



Application to amend licence

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

Licence number	L7038/1997/12
Licence holder	Brajkovich Landfill & Recycling Pty Ltd
ACN	161 973 931
DWER file number	DER2015/001610
Premises	Quinns Quarry 220 Hester Avenue NEERABUP WA 6031 Being Part lot 1153 on Plan 217813 as defined by the coordinates listed in Appendix 1
Date of report	26 September 2019
Decision	Granted

1. Definitions

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

Table 1: Definitions

Term	Definition
Applicant	Brajkovich Landfill & Recycling Pty Ltd
Category / categories	Categories of prescribed premises as set out in Schedule 1 of the EP Regulations.
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 <i>Public Sector Management Act 1994</i> 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 <i>Public Sector Management Act 1994</i> and is responsible for the administration of the <i>Environmental Protection Act 1986</i> along with other legislation.
Emission	has the same meaning given to that term under the EP Act.
EP Act	<i>Environmental Protection Act 1986 (WA)</i>
EP Regulations	<i>Environmental Protection Regulations 1987 (WA)</i>
Green Waste	means solid waste that originated from flora and which does not contain or has not been treated or coated with preserving agents, biocides, fire retardants, paint, adhesives or binders.
Inert Waste Type 1	as defined in the <i>Landfill Waste Classification and Waste Definitions 1996 (as amended 2018)</i>
Inert Waste Type 2	as defined in the <i>Landfill Waste Classification and Waste Definitions 1996 (as amended 2018)</i>
Landfill Definitions	means <i>Landfill Waste Classification and Waste Definitions 1996 (as amended 2018)</i>
Licence Holder	Brajkovich Landfill & Recycling Pty Ltd

Term	Definition
Metal Dust	means the fine and small particles of waste concrete generated during concrete crushing operations, meeting the criteria for Class I landfills, as specified in the <i>Landfill Waste Classification and Waste Definitions 1996 (as amended 2018)</i> ;
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 specified at the front of this Decision Report
Primary Activities	as defined in Schedule 2 of the Licence
Risk Event	As described in <i>Guidance Statement: Risk Assessment</i>

2. Overview of premises

The Prescribed Premises (Quinns Quarry) is located at 220 Hester Avenue in Neerabup, within the City of Wanneroo.

The site has historically operated as a limestone quarry. R.C.G. Pty Ltd previously operated the premises between 1974 and 2018. Brajkovich Landfill & Recycling Pty Ltd (the Applicant) has operated the facility since 1 October 2018 and currently holds Licence L7038/1997/12 for the following prescribed premises categories:

- Category 13: Crushing of building materials;
- Category 62: Solid waste depot;
- Category 63: Class I inert landfill site; and
- Category 70: Screening of material.

Several waste types are handled at the Premises, including clean fill, inert construction and demolition waste, asphalt, drilling slurry and asbestos. The wastes accepted at site are predominately sourced within the Perth Metropolitan area. The waste is sorted on arrival and non-conforming waste is removed. Construction and demolition waste is crushed prior to landfilling where required. Clean sand is separated for use as landfill cover material. While the quarrying of limestone has ceased, previously extracted limestone is screened and crushed into smaller pieces for sale.

The land is owned by the State of Western Australia and is zoned 'Parks and Recreation' under the City of Wanneroo's District Planning Scheme No. 2. Planning approval has been granted by the Department of Planning, Lands and Heritage until 30 September 2021, authorising crushing of construction and demolition waste, an inert landfill, solid waste depot and screening of material.

The western boundary of the premises is adjacent to the Transperth north-south railway line (Joondalup line) and the Mitchell Freeway. Beyond the road and railway easements is the residential community of Clarkson. The northern and eastern boundaries are adjacent to Bush Forever areas classified under State Planning Policy 2.8 Bushland Policy for the Perth Metropolitan Region (June 2010).

2.1 Classification of Premises

Table 2 summarises the classification and approved capacity for the Prescribed Premises.

