Licence

Licence Number	L9064/2017/1
Licence Holder	P.M.R Quarries Pty Ltd
ACN	008 866 448
Registered business address	401 Spearwood Avenue BIBRA LAKE WA 6163
File Number	DER2017/000714
Duration	8 December 2017 to 24 August 2025
Date of issue	8 December 2017
Prescribed Premises	Category 12 – Screening, etc. of material Category 13 – Crushing of building material Category 62 – Solid waste depot Category 63 – Class I inert landfill site
Premises	Baldivis Pit Kerosene Lane BALDIVIS WA 6171 Legal description - Portion of Lot 800 on Plan 72839 As defined within in Schedule 1 of the Licence.

This Licence is granted to the Licence Holder, subject to the following conditions, on 8 December 2017 by:

Date signed: 8 December 2017

Steve Checker
MANAGER LICENSING (WASTE INDUSTRIES)

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

Explanatory notes

These explanatory notes do not form part of this Licence.

Defined terms

Definition of terms used in this Licence can be found at the start of this Licence. Terms which are defined have the first letter of each word capitalised throughout this Licence.

Department of Water and Environmental Regulation

The Department of Water and Environmental Regulation (DWER) is 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 *Environmental Protection Act 1986* (WA) (EP Act). The Department also monitors and audits compliance with licences, takes enforcement action and develops and implements licensing and industry regulation policy.

Licence

Section 56 of the EP Act provides that an occupier of Prescribed Premises commits an offence if Emissions are caused or increased, or permitted to be caused or increased, or Waste, noise, odour or electromagnetic radiation is altered, or permitted to be altered, from Prescribed Premises, except in accordance with a works approval or licence.

Categories of Prescribed Premises are defined in Schedule 1 of the *Environment Protection Regulations 1987* (WA) (EP Regulations).

This Licence does not authorise any activity which may be a breach of the requirements of another statutory authority including, but not limited to the following:

- conditions imposed by the Minister for Environment under Part IV of the EP Act;
- conditions imposed by DWER for the clearing of native vegetation under Part V, Division 2 of the EP Act;
- any requirements under the *Waste Avoidance and Resource Recovery Act 2007;*
- any requirements under the *Environmental Protection (Controlled Waste) Regulations 2004*; and
- any other requirements specified through State legislation.

It is the responsibility of the Licence Holder to ensure that any action or activity referred to in this Licence is permitted by, and is carried out in compliance with, other statutory requirements.

The Licence Holder must comply with the Licence. Contravening a Licence Condition is an offence under s.58 of the EP Act.

Responsibilities of a Licence Holder

Separate to the requirements of this Licence, general obligations of Licence Holders are set out in the EP Act and the regulations made under the EP Act. For example, the Licence Holder must comply with the following provisions of the EP Act:

- the duties of an occupier under section 61; and
- restrictions on making certain changes to Prescribed Premises unless the changes are in accordance with a works approval, Licence, closure notice or environmental protection notice (s.53).

Strict penalties apply for offences under the EP Act.

Reporting of incidents

The Licence Holder has a duty to report to DWER all discharges of waste that have caused or are likely to cause Pollution, Material Environmental Harm or Serious Environmental Harm, in accordance with s.72 of the EP Act.

Offences and defences

The EP Act and its regulations set out a number of offences, including:

- Offence of emitting an Unreasonable Emission from any Premises under s.49.
- Offence of causing Pollution under s.49.
- Offence of dumping Waste under s.49A.
- Offence of discharging Waste in circumstances likely to cause Pollution under s.50.
- Offence of causing Serious Environmental Harm (s.50A) or Material Environmental Harm (s.50B).
- Offence of causing Emissions which do not comply with prescribed standards (s.51).
- Offences relating to Emissions or Discharges under regulations prescribed under the EP Act, including materials discharged under the *Environmental Protection (Unauthorised Discharges) Regulations 2004 (WA).*
- Offences relating to noise under the *Environmental Protection (Noise) Regulations 1997 (WA).*

Section 53 of the EP Act provides that a Licence Holder commits an offence if Emissions are caused, or altered from a Prescribed Premises unless done in accordance with a Works Approval, Licence or the requirements of a Closure Notice or an Environmental Protection Notice.

Defences to certain offences may be available to a Licence Holder and these are set out in the EP Act. Section 74A(b)(iv) provides that it is a defence to an offence for causing Pollution, in respect of an Emission, or for causing Serious Environmental Harm or Material Environmental Harm, or for discharging or abandoning Waste in water to which the public has access, if the Licence Holder can prove that an Emission or Discharge occurred in accordance with a Licence.

This Licence specifies the Emissions and Discharges, and the limits and Conditions which must be satisfied in respect of Specified Emissions and Discharges, in order for the defence to offence provision to be available.

Authorised Emissions and Discharges

The Specified and General Emissions and Discharges from Primary Activities conducted on the Prescribed Premises are authorised to be conducted in accordance with the Conditions of this Licence.

Emissions and Discharges caused from other activities not related to the Primary Activities at the Premises have not been Conditioned in this Licence. Emissions and Discharges from other activities at the Premises are subject to the general provisions of the EP Act.

Amendment of licence

The Licence Holder can apply to amend the Conditions of this Licence under s.59 of the EP Act. An application form for this purpose is available from DWER.

The CEO may also amend the Conditions of this Licence at any time on the initiative of the CEO without an application being made.

Amendment Notices constitute written notice of the amendment in accordance with s.59B(9) of the EP Act.

Duration of Licence

The Licence will remain in force for the duration set out on the first page of this Licence or until it is surrendered, suspended or revoked in accordance with s.59A of the EP Act.

Suspension or revocation

The CEO may suspend or revoke this Licence in accordance with s.59A of the EP Act.

Fees

The Licence Holder must pay an annual licence fee. Late payment of annual licence fees may result in the licence ceasing to have effect. A licence that has ceased to have effect due to non-payment of annual licence fees continues to exist; however, it ceases to provide a defence to an offence under s.74A of the EP Act.

Late fees are a component of annual licence fees and should a Licence Holder fail to pay late fees within the time specified the licence will similarly cease to have effect.

Definitions and interpretation

Definitions

In this Licence, the terms in Table 1 have the meanings defined.

