class I inert landfill at a site which has previously been used for clay extraction. The existing quarry is proposed to be filled with inert class I materials, which will also assist in rehabilitating the existing hole.</p> <p>Waste types proposed for disposal include concrete, bricks, tiles, ceramics, glass, and bitumen.</p>	
Category number/s (activities that cause the premises to become prescribed premises)		
Table 1: Prescribed premises categories		
Prescribed premises category and description	Proposed production or design capacity	
Category 63: Class I inert landfill site: premises (other than clean fill premises) on which waste of a type permitted for disposal for this category of prescribed premises, in accordance with the <i>Landfill Waste Classification and Waste Definitions 1996</i> , is accepted for burial.	500,000 tonnes per annual period	
Legislative context and other approvals		
Has the applicant referred, or do they intend to refer, their proposal to the EPA under Part IV of the EP Act as a significant proposal?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Referral decision No: Managed under Part V <input checked="" type="checkbox"/> Assessed under Part IV <input type="checkbox"/>
Does the applicant hold any existing Part IV Ministerial Statements relevant to the application?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Ministerial statement No: EPA Report No:
Has the proposal been referred and/or assessed under the EPBC Act?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Reference No:
Has the applicant demonstrated occupancy (proof of occupier status)?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Certificate of title <input checked="" type="checkbox"/> General lease <input type="checkbox"/> Expiry: Mining lease / tenement <input type="checkbox"/> Expiry: Other evidence <input type="checkbox"/> Expiry:
Has the applicant obtained all relevant planning approvals?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>	Approval: DA approval from Shire of Chittering Expiry date: 15 November 2043 If N/A explain why?
Has the applicant applied for, or have an existing EP Act clearing permit in relation to this proposal?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	CPS No: N/A No clearing is proposed.

<p>Has the applicant applied for, or have an existing CAWS Act clearing licence in relation to this proposal?</p>	<p>Yes <input type="checkbox"/> No <input checked="" type="checkbox"/></p>	<p>Application reference No: N/A Licence/permit No: N/A No clearing is proposed.</p>
<p>Has the applicant applied for, or have an existing RIWI Act licence or permit in relation to this proposal?</p>	<p>Yes <input type="checkbox"/> No <input checked="" type="checkbox"/></p>	<p>Application reference No: Licence/permit No:</p>
<p>Does the proposal involve a discharge of waste into a designated area (as defined in section 57 of the EP Act)?</p>	<p>Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p>	<p>Name: Swan River System (surface) and Gingin Groundwater Area Type: Proclaimed Surface Water Area and Proclaimed Groundwater Area Has Regulatory Services (Water) been consulted? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/> Regional office: Swan Avon</p>
<p>Is the Premises situated in a Public Drinking Water Source Area (PDWSA)?</p>	<p>Yes <input type="checkbox"/> No <input checked="" type="checkbox"/></p>	<p>Name: N/A Priority: N/A Are the proposed activities/ landuse compatible with the PDWSA (refer to WQPN 25)? Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" type="checkbox"/></p>
<p>Is the Premises subject to any other Acts or subsidiary regulations (e.g. <i>Dangerous Goods Safety Act 2004, Environmental Protection (Controlled Waste) Regulations 2004, State Agreement Act xxxx</i>)</p>	<p>Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p>	<p><i>Environmental Protection (Noise) Regulations 1997</i></p>
<p>Is the Premises within an Environmental Protection Policy (EPP) Area?</p>	<p>Yes <input type="checkbox"/> No <input checked="" type="checkbox"/></p>	
<p>Is the Premises subject to any EPP requirements?</p>	<p>Yes <input type="checkbox"/> No <input checked="" type="checkbox"/></p>	
<p>Is the Premises a known or suspected contaminated site under the <i>Contaminated Sites Act 2003</i>?</p>	<p>Yes <input type="checkbox"/> No <input checked="" type="checkbox"/></p>	<p>Classification: N/A Date of classification: N/A</p>