Table 2: Classification of premises and assessed design capacity

Category	Description	Assessed production or design capacity or throughput
Category 13	Crushing of building material: premises on which waste building or demolition material (for example, bricks, stones or concrete) is crushed or cleaned.	200,000 tonnes per annum
Category 62	Solid waste depot: premises on which waste is stored, or sorted, pending final disposal or re-use.	100,000 tonnes per annum

Category	Description	Assessed production or design capacity or throughput
Category 63	Class 12 inert landfill site: premises on which waste (as determined by reference to the waste type set out in the document entitled "Landfill Waste Classification and Waste Definitions 1996" as published by the Chief Executive Officer and as amended from time to time) is accepted for burial.	500,000 tonnes per annum
Category 70	Screening, etc. of material: premises on which material extracted from the ground is screened, washed, crushed, ground, milled, sized or separated.	50,000 tonnes per annum

2.2 Description of proposed activity

The Applicant proposes to amend the Licence as follows:

1. To accept new waste types under Category 62:
 - Inert Waste Type 2 (as defined in the Landfill Definitions) comprising plastics free of chemical or putrescible waste residues. Up to 195 tonnes per annum, with up to 13 tonnes stored at any given time, located in 'Inert Waste Type 2' area shown in Figure 1. Examples provided by the Applicant are buckets, strapping, pipes, cable reels made from polypropylene, high density polypropylene or nylon;
 - Green Waste up to 2,250 tonnes per annum, with up to 150 tonnes at any given time and stored for a maximum of four weeks per load. Located in 'Green waste' area as shown in Figure 1;
2. To increase the maximum height of stockpiles from 5 m to 10 m for:
 - Inert waste for recycling stockpile (unprocessed inert) in low lying areas shielded by the high excavated pit boundaries; and
 - Product stockpiles in low lying areas shielded by the high excavated pit boundaries

The Applicant provided volumes of waste in their application, which the Delegated Officer has converted to weight using Waste Authority *Guidance Note 6: Converting volumes to tonnes* for 'Plastic containers – whole, some flattened' and 'Greenwaste unprocessed' as detailed in Table 3. Conversion to weight is required to align with the units used within the *Environmental Protection Regulations 1987* (EP Regulations).

Table 3: Conversion of volume to weight as per the Waste Authority Guidance Note 6: Converting Volumes to Tonnes

Waste Type Description	Volume given in application (m ³)	Tonnes per m ³ conversion factor	Tonnes for licensing
Inert Waste Type 2 - capacity per annum	15,000	0.013	195
Inert Waste Type 2 - limit at any given time	1,000	0.013	13
Green waste - capacity per annum	15,000	0.15	2,250
Green waste - limit at any given time	1,000	0.15	150

The additional infrastructure and equipment associated with this amendment are outlined in Table 4 below and the site layout is shown in Figure 1.

Table 4: Additional infrastructure associated with this amendment

Ref	Infrastructure or Equipment	Site Layout Plan reference (Figure 1)
1	Hardstand for Green Waste storage	"Green Waste"
2	Hardstand for Inert Waste Type 2 storage	"Inert Waste Type 2"

The initial application proposed tyre storage under category 62. During the assessment the Department identified that tyre storage would not be considered compatible with the Premises location, being within a Priority 3 Public Drinking Water Supply Area (see Section 4.2 for further description). After discussion with the Department, the Licence Holder withdrew this activity from the amendment. The storage of tyres is not further considered in this Decision Report.

Table 5 lists the documents submitted during the assessment process.

Table 5: Documents and information submitted during the assessment process

Document/information description	Date received
Application form and supporting documentation, <i>Licence Amendment Application Report</i> (00425_LA_AC_171218, dated 17 December 2018) and <i>Figure 1: Site Layout</i> dated 30/11/2018)	18 February 2019
Request for information response	11 April 2019
Confirming removal of tyre storage from application	10 May 2019
Updated Site Figure	4 June 2019

As part of the amendment to the Licence, Amendment Notices 1, 2, 3 and 4 have been consolidated into the Licence document. No additional assessment has been undertaken as part of this amendment assessment. Decisions related to the amalgamated changes are published in previous Amendment Notices 1, 2, 3 and 4. Section 2.2.1 summarises the content of previous amendments to the Licence.

Key Finding:

1. The Department determined that the tyre storage would not be compatible with the Premises environmental siting, and as a result the Licence Holder agreed to remove the proposed tyre storage from the amendment. This aspect is no longer assessed within the scope of this report.