Table 1: Definitions

Term	Definition
ACM	means Asbestos Containing Material and has the meaning defined in the 'Guidelines for Assessment, Remediation and Management of Asbestos Contaminated Sites, Western Australia' (Department of Health, 2009)
ACN	Australian Company Number.
Amendment Notice	means an amendment granted under s.59 of the EP Act in accordance with the procedure set out in s.59B of the EP Act.
Annual Period	means a 12 month period commencing from 1 July until 30 June in each year.
Asbestos	The asbestiform variety of mineral silicates belonging to the serpentine or amphibole groups of rock-forming minerals and includes actinolite, amosite, anthophyllite, chrysotile, crocidolite, tremolite and any mixture containing 2 or more of those.
Condition	means a condition to which this Licence is subject under s.62 of the EP Act.
Books	has the same meaning given to that term under the EP Act.
CEO	means Chief Executive Officer. CEO for the purposes of notification means: Director General Department Administering the *Environmental Protection Act 1986* Locked Bag 33 Cloisters Square PERTH WA 6850 info-der@dwer.wa.gov.au
Compliance Report	means a report in a format approved by the CEO as presented by the Licence Holder or as specified by the CEO (guidelines and templates may be available on the Department's website).
Department	means 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.
Department Request	means a request for Books or other sources of information to be produced, made by an Inspector or the CEO to the Licence Holder in

	writing and sent to the Licence Holder's address for notifications, as described at the front of this Licence, in relation to: (a) compliance with the EP Act or this Licence; (b) the Books or other sources of information maintained in accordance with this Licence; or (c) the Books or other sources of information relating to Emissions from the Premises.
Discharge	has the same meaning given to that term under the EP Act.
DWER or DER	Department of Water and Environmental Regulation.
Emission	has the same meaning given to that term under the EP Act.
Environmental Harm	has the same meaning given to that term under the EP Act.
EP Act	means the *Environmental Protection Act 1986* (WA).
EP Regulations	means the *Environmental Protection Regulations 1987* (WA).
Implementation Agreement or Decision	has the same meaning given to that term under the EP Act.
Inspector	means an inspector appointed by the CEO in accordance with s.88 of the EP Act.
Licence	refers to this document, which evidences the grant of a Licence by the CEO under s.57 of the EP Act, subject to the Conditions.
Licence Holder	refers to the occupier of the premises being the person to whom this Licence has been granted, as specified at the front of this Licence.
Material Environmental Harm	has the same meaning given to that term under the EP Act.
Pollution	has the same meaning given to that term under the EP Act.
Premises	refers to the premises to which this Licence applies, as specified at the front of this Licence and as shown on the map in Schedule 1 to this Licence.
Prescribed Premises	has the same meaning given to that term under the EP Act.
Primary Activities	refers to the Prescribed Premises activities listed on the front of this Licence.
Serious Environmental	has the same meaning given to that term under the EP Act.

Harm	
Unreasonable Emission	has the same meaning given to that term under the EP Act.
Waste	has the same meaning given to that term under the EP Act.

Interpretation

In this Licence:

(a) the words ‘including’, ‘includes’ and ‘include’ will be read as if followed by the words ‘without limitation’;

(b) where any word or phrase is given a defined meaning, any other part of speech or other grammatical form of that word or phrase has a corresponding meaning;

(c) where tables are used in a Condition, each row in a table constitutes a separate Condition;

(d) any reference to an Australian or other standard, guideline or code of practice in this Licence means the version of the standard, guideline or code of practice in force at the time of granting of this Licence and includes any amendments to the standard, guideline or code of practice which may occur from time to time during the course of the Licence; and

(e) unless specified otherwise, any reference to a section of an Act refers to that section of the EP Act.

Conditions

Environmental Compliance

1. The ***Licence Holder*** must comply with the ***EP Act*** and all regulations prescribed under the EP Act applicable to the ***Premises***, including:

(a) the duties of an occupier under s 61;

(b) the duty to notify the ***CEO*** of ***Discharges*** of ***Waste*** under s 72; and

(c) not causing, or doing anything that is likely to cause, an offence under the EP Act,

except where the Licence Holder does something in accordance with a ***Condition*** which expressly states that a defence under s 74A of the EP Act may be available.

Throughput restrictions

2. The Licence Holder is permitted to undertake the activities in Column 1 of Table 2 at volumes not exceeding those in Column 2 of Table 2, as defined within Table 2.

Table 2. Throughput restrictions

Column 1	**Column 2**
Category	**Throughput volume**
Category 12	500,000 tonnes per annual period
Category 13	100,000 tonnes per annual period
Category 62	100,000 tonnes per annual period
Category 63	100,000 tonnes per annual period

3. The Licence Holder must monitor and record the volumes of incoming Waste and outgoing waste types at the Premises for the parameters stipulated in column 1 of Table 3, using the units specified in column 2 of Table 3 at the frequency specified in column 3 of Table 3.

Table 3. Monitoring of inputs and outputs

Column 1	**Column 2**	**Column 3**
Parameter	**Units**	**Frequency**
Waste Inputs – ***Inert waste type 1*** *(solid waste meeting acceptance criteria for Class I landfills Including: Construction and demolition waste, Clean fill. Excluding tyres or asbestos)*	m^3 and calculated tonnes – a conversion factor of 1.3 tonnes in every m^3 must be used to calculate tonnage.	Each load type arriving at the Premises.
Waste Outputs – Waste type as defined in the ***Landfill Definitions***	Tonnes – as measured by certified load scales on wheel loaders OR	Each load type leaving or rejected from the Premises.

Column 1	Column 2	Column 3
Parameter	**Units**	**Frequency**
	m^3 and calculated tonnes – a conversion factor of 1.3 tonnes in every m^3 must be used to calculate tonnage.	

Infrastructure and equipment

4. The Licence Holder must ensure that the placement of all processing equipment and processing operations occur on the northern side of the premises, to enable a minimum 200 m buffer to sensitive residential receptors.

5. The Licence Holder must ensure that the infrastructure and equipment specified in Column 1 of Table 4 is maintained in good working order and operated in accordance with the requirements specified in Column 2 of Table 4.