Figure 1: Site Layout


 <p>SERS Site Environmental and Remediation Services</p> <p>Head Office: 281 Newcastle Street Northbridge WA 6003 Postal: PO Box 377 Northbridge Perth WA 6865 T: +61 8 92202000 F: +61 8 92202010 E: admin@sers.net.au W: www.sers.net.au</p>	<p>Job No: 004</p> <p>Client: Adrian Brajkovich</p> <p>Address: 220 Hester Avenue, Neerabup</p>	<p>Scale: 1:5,160</p> <p>Original size: A3</p> <p>Imagery from: 15/08/2019</p> <p>Source: Neamaps</p>	<p>Date drawn: 23/09/2019</p> <p>Revision: 5</p> <p>Drawn by: S.P</p> <p>Checked by: R.M</p>	<p>Legend</p> <p>MB1 Well</p> <p>Current Landfill Area</p> <p>Green Waste</p> <p>Plant Maintenance Area</p> <p>Drill Slurry Drying Bed</p> <p>Processing Area (Crusher and Screener)</p> <p>Inert Waste Type 2</p> <p>BGG Premises</p> <p>Leighton's Premises</p> <p>Site Boundary</p> <p>Site Access</p> <p>Weightbridge</p> <p>Site Amenities</p> <p>Product Stockpile</p> <p>Asbestos Cell</p>
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Figure 1: Site Layout Plan

2.2.1 Amendment history

The amendment history for L7038/1997/12 is outlined in Table 6.

Table 6: Amendment history

Instrument	Issued	Amendment
L7038/1997/12	19/10/2016	Amendment Notice 1: amendment to extend Licence duration in line with planning approval and DEC Guidance Statement: Licence Duration (2016)
L7038/1997/12	11/11/2016	Amendment to include prescribed premises category 13 (crushing of building material)
L7038/1997/12	20/12/2016	Amendment Notice 2: amendment to Licence Holder's registered office address
L7038/1997/12	08/03/2017	Amendment Notice 3: amendment to authoring infilling activities within 25m of Premises boundary to stabilize the western boundary wall
L7038/1997/12	01/10/2018	Amendment Notice 4: transfer of Licence
L7038/1997/12	26/09/2019	Amendment 5: This amendment

3. Legislative context and other approvals

Approvals relevant to the premises are outlined in Table 7.

Table 7: Approvals relevant to the premises

Legislation	Number	Approval
<i>Mining Act 1978</i>	M 70/717 and L70/172	Tenements M70/717 and L70/172 subleased to the Applicant
<i>Planning and Development Act 2005</i>	N/A	Local government planning approval, valid until 30 September 2021. The planning approval authorises crushing of construction and demolition waste, an inert landfill, solid waste depot and screening of material
<i>Rights in Water and Irrigation Act 1914</i>	GWL151368(3)	Approval to abstract groundwater for use in dust suppression for mining purposes, valid until 18/3/2029

4. Emission sources, receptors and pathways

4.1 Emissions

The potential for emissions to impact on sensitive receptors has been assessed in accordance with the Department's Risk Framework. The key emissions which have been considered in this report are:

- dust from increased stockpile heights;
- leachate from the Green Waste storage. Green Waste is considered putrescible in the Landfill Definitions and although the applicant is not proposing to encourage composting, it could produce nutrient-containing leachate within the four week storage period; and
- fire-related emissions from Green Waste or Inert Waste Type 2. Green Waste and Inert Waste Type 2 are potentially flammable, and the fire related emissions considered are smoke and embers. The Delegated Officer notes that the plastic waste of Inert Waste Type 2 is considered to require fire management under the Landfill Definitions.

The Applicant has proposed some measures to assist in controlling these emissions. The control measures are outlined in Section 4.4 below and have been considered when undertaking the risk assessment detailed in Section 5.

4.2 Receptors

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 2 and Table 8 below provides a summary of human and environmental receptors in proximity to the premises which have a potential to be impacted from the site activities considered in this amendment, and the risk assessment in Section 5 considers these receptors in the context of emissions and potential pathways. Note that previous Decision Reports have given a full description of the environmental siting and sensitive receptors for the Premises.