Table 4: Infrastructure and equipment controls table

	Column 1	Column 2
	Site infrastructure and equipment	**Operational requirements**
1	Access and operation of premises infrastructure/ equipment	All landfill works must only be carried out between the hours of 6:30am to 5:00pm Mondays to Saturdays and not at all on Sundays or Public Holidays. Crushing, processing and compacting must not occur prior to 7:00am on any given day, and must not be carried out on Sundays and Public Holidays. Maintain a minimum groundwater separation distance of 3 m from the highest known groundwater level. Locate the base of all crushing/ processing equipment no higher than 8 m AHD below pre-existing ground levels.
2	Security and signage	Maintain the 1.8 m diamond mesh fencing along the perimeter of the premises boundary. All entry/ exit points must include lockable gates when premises is not manned.
3	Water truck fitted with a minimum 10,000L water tank, high volume side and rear spray bars and hose to ensure complete coverage of stockpiles, roadways and to assist while tipping.	Roadways and stockpiles must be kept damp through targeted wetting when visible dust lift-off is occurring.- Targeted wetting must occur during tipping and when material handling such as reclaiming of Waste from the stockpiles has the potential to generate fugitive dust.
4	Bore and storage tank and fill stand pipe	To allow fast fill of water truck/s
5	Water sprayers/ sprinklers on stockpiles	Series of sprinklers on top of stockpiles to supplement wetting by water truck sprays to prevent dust particulates becoming air borne. Effective sprinklers on the stockpiles need to achieve an appropriate coverage and produce a fine water droplet cloud to effectively suppress airborne dust

		particles. The positioning and setup of sprinklers must effectively deliver water to stockpiles. Sprinklers to be maintained in good working order to ensure continuous availability.
6	Fixed water sprays on machines (screening, crushing and stacking) and associated conveyors.	(a) Series of sprays at appropriate locations on machines and conveyors to prevent fugitive dust from processing and handling of *Waste*. Effective sprays on machines need to produce water droplets that are fine enough to form a droplet cloud and interact with dust particles. Water must be effectively delivered to stockpiles and must not be blown away by wind. (b) Sprays are to be maintained in good working order to ensure availability during operation of equipment.
7	Noise and dust management	(a) All earthen bunding and vegetation buffers must be maintained at all times to assist in the management and mitigation of fugitive dust and noise emissions from the premises. (b) Earthen bunds must be a minimum of 3 m above pre-existing ground levels along the western, southern and eastern edge of the landfill area. (c) Vegetation buffers are to be at least 40 m wide from Kerosene Lane and 20 m wide from the eastern and western boundaries. (d) All trucks leaving the premises must be effectively covered so as to prevent the lift off of visible dust.
8	Hydrocarbon storage	(a) Any refueling of equipment or trucks must take place either over an impermeable, bunded, hardstand surface or using drip trays that can capture any potential spills. (b) All spills must be remediated and contaminated solid waste disposed of to a licensed facility. (c) Spill kits are to be available for use for any minor spills. (d) All hydrocarbons to be stored in compliance with AS 1940:2017 and AS 1692.

Waste type restrictions and waste classification

6. The Licence Holder must only accept the following types of Waste onto the Premises for storage, sorting or crushing:

(a) Inert Waste Type 1 (construction and demolition waste, excluding tyres); and

(b) Clean Fill.

7. Waste must not be accepted onto the Premises where:

(a) it contains visible Asbestos or ACM; or

(b) where the Licence Holder has not obtained a signed declaration from the supplier of the source material with each delivery that:

(i) sets out the details of the Waste source, carrier, registration number of the vehicle and the date of delivery;

(ii) sets out the Waste type and volume being delivered; and

(iii) confirms that the load does not contain any Asbestos or ACM.

8. The Licence Holder must maintain a clearly visible sign specifying 'No Asbestos' at the entry to the Premises.

9. The Licence Holder must visually inspect all loads of Waste when they arrive at the Gatehouse of the Premises, prior to unloading, to determine the risk of a load containing Asbestos or ACM and each load shall be classified in accordance with the risk classification procedure outlined in Attachment 1 (Classified Load).

10. Where the visual inspection identifies that Waste contains Asbestos or ACM or is otherwise not permitted by the Licence, the Licence Holder must:

(a) reject the Waste for acceptance;

(b) record the details of the Waste source, Waste carrier, registration number of the vehicle and the date of rejection; and

(c) maintain accurate and auditable records of all rejected loads on the Premises.

11. The Licence Holder must retain all documentation recorded under Conditions 10 and 17 on the Premises or at the Head Office for a minimum period of three years.

Acceptance and unloading inspection

12. Upon acceptance of Waste the Licence Holder must direct each Classified Load to an unloading area at the site for further inspection. The unloading area must be appropriately designed and constructed to ensure the Classified Load will not mix with other Waste prior to inspection.

13. At the unloading area, the Licence Holder must keep all stockpiles of Waste wetted down throughout the inspection process using the Infrastructure specified in Table 4.

14. The Licence Holder must visually inspect loads classified as Low Risk Loads, while the material is being unloaded to determine whether any Asbestos can be identified.

15. If Asbestos is suspected or identified, the load must be reclassified as a High Risk Load and the Licence Holder must implement the High Risk Load procedure set out in Attachment 2.

16. High Risk Loads must be visually inspected and handled in accordance with the procedure set out in Attachment 2.

17. The Licence Holder must maintain accurate and auditable records of all loads that have been inspected and suspected or found to contain Asbestos. Those records must show the source and originating site and actions taken to address the issue with the source customer.

18. The Licence Holder must continue to visually inspect Waste on the Premises at all stages of the storage, sorting and screening process. Suspected Asbestos identified at any stage of the process must be handled in accordance with the procedure set out in Attachment 2 and records maintained in accordance with Condition 18.

Dust management

19. The Licence Holder must ensure that all stockpiles on the Premises:

(a) do not exceed 7 metres in height at any point from the base of the stockpile;

and

(b) have a minimum distance of 1.5 metres separation from the base of each stockpile to the Premises boundary at all times.

20. The Licence Holder must ensure that when monitoring identifies emissions described in column 1, greater than the emission levels described in column 2, that the specified actions in column 3 of Table 5 are undertaken.

Table 5: Dust emission specified actions Table

Column 1	Column 2	Column 3
Emission parameter	**Emission level**	**Specified action**
Particulates (Static/Depositional monitoring)	4g/m^2/month[1]	Assess the operational effectiveness of dust management measures on the Premises and if required undertake improvements to ensure dust management measures are operating to their design specification as detailed in Table 4.
Dust	N/A	Immediately cease all activities causing visible dust lift off in high winds where dust management measures have not prevented visible dust lift off.