Table 8: Sensitive receptors relevant to the premises

Human receptors	Distance from activity / prescribed premises
Residents of the suburb of Clarkson	The closest houses are approximately 140 m from the western boundary.
Environmental receptors	Distance from activity / prescribed premises
Groundwater in a Priority 3 Public Drinking Water Source Area (P3 PDWSA)	<p>The premises is within a Public Drinking Water Source Area as proclaimed under the <i>Metropolitan Water Supply, Sewerage, and Drainage Act 1909</i>, and is within the Priority 3 Area of the Perth Coastal and Gwelup Underground Water Pollution Control Area. These areas are designated to protect water quality and public health.</p> <p>DWER's internal database shows groundwater is approximately 22 m below the premises surface at the closest point, based on the lowest quarry ground level of approximately 27 m Australian Height Datum (AHD) and historical maximum groundwater level of 4-5 m AHD.</p> <p>There are two P3 PDWSA well-head protection zones approximately 715 m west of the site (being areas surrounding a production bore to protect drinking water supply locations).</p>
Bush Forever Site (No. 383)	Immediately adjacent to the northern and eastern premises boundaries.
Bush Forever Site (No. 384)	Approximately 820 m east of the premises boundary.
Neerabup Lake	Approximately 1 km east of the premises.



Figure 4: Surrounding Land Uses











 SERS <small>Soil & Environmental Remediation Services</small>	Job No: 004-25 Client: Adrian Brajkovich Address: 220 Hester Avenue, Neerabup	Scale: 1:8,500 Original size: A3 Imagery from: 27/10/2018 Source: Nearmaps	Date drawn: 07/12/2018 Revision: 0 Drawn by: A.C Checked by: R.M	Legend  100m Buffer  450m Buffer  Site Boundary  BCG Premises  Leighton's Premises  Parks & Recreation  Roads & Infrastructure  Commercial  Residential
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Figure 2: Distance to sensitive receptors

4.3 Pathways

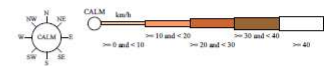
4.3.1 Air

Dust, smoke and fire embers are potential emissions carried by air and so the prevailing wind patterns that may carry the dust or fire to sensitive receptors have been considered. The Bureau of Meteorology website shows that Pearce RAAF, approximately 23 km from Neerabup is the closest relevant weather station site. Based on the available data the prevailing wind direction is easterly in the morning (towards the Clarkson community) and south-westerly in the afternoon (towards the Bush Forever sites).

Table 9: Wind roses for Pearce RAAF weather station (No. 0090503) giving the prevailing annual wind directions at 9am (left) and 3pm (right) using data from November 1940 to August 2018.

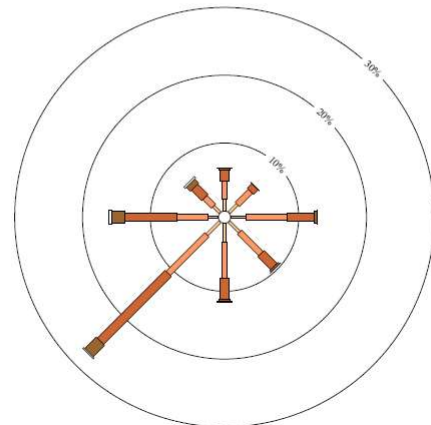
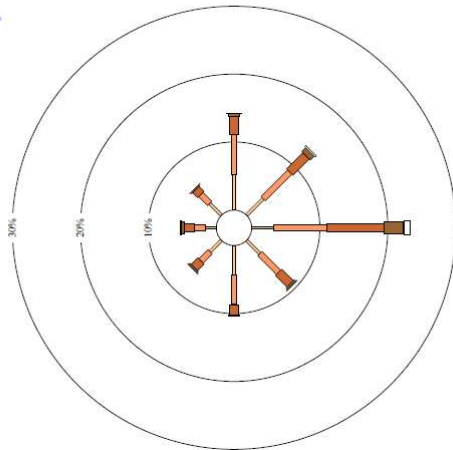
Rose of Wind direction versus Wind speed in km/h (02 Nov 1940 to 10 Aug 2018)
 Custom times selected, refer to attached note for details
PEARCE RAAF
 Site No: 0090503 • Opened Jan 1937 • 080 Open • Latitude: -31.6669° • Longitude: 116.0189° • Elevation: 40m
 An asterisk (*) indicates that calm is less than 0.5%.
 Other important info about this analysis is available in the accompanying notes.

Rose of Wind direction versus Wind speed in km/h (02 Nov 1940 to 10 Aug 2018)
 Custom times selected, refer to attached note for details
PEARCE RAAF
 Site No: 0090503 • Opened Jan 1937 • 080 Open • Latitude: -31.6669° • Longitude: 116.0189° • Elevation: 40m
 An asterisk (*) indicates that calm is less than 0.5%.
 Other important info about this analysis is available in the accompanying notes.