Note: As defined by the 'NSW Approved Methods for the Modelling and Assessment of Air Pollutants in New South Wales, 2005' (as amended).

Product testing and supply

21. The Licence Holder must ensure that Asbestos content testing of any waste processed under Category 13 operations which is sold or otherwise made available for use outside the Premises is undertaken in accordance with the Product testing procedures specified in Attachment 3.

22. The Licence Holder must ensure that processed waste which is the subject of Condition 21 is not made available for use outside of the Premises unless it has been tested in accordance with Condition 21 and shown to conform to the product specification of 0.001% Asbestos weight for weight (w/w) for Asbestos content (in any form) within any recycled products.

Emissions

23. The Licence Holder must not cause any Emissions from the Primary Activities on the Premises except for specified Emissions and general Emissions described in Column 1 of Table 6 subject to the exclusions, limitations or requirements specified in Column 2 of Table 6.

Table 6: Authorised Emissions table

Column 1	**Column 2**
Emission type	**Exclusions/Limitations/Requirements**
Specified Emissions	
Nil	Subject to compliance with *c*onditions of the Licence.
General Emissions (excluding Specified Emissions)	
Emissions which: • arise from the Primary Activities set out in Schedule 2 (Dust and Noise);	Emissions excluded from General Emissions are: • Unreasonable Emissions; or • Emissions that result in, or are likely to result in, Pollution, Material Environmental Harm or Serious Environmental Harm; or • Discharges of Waste in circumstances likely to cause Pollution; or • Emissions that result, or are likely to result in, the Discharge or abandonment of Waste in water to which the public has access; or • Emissions or Discharges which do not comply with an Approved Policy; or • Emissions or Discharges which do not comply with a prescribed standard; or • Emissions or Discharges which do not comply with the conditions in an Implementation Agreement or Decision; or • Emissions or Discharges the subject of offences under regulations prescribed under the EP Act, including materials discharged under the Environmental *Protection (Unauthorised Discharges) Regulations 2004*.

Noise emission controls

24. The Licence Holder must ensure that only broadband reversing alarms are used within the Premises.

Emissions monitoring

25. The Licence Holder must conduct monitoring using the equipment sited at the locations specified in column 1, for the emission parameters set out in column 2, over the averaging period specified in column 3, at the frequency specified in column 4 using the method specified in column 5 of Table 7.

Table 7: Monitoring of Dust Emissions Table

Column 1	**Column 2**	**Column 3**	**Column 4**	**Column 5**
Equipment Location	**Emission parameter**	**Averaging Period**	**Frequency**	**Method**
Static (depositional) dust monitors located on the eastern, western and southern boundary of the premises.	Particulates	N/A	Monthly	***AS/NZS 3580.10.1:2016***
Video monitoring located along the southern boundary of the premises	Particulates	N/A	Ongoing	N/A
Meteorological monitoring - wind direction and velocity	N/A	Operating hours	Daily whilst in operation	N/A

26. The Licence Holder must ensure that all laboratory samples are submitted to and tested by a laboratory with current NATA accreditation for the parameters being measured.

Information

27. The Licence Holder must comply with a Department Request, within 14 days from the date of the Department Request or such other period as agreed to by the Inspector or the CEO.

Record-keeping

28. The Licence Holder must maintain accurate and auditable Books including the following records, information, reports and data required by this Licence:

(a) the calculation of fees payable in respect of this Licence;

(b) the maintenance of infrastructure required to ensure that it is kept in good working order in accordance with Condition 5 of this Licence;

(c) monitoring undertaken in accordance with this Licence; and

(d) complaints received under Condition 29 of this Licence.

In addition, the Books must:

(e) be legible;

(f) if amended, be amended in such a way that the original and subsequent amendments remain legible and are capable of retrieval;

(g) be retained for at least 6 years from the date the Books were made; and

(h) be available to be produced to an Inspector or the CEO.

29. The Licence Holder must record the number and details of any complaints received by the Licence Holder relating to its obligations under this Licence and its compliance with Part V of the EP Act at the Premises, and any action taken by the Licence Holder in response to the complaint. Details of complaints must include:

(a) an accurate record of the concerns or issues raised, for example a copy of any written complaint or a written note of any verbal complaints made;

(b) the name and contact details of the complainant, if provided by the complainant;

(c) the date of the complaint; and

(d) the details and dates of the actions taken by the Licence Holder in response to the complaints.

30. The Licence Holder must submit to the CEO, no later than 30 July in each year, an Annual Compliance Report indicating the extent to which the Licence Holder has complied with the Conditions in this Licence, for the previous Annual Period.

31. The Licence Holder must provide to the CEO, no later than 30 July in each year, an Annual Monitoring Report for the previous annual period which includes:

(a) a summary of the particulate and Asbestos monitoring at the Premises required by Conditions 22 and 25, and any actions undertaken to rectify issues identified;

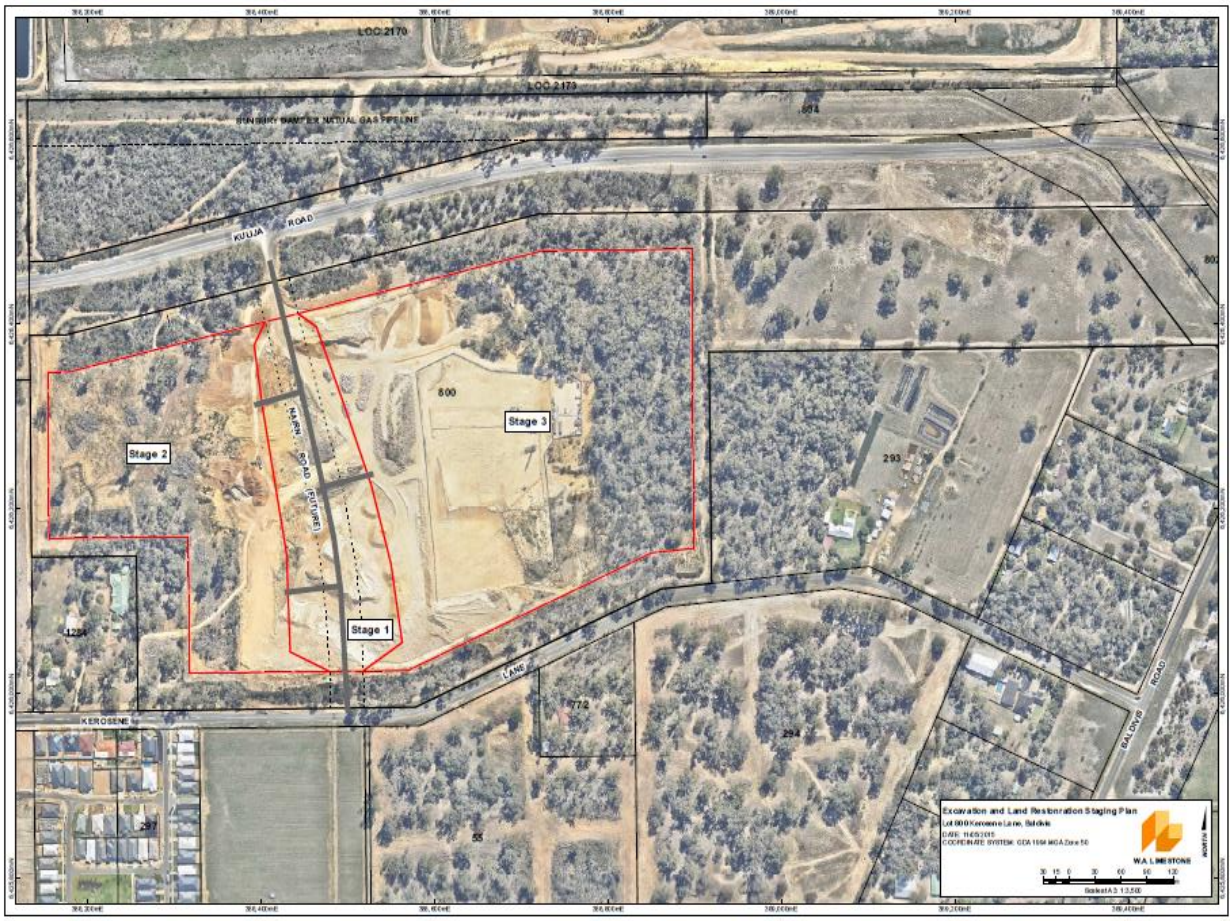
(b) a summary of the Monitoring of Inputs and Outputs required by Condition 4; and

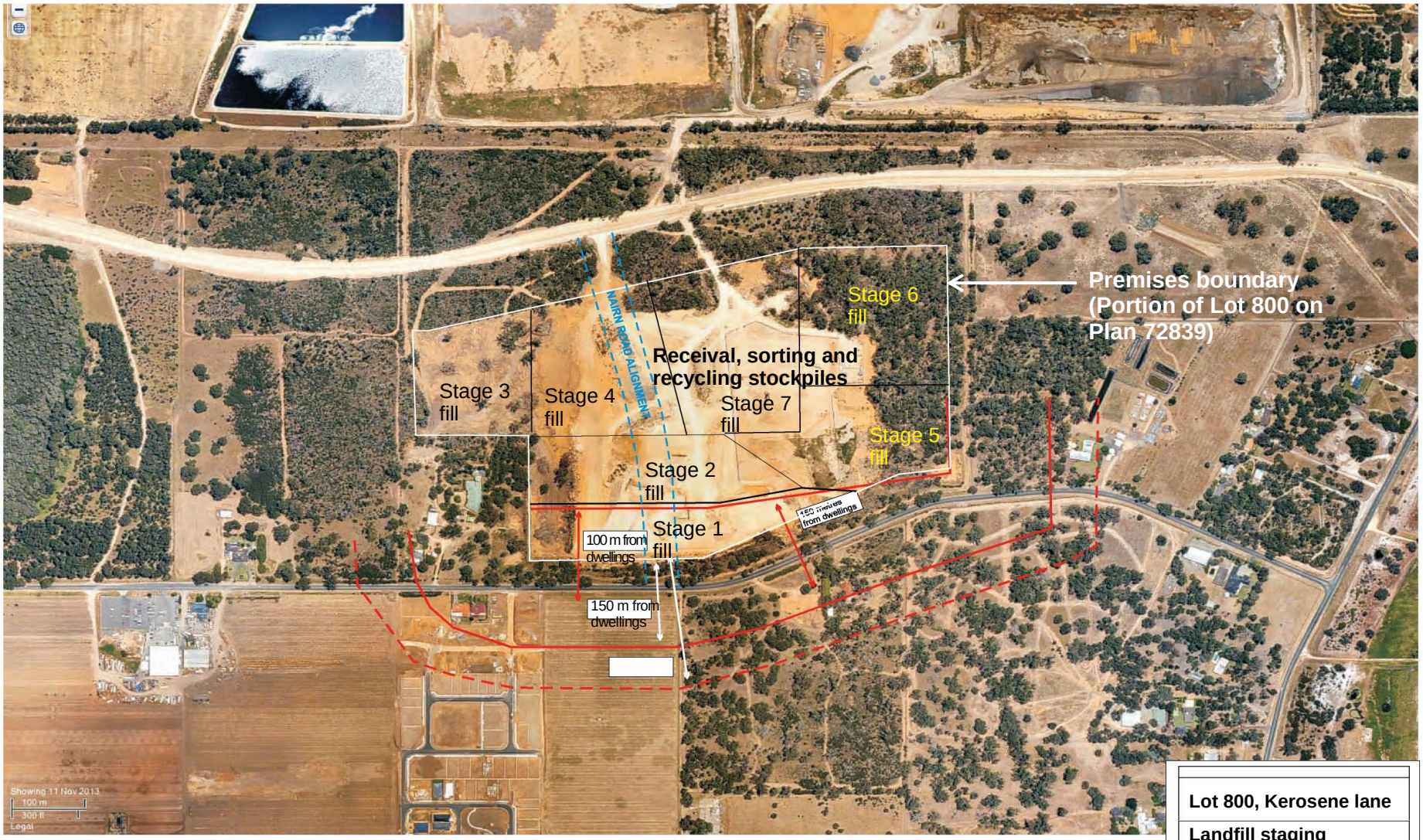
(c) a summary by month of the cumulative throughput for the Premises operation as defined by Condition 2.

Schedule 1: Maps

Premises map and layout

The Premises map is shown below. The Premises boundary is shown in red.
The Premises layout is shown over.




Premises boundary (Portion of Lot 800 on Plan 72839)
Stage 6 fill
Receival, sorting and recycling stockpiles
NAIRN ROAD ALIGNMENT
Stage 3 fill
Stage 4 fill
Stage 7 fill
Stage 5 fill
Stage 2 fill
Stage 1 fill
100 m from dwellings
150 m from dwellings
Showing 11 Nov 2013
100 m
300 ft
Legal
Lot 800, Kerosene lane
Landfill staging

Attachment 1 - Asbestos Risk Classification Procedure

To determine the risk of an incoming load containing ***Asbestos***, the ***Gatehouse*** operator should establish:

- The source of the load including the site location and if possible, the age of any building or structure from which the ***Waste*** originated;
- The content/***Waste*** types within the load; and
- The type of load.

Where the source of the load can clearly be determined to be a building or structure constructed after 1990 then the load can be considered to represent a low risk of ***Asbestos*** contamination. Where the ***Waste*** originates from a building constructed before 1990 or there is uncertainty over this issue, the risks associated with ***Asbestos*** in the load must be established in line with the Risk Classification Matrix below.

Risk Classification Matrix			
	Type of load		
Material Type	**Commercial**	**Public, utes, cars and trailers***	**Skip bins**
Clean Concrete (without formwork)	Low	High	High
Clean Brick	Low	High	High
Clean Bitumen / Asphalt	Low	High	High
Mixed Construction waste	High	High	High
Mixed Demolition waste	High	High	High

* if it is possible to view the entire load of incoming C & D material (eg a small trailer with a shallow load, then consideration may be given to classifying these loads as low risk

(Risk Matrix Classification *adapted from WorkSafe Victoria 2006 and WMAA 2009*)

(Derived from Section 3.3 of the DER Asbestos Guidelines, pages 10 – 11)

Attachment 2 – High Risk Load Procedure

- ***High Risk Loads*** must be unloaded and spread over a sufficiently large area to enable a comprehensive visual inspection of all sides of the material to be undertaken.
- If ***Asbestos*** is suspected or detected, the load must be isolated, kept wet and once appropriately contained in accordance with the *Environmental Protection (Controlled Waste) Regulations 2004,* and redirected to an appropriately authorised disposal facility.
- Where suspect ***ACM*** is identified within a load and is not capable of being easily removed by hand, the load must be rejected and should be isolated, kept wet and once appropriately contained in accordance with the Asbestos Factsheet in Attachment 4, and redirected to an appropriately authorised disposal facility.
- Where suspected ***ACM*** fragments capable of being easily removed by hand are identified in a load, the suspect ***ACM*** must be removed from the load and either:
    1. Appropriately isolated and covered for ***Asbestos*** testing. If testing of representative samples confirms the material is ***ACM*** it must be redirected to an appropriately authorised disposal facility. If testing confirms the material is not ***ACM*** the ***Waste*** can be added to the stockpile awaiting further processing; or
    2. Assumed to be ***ACM*** and redirected to an appropriately authorised disposal facility.

1 All suspected or assumed ***ACM*** must be segregated. Material must be clearly labelled, kept secure and sufficiently contained to prevent the release of ***Asbestos*** including wind blown fibres.

2 Once all suspected or assumed ***ACM*** has been removed from a load in line with the above procedure, the residual ***Waste*** can be added to the stockpile for further processing.

3 Records must be kept to ensure that the process from receipt of C&D material to the completion of the unloading procedure is auditable and that any loads found to contain suspect ***Asbestos*** will be traced back to the customer and originating site.

(Derived from Section 4.3 of the DER Asbestos Guidelines, page 12)

Attachment 3 – Asbestos Monitoring and Testing

Product testing and supply

The testing procedures detailed in this attachment have application to the three main recycled products:

1. Recycled drainage rock 20-27mm;
2. Recycled sand, screened to <10mm; and
3. Recycled road-base, <19mm.

Stockpile inspection and sampling

- No sampling is required for recycled drainage rock, other than to determine by laboratory analysis if necessary whether a suspect fragment is ***Asbestos***.
- For recycled road-base and screened sand, sampling is necessary and must be spread evenly over the whole stockpile surface or samples may be taken at regular intervals (as per conveyor sampling) during construction of the stockpile. Suspect ***ACM*** or areas must be targeted for sampling.
- Sampling of road base and screened sand products must occur at a minimum rate of 40 locations per 4000 tonnes or 14 samples per 1000m^3 of ***Product***.

Conveyor sampling

- Sampling of road base and screened sand ***Products*** must occur at a minimum rate of 1 sample per 70m^3 of a ***Product*** output. Suspect ***ACM*** or areas must be targeted for sampling.

Sample treatment

- Each sample collected must be at least 10 litres in volume and then be divided into 2 size fractions (>7mm and <7mm) in the field by sieving through a 7mm screen or spread out for inspection on a contrasting colour fabric. The >7mm fraction should be examined for any suspect ***ACM*** and this be retained to calculate the level of contamination.
- The <7mm fraction will need to be a minimum 500 ml, be wetted, and submitted for laboratory analysis. This sample size is considered necessary to improve the limit of detection for ***Asbestos*** in the analysis procedure.

Reduced Sampling Criteria

Once ***Premises*** have demonstrated that their procedures are able to consistently produce recycled ***Product*** that meets the ***Product*** specification and undertake their activities to a high standard, DER may authorise a reduced ***Product*** testing rating including down to 5 locations per 4,000 tonnes (1 sample per 600m^3) of ***Product***.

The criteria that ***DER*** will use to consider and determine a reduction in ***Product*** sampling frequency are:

1. Activities at the ***Premises*** have been validated through a ***DER*** site inspection or audit to comply with the DER Asbestos Guidelines;
2. ***DER*** has confirmed through an inspection or audit that the conditions of the ***Licence*** are being met;
3. ***DER*** has not undertaken any enforcement action in relation to the activities at the ***Premises*** in the last 6 months;

4. ***Product*** testing has demonstrated that the ***Product*** specification has been consistently achieved at the ***Premises*** for a continuous 6 month period;
5. The presence of mitigating factors such as best practice management measures, high control of source material or use of the ***Product*** for low risk purposes;
6. The quantity of ***Waste*** processed in the last 6 months and the different sources/types of material processed at the ***Premises***; and
7. Department of Health (DoH) has agreed to the reduction in ***Product*** sampling rate at the ***Premises***.