9 am
 18562 Total Observations
 Calm 13%

3 pm
 17441 Total Observations
 Calm 5%



The contours of the land across the site and adjacent areas will affect the wind erosion of dust from stockpiles travelling across and beyond the site boundary. The ground level adjacent to the site at the Mitchell Freeway slopes from approximately 46-48 m AHD across much the site to a lowest point of 40 m AHD adjacent to the southern end of the site and the 'Rock Stockpile' and 'Cement Stockpile'. The western boundary of the Premises appears to be approximately 46 m AHD with either natural ground level or formed landforms. The eastern and northern sides of the Premises next to the Bush Forever site are approximately 48 to 55 m AHD (Figure 3).

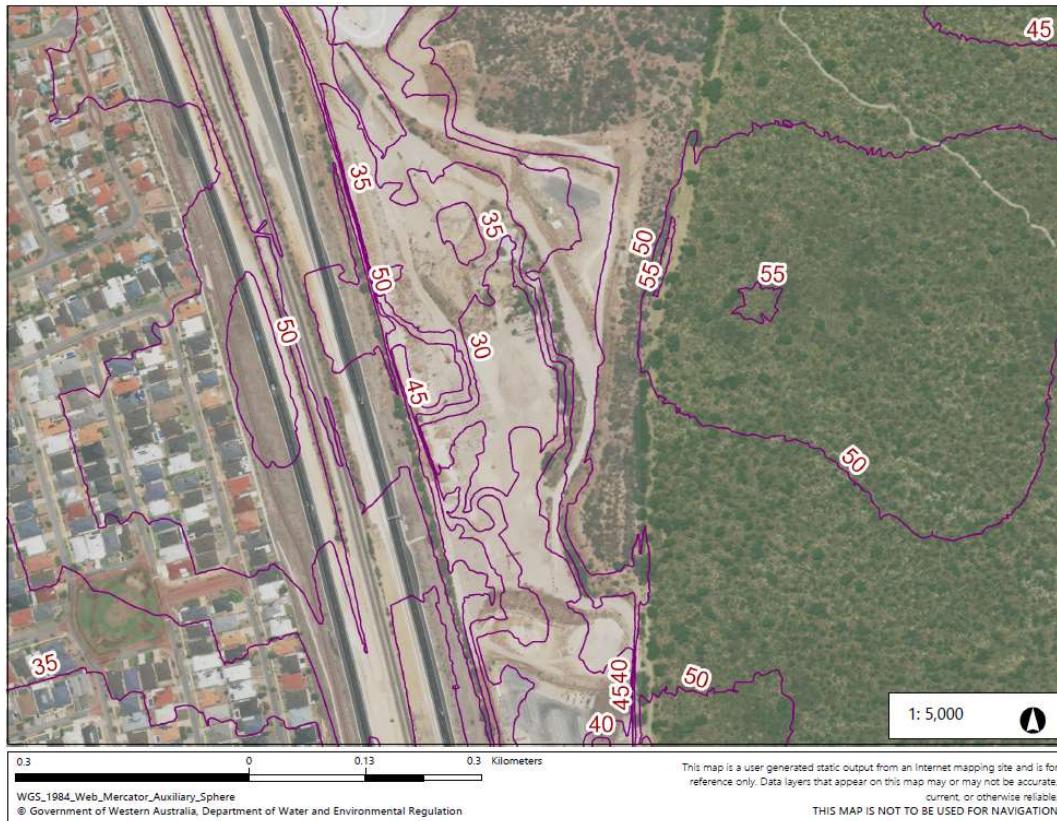


Figure 3: Indicative ground levels across the Premises and surrounding areas (5 m AHD contours)

4.3.2 Movement of liquid through soil to groundwater

Accumulation of contaminants in soil and transmission through the soil profile to groundwater is another potential pathway for emissions to reach sensitive receptors. The groundwater aquifers in the local area form a large interconnected groundwater resource that is both a sensitive receptor itself (P3 PDWSA) and capable of moving emissions to other sensitive receptors.

The geology in which the Premises is located is the Tamala limestone formation, which is overlain by soils consisting of estuarine deposits, siliceous and brown sands and leached sands, and weathered Tamala limestone. In some areas, Tamala limestone is characterised by solution channels, cavities and karst structures, which provide pathways for infiltration and movement of solutes in water. As described in Table 8, groundwater is estimated to be approximately 22 m below the premises surface. This has been estimated using the lowest point, being the quarry ground level of approximately 27 m AHD and the historical maximum groundwater level of 4-5 m AHD. On the basis of the subsurface conditions at the premises it is considered that there is a pathway for potential emissions to reach groundwater.

The Green Waste is intended to be stored for less than four weeks per batch to minimise leachate generation. However, over that time the partial decomposition products (nutrients) may still be released from the wastes. If not contained, the added nutrients may be carried by surface runoff and percolate through the soil profile reaching the groundwater aquifers.

These pathways have been considered in the risk assessment table in Section 5.

4.4 Applicant controls

The Applicant has proposed the following management controls as part of the application:

Emission (as identified above)	Source	Controls proposed by the Applicant
Dust	Unloading, loading and storage of inert materials on stockpiles up to 10 m high Unloading, loading and storage of Green Waste and Inert Waste Type 2	<ul style="list-style-type: none"> • The stockpiles that are proposed to be increased are the inert waste for recycling stockpile (unprocessed inert) and the product stockpiles. It is proposed that these will remain in low lying areas shielded by the high excavated pit boundaries. • It is proposed to utilise the onsite water truck for wetting down exposed stockpiles or delivered materials as required to prevent dust generation. The frequency of wetting down work areas using the water truck will be increased when the need arises. • Additionally, water cannons will be utilised to wet down stockpiled materials in order to saturate the material prior to processing.
Leachate containing nutrients	Storage of Green Waste	<ul style="list-style-type: none"> • To be stored on a hardstand constructed as follows: readily compacted, in-situ (limestone rubble) materials, capped with an ancillary crushed limestone layer to the thickness of 300 mm. The in-situ materials utilised as the initial layer will be free from plant roots and reactive, soluble and organic matter.
Embers from fire	Green Waste fire or Inert Waste Type 2 fire	None provided
Smoke from fire	Green Waste fire or Inert Waste Type 2 fire	None provided

5. Risk assessment

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 for emissions during operation. The risk assessment included in this Decision Report is only for the changed risks arising from this proposed amendment.