All requests for reduced ***Product*** sampling rate must be submitted in writing to the ***CEO***.

DER will refer all requests to the DoH and operators must ensure that all requests include sufficient evidence, particularly in relation to ***Product*** testing, to support compliance with the above criteria.

Proponents should note however, that despite premises meeting the above reduced sampling criteria, there may be occasions where a reduced sampling rate is not approved by ***DER***. This may occur for example where the site is close to sensitive receptors, contentious and/or there is a need to provide public confidence in the activities at the site.

Where a reduced sampling rate is approved at ***Premises***. ***DER*** will provide written notification of the approval and will continue to closely monitor that ***Premises*** to ensure it remains compliant with the reduced sampling criteria. ***DER***'s monitoring of ***Premises*** will be further supported by annual process audits and the results of the ***Product*** sampling.

DER will withdraw approval to implement a reduced sampling frequency where the reduced sampling criteria are not being met on an on-going basis. Where ***DER*** withdraws approval for a reduced sampling frequency, proponents will be provided with the reasons for the withdrawal.

In the event that approval for a reduced sampling rate is withdrawn by ***DER***, proponents will be required to make a new reduced sampling frequency request and demonstrate that they:

1. Have implemented appropriate measures to prevent a re-occurrence of the non-compliance that caused the previous agreement for a reduced sampling frequency to be withdrawn; and
2. That the ***Product*** specification (sampled at the 40 samples per 4000 tonnes rate) has been consistently met for a 6 month period following the implementation of the measures identified above.

Sample analysis method

- **>7mm sample fractions –**
    - ***Asbestos*** concentrations (***ACM*** and ***Asbestos***) should be calculated in accordance with the methods detailed in section 4.1.7 of DoH, 2009, Guidelines for the Assessment, Remediation and Management of Asbestos-Contaminated Sites in Western Australia. Averaging ***Asbestos*** levels across the stockpile is not appropriate and ***Asbestos*** levels within each sample should be reported.
- **<7mm sample fractions**
    - Each <7mm sample fraction must be analysed for ***Asbestos*** and ***ACM***.
    - ***Asbestos*** analysis must be undertaken by an independent NATA certified laboratory and comply with *Australian Standard Method for the Qualitative Identification of asbestos in bulk samples* (AS4964-2004) or be demonstrated to be able to achieve the equivalent level of results to

this Australian Standard.

AS4964-2004 is currently the only method in Australia that has NATA certification; however the practicable level of detection for this standard polarized light microscopy method (PLM) and dispersion staining (DS) is 0.01%w/w. It is possible however, to measure ***Asbestos*** contamination at or lower than 0.001% w/w where an increased sample size is used, however ***DER*** recognises that any reporting of concentrations below 0.01%w/w will be outside the conditions set by NATA.

Therefore, to determine whether recycled products meet the product specifications for ***Asbestos*** content, samples must be a minimum of 500mL in size. Proponents must adopt one of the following analytical approaches:

1. Detected/non-detected – where any quantity of ***Asbestos*** is detected by the PLM method it must be assumed, without further analysis, to be in concentrations above the product specification limit of 0.001%w/w. A weight of evidence approach may be adopted i.e. the frequency and occurrence of other positive results in the stockpile can be taken into account to determine whether the stockpile being assessed is considered to meet the product specification or not; or
2. Where any quantity of ***Asbestos*** is detected by the PLM method, the sample is subject to further testing in the form of a semi-quantitative method with a lower level of detection for ***Asbestos***. Either of the following methods are considered acceptable by ***DER***:
    4 The extraction and weighing of fibre bundles or fibre cement material from the total sample; and
    5 Measuring the width and length (i.e. volume) of individual fibre by Phase Contrast Microscopy (PCM) and calculating the weight of fibres in the extracted sub-sample.

Interpreting inspection and sampling results

- If the visual inspection, sieve sample or analytical results identify ***Asbestos*** above or possible above the 0.001%w/w criteria, then that stockpile or product process should be deemed potentially contaminated and considered for off-site disposal as ***Asbestos*** waste, or subject to further actions to remediate it or to demonstrate its acceptability by further assessment. A record should be made of the decision-making and action taken (e.g. off-site disposal, further assessment undertaken etc.) in relation to that stockpile.
- In addition to the above, where ***Asbestos*** is identified above or possibly above the 0.001%w/w criteria, an investigation into the likely cause for the presence of ***Asbestos*** in the ***Product*** should be undertaken and measures implemented to prevent a reoccurrence. A record of the investigation and its findings together with the details of any preventative measures implemented at the site should be made.

(Derived from Section 4.3 of the DER Asbestos Guidelines, pages 15 - 20)

Attachment 4 – Asbestos Fact Sheet

Appendix A: Asbestos Factsheet

TRANSPORTATION AND DISPOSAL OF ASBESTOS CONTAINING MATERIAL

The transportation and disposal of asbestos-containing material from commercial, industrial and other activities is regulated by the Environmental Protection (Controlled Waste) Regulations 2004 (Regulations). The Regulations apply obligations on the waste transporter to ensure the waste is safely transported to an approved location.

The Regulations define what is considered to be asbestos containing material for the purposes of the Regulations. This definition includes material which contains 0.001% or more of asbestos fibres weight/weight.

Please note that removal, handling, signage, security and onsite packaging of asbestos contaminated material must be carried out in accordance with the Local Government Authority, Department of Health and WorkSafe requirements. Contact the relevant authority for further information (refer to the end of this factsheet).

TRANSPORTATION OF ASBESTOS-CONTAINING MATERIAL (ACM)

The Regulations require asbestos containing material to be:

1. Separated from other material for disposal where that is reasonably practicable;
2. Wrapped and contained in a manner that prevents asbestos fibres entering the atmosphere during transportation on a road; and
3. Labelled or marked with the words "CAUTION ASBESTOS" in letters no less than 50 millimetres high on the individual packages and the transport container.

Further guidance on the transportation of asbestos containing materials is set out in the Code of Practice for the Safe Removal of Asbestos 2nd Edition [NOHSC:2002(2005)] and the *Health (Asbestos) Regulations (1992 or as amended)*. This Code of Practice recommends that:

- ACM is sealed in heavy duty 200 μm (minimum thickness) polythene plastic and clearly labelled with the appropriate signage warning.
- All drums or bins used to store and dispose of ACM should be in good condition, with lids and rims in good working order. The drums or bins should be lined with polythene plastic (200 μm minimum thickness) and be clearly labelled.
- If a waste skip bin, vehicle tray or similar container is used, the ACM should be double bagged before being placed in to the container or sealed in double-lined, polythene plastic (200 μm minimum thickness), and be clearly labelled. In the case of bulk loads such as contaminated soil an alternative is to double line the vehicle tray with the polythene and completely cover the load with a close fitting durable material such as the double layered polythene or a tarpaulin.

- In the case of ACM in the form of contaminated soil, it needs to be wetted down prior to removal and loading onto vehicle or bin.

DISPOSAL OF MATERIAL CONTAINING ASBESTOS

All material containing asbestos must be disposed at a disposal site appropriately licensed or registered under *Part V* of the *Environmental Protection Act 1986* to accept asbestos waste.

A person who disposes of material containing asbestos other than at a licensed disposal site commits an offence.

Receipts for the disposal of ACM should be retained or passed on to the disposal client to assist any subsequent regulatory investigation.

DUTY TO NOTIFY OTHERS OF THE PRESENCE OF ASBESTOS

A person who takes material containing asbestos to a disposal site **MUST** inform the operator of the facility that the material is, or contains asbestos waste. This notification should be provided in a written form however where notification is verbally provided the disposal site should make a written record of the notification.

PENALTIES FOR NON-COMPLIANCE

Penalties apply for offences committed under the *Environmental Protection Act 1986* and the Environmental Protection (Controlled Waste) Regulations 2004.

DISPOSAL SITES FOR MATERIAL CONTAINING ASBESTOS

For a map of landfills within the Metropolitan area visit the WA Waste Authority website at: www.zerowastewa.com.au/disposal/community/perthlandfills

Please contact the Local Government Authority or the facility on the number provided for more information before visiting the disposal site. In Regional areas contact the Local Government Authority for disposal site locations. Please note **this list is subject to change and is only intended as a guide.**

COUNCIL OR COMPANY	ADDRESS	SUBURB	POST CODE	PHONE NUMBER	LANDFILL CLASS
Buller Road Refuse Disposal Site	Lot 1701 Buller Rd	Waroona	6215	9733 1277	II
City of Armadale	Hopkinson Rd	Forrestdale	6112	9399 3935	II
City of Canning	Ranford Rd	Canning Vale	6155	9321 0606	II & III
City of Cockburn	Rockingham Rd	Henderson	6166	9411 3444	II
City of Rockingham	Millar Rd	Baldivis	6171	9524 2053	III
City of Stirling	238 Balcatta Rd	Balcatta	6021	9345 8555	Transfer station
Eastern Metro Regional Council	Toodyay Rd (Red Hill)	Gidgegannup	6083	9574 6235	III & IV
Mindarie Regional Council	1700 Marmion Ave	Mindarie	6030	9306 6300	II
RCG Pty Ltd	Lot 70/717 Hester Ave	Neerabup	6031	9407 5069	I
Shire of Gingin	Lot 10 Cockram Rd	Gingin	6503	9575 2211	II
South Perth Waste Transfer Station	Cnr Hayman Rd Thelma St	Como	6152	9367 2492	Transfer station
Wastestream Management	Ratcliffe Rd	Kwinana	6167	9439 1300	I
West Australian Landfill Services	Lot 200 and Lot 201 Shale Rd	South Cardup	6201	9525 5355	II
Western Metropolitan Regional Council	Cnr Lemnos & Brockway Rd	Shenton	6008	9384 2544	Transfer station

FURTHER INFORMATION AND CONTACTS

Local Government Authority
For information on demolition licence requirements and household queries contact an Environmental Health Officer at your Local Government Authority.

Department of Health
For information on asbestos cement products in your home, asbestos contaminated sites and frequently asked questions on asbestos, visit the Department of Health website at: www.public.health.wa.gov.au/2/867/2/asbestos.pm or Tel: 9388 4999.

Department of Consumer and Employment Protection – Worksafe
For information about asbestos in the workplace, licensed asbestos removalists and appropriate handling of asbestos including safety wear, visit the Worksafe website at:

www.commerce.wa.gov.au/WorkSafe/Content/Safety_Topics/Asbestos/ or Tel: 1300 307 877.

Decision Report

Application for Licence

Division 3, Part V *Environmental Protection Act 1986*

Licence Number	L9064/2017/1
Applicant	P.M.R Quarries Pty Ltd
ACN	008 866 448
File Number	DER2017/000714
Premises	Baldivis Pit Kerosene Lane BALDIVIS WA 6171 Legal description - Portion of Lot 800 on Plan 72839 As defined within Schedule 1 of the Licence
Date of Report	8 December 2017
Status of Report	Final

Document control

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Council Resolution

That Council ***APPROVE*** the application seeking Planning Approval for Landform Reconstruction by Inert Landfill at Lot 800 Kerosene Lane, Baldivis, subject to the following conditions:

1. This approval is valid for a period of 10 years only commencing on the date of the issue of this approval.
2. Only one access is permitted from the future Nairn Drive to the subject site at any one time.
3. Prior to the construction of an access to the site from the future Nairn Drive, engineering drawings and specification are to be submitted to and approved by the City of Rockingham. Construction of the access must in accordance with the approved engineering drawings and specifications.
4. No material is to be deposited on the site other than sand, clay, soils, bricks or concrete and other similar inert building waste.
5. Without limiting Condition No.4, no putrescible material, asbestos, or contaminated or hazardous material is to be deposited on the site.
6. Filling of land must occur in accordance with the revised Staging Plan dated 07.05.2015.
7. Each stage of the landfill area is to be rehabilitated when final contour levels and grades for each stage have been completed in accordance with the application and the rehabilitation is to commence immediately and be completed within 12 months of the completion of each stage. For the purpose of this condition rehabilitation means the covering of the inert fill with clean sand fill which is stabilised with grass seed to the satisfaction of the City.
8. Prior to the commencement of any development, a management plan prepared