5.2 Risk assessment – operation

Risk Event				Consequence rating*	Likelihood rating*	Risk*	Reasoning	Regulatory controls (refer to conditions of the granted instrument)
Source/Activities	Potential emissions	Potential receptors, pathway and impact	Applicant controls					
<p>Unloading, loading and storage of inert materials on stockpiles up to 10 m high, for:</p> <p>1) unprocessed inert material stockpiles that may contain:</p> <p>Clean Fill, Inert Waste Type 1, Asphalt, Inert Waste Type 2 (shown as 'Unprocessed material stockpile' on Figure 1: Site Layout)</p> <p>and</p> <p>2) product stockpiles shown as 'Product Stockpile' on Figure 1: Site Layout</p>	Dust	Air/windborne dust causing impacts to health and amenity of closest human receptors (Clarkson community approximately 140 m west from the premises)	<p>The stockpiles that are proposed to be increased in height are the inert waste for recycling stockpile (unprocessed inert) and the product stockpiles.</p> <p>It is proposed that these will remain in low lying areas of the quarry, shielded by the high excavated pit walls.</p> <p>It is proposed to utilise the onsite water truck for wetting down exposed stockpiles or delivered materials as required</p> <p>Additionally, water cannons will be utilised to wet down stockpiled materials in order to saturate the material prior to processing.</p>	Minor	Unlikely	Medium	<p>Considering the prevailing wind direction, the closest residential receptors are likely to be situated downwind of the stockpiles. However, as they are proposed to be placed within the quarry, below natural ground level, the placement along with the Applicant's proposed dust mitigation controls and the current site dust controls, are likely to be sufficient at mitigating dust emissions.</p> <p>The Delegated Officer considers that his risk outcome is contingent on the placement of the stockpiles in the low-lying areas of the quarry only, i.e. where the 10 m maximum stockpile height is contained within the quarried area, below either the adjacent natural ground level or the level of permanent shielding landforms at the site boundary (approximately 46 m AHD).</p>	<p>Additional controls are proposed to reinforce proposed controls.</p> <p>Dust management conditions including wetting loads prior to unloading, loading and processing, maintaining stockpiles in a damp state to prevent dust lift-off, maintaining dust suppression equipment, and temporarily ceasing activities where weather conditions means that dust cannot be controlled.</p>
Unloading, loading and storage of Green Waste and Inert Waste Type 2					Slight	Rare	Low	
Storage of Green Waste	Leachate arising from the decomposition of Green Waste	Infiltration through soil profile to groundwater causing potential impacts on the Gngara Mound P3 PDWSA public drinking water supply and ecological values and beneficial uses associated with quality of water in the aquifer.	Storage of waste on a Limestone hardstand	Major	Possible	High	<p>The P3 PDWSA is an environmental receptor of special significance as a public drinking water source. It is possible that if uncontained, leachate could travel to the aquifer affecting the water quality.</p> <p>The Delegated Officer considers that additional regulatory controls are required to reduce the likelihood of impact. These include:</p> <ul style="list-style-type: none"> the use of alternate materials in hardstand construction to achieve a low permeability surface; and Construction of bunding to contain runoff on the hardstand area. 	<p>Storage in bunded infrastructure to prevent the infiltration of leachate through soil to groundwater. Testing and reporting of the infiltration capacity of that bunded infrastructure.</p> <p>Storage in the 'Green Waste' area as depicted in the 'Site Layout Map' in Schedule 1.</p> <p>No storage within 25 m from the boundary of the premises.</p> <p>Adding analytes from the Australian Drinking Water Guideline suite to the groundwater monitoring program</p>
Storage of Inert Waste Type 2	Runoff or leachate from Inert Waste Type 2						<p>The P3 PDWSA is an environmental receptor of special significance as a public drinking water source. It is possible that if uncontained, runoff or leachate could travel to the aquifer affecting the water quality.</p> <p>The Delegated Officer considers that additional regulatory controls are required to ensure that public health values are protected, with the use of materials in pad construction to achieve a low permeability surface.</p>	
Green Waste Fire or Inert Waste Type 2 fire	Smoke from fire	Air/windborne pathway causing impacts to health and amenity of closest human receptors (Clarkson community approximately 140 m west from the premises).	None provided	Minor	Possible	Medium	<p>The prevailing wind direction is at times towards the residential community and other times towards the bush forever areas. As such in the case of fire it is likely that impacts would reach and affect sensitive receptors with low level impact to amenity from smoke, and short term impact to an area of high conservation value or special significance from fire embers reaching bush forever areas.</p>	<p>Prepare an emergency management procedure to reduce the potential impact of fire.</p> <p>Five metre wide buffer around the Green Waste and Inert Waste Type 2 storage areas to reduce the potential impact of fire.</p>
Green Waste Fire or Inert Waste Type 2 fire	Fire embers	Embers from Green Waste fire or Inert Waste Type 2 fire travelling through air to Bush Forever vegetation causing fire and ecological harm	None provided	Major	Possible	High	<p>The Delegated Officer considers that additional regulatory controls are required to reduce the likelihood of occurrence of risk events associated with fire.</p>	

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

6. Regulatory Controls

The Delegated Officer considers that additional regulatory controls are required to reduce the risk of leachate produced from Green Waste storage infiltrating through the soil profile and potentially impacting groundwater quality. It is noted that the limestone sourced on site may not achieve the low permeability required to prevent leachate movement. The Licence contains conditions to construct the Green Waste storage area with low permeability materials and bunding along with the requirement to test the permeability of the storage area after construction and report it to the CEO to demonstrate that this condition has been met.

The Delegated Officer considers that in order to reduce the risk of impacts from fire due to the storage of potentially flammable materials, an emergency management plan addressing fire response actions is required to describe the fire prevention controls being implemented on the premises.

7. Consultation

Method	Comments received	DWER response
Local Government Authority advised of proposal (16 April 2019)	The City of Wanneroo replied on 6 May 2019 recommending to consult with the Department of Planning, Land and Heritage as it considers the proposed storage of green waste and plastics to be not covered by the existing development approval. The City of Wanneroo did not make any comment about the increased stockpile heights.	The Delegated Officer notes the City of Wanneroo's advice and has consulted the Department of Planning, Lands and Heritage about the proposal.
Department of Planning, Lands and Heritage advised of proposal (16 April 2019)	The Department of Planning, Lands and Heritage considered the proposal and replied that, "The proposal is considered to be consistent with development approval granted by the Commission on 30 September 2016 (WAPC Ref: 30-50329-2), as such, no objections are raised"	The Delegated Officer notes the advice.

8. Conclusion

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

Table 10 summarises these changes.

Table 10: Licence conversion map

Existing condition	licence	Condition summary	New reference	condition	Conversion notes
1 General					
1.1 Interpretation		Definitions and interpretations		Definitions and Interpretations section	Some terms updated to reflect Department change, and general terminology updates e.g. Licensee to Licence Holder. Some new terms e.g. Serious Environmental Harm, Green Waste, Inert Waste Type 2.
1.2 Premises Operation		Accepted waste types, acceptance inspections and testing, asbestos content, processing limits, infrastructure requirements, cover requirements		General, 1-24	New numbering and updated terminology, added waste types
2 Monitoring					
2.1 General monitoring		Timing and certification of tests carried out		25-26	New numbering
2.2 Monitoring and recording of inputs and outputs		Waste inputs and outputs, product outputs		27	New numbering, waste inputs row from Amendment Notice 3, added waste types
2.3 Monitoring of noise emissions		Noise monitoring		28	This condition has not been previously fulfilled and closed out so it has been kept in the Licence New numbering
2.4 Ambient environmental quality monitoring		Water quality monitoring		29	Added reference to monitoring wells that will be installed under improvement conditions, Drinking Water guideline suite for P3 PDWSA leachate monitoring
3 Improvements					

Existing condition	licence	Condition summary	New reference	condition	Conversion notes
3.1 Improvement program		Table of improvements including permeability testing and groundwater monitoring bores	37-38		
4 Information					
4.1 Records		Information storage and complaints management	30-31		New numbering plus reference to emergency management plan
4.2 Reporting		Annual reporting, non-annual reporting	32-35		New numbering plus reference to new monitoring suite Added wording to submit a map or coordinates of the proposed wall stabilisation area prior to the works starting to address the low quality of the map in Amendment Notice 3.
4.3 Notification		Breach reporting	36		New numbering plus Amendment Notice 3 Item 10 infilling reference

TRACEY HASSELL
A/MANAGER WASTE INDUSTRIES
INDUSTRY REGULATION

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

Appendix 1: Premises Coordinates

Position No.	Latitude	Longitude
A	31° 40' 22.98" S	115° 44' 00.19" E
B	31° 40' 27.05" S	115° 44' 03.64" E
C	31° 40' 27.61" S	115° 44' 03.80" E
D	31° 40' 27.96" S	115° 44' 03.65" E
E	31° 40' 28.13" S	115° 44' 04.32" E
F	31° 40' 29.77" S	115° 44' 04.63" E
G	31° 40' 29.72" S	115° 44' 05.35" E
H	31° 40' 30.58" S	115° 44' 05.87" E
I	31° 40' 30.20" S	115° 44' 08.06" E
J	31° 40' 28.19" S	115° 44' 08.25" E
K	31° 40' 27.36" S	115° 44' 07.07" E
L	31° 40' 27.37" S	115° 44' 05.74" E
M	31° 40' 27.05" S	115° 44' 03.64" E
N	31° 40' 25.49" S	115° 44' 11.24" E
O	31° 40' 23.56" S	115° 44' 13.83" E
P	31° 40' 23.94" S	115° 44' 20.08" E
Q	31° 40' 40.96" S	115° 44' 15.15" E
R	31° 40' 49.97" S	115° 44' 16.54" E
S	31° 40' 50.19" S	115° 44' 10.36" E
T	31° 40' 31.18" S	115° 44' 03.88" E
U	31° 40' 25.80" S	115° 44' 00.82" E

Appendix 2: Key documents

Document title	Availability
Licence (L7038/1997/12) application form and supporting documentation (February, 2019)	DWER records (A1781385, A1781387, A1781399, A1781397, A1788104)
DER, July 2015. <i>Guidance Statement: Regulatory principles</i> . Department of Environment Regulation, Perth.	accessed at www.dwer.wa.gov.au
DER, October 2015. <i>Guidance Statement: Setting conditions</i> . Department of Environment Regulation, Perth.	
DER, February 2017 <i>Guidance Statement: Risk Assessments</i> . Department of Environment Regulation, Perth.	
DER, June 2019. <i>Guidance Statement: Decision Making</i> . Department of Environment Regulation, Perth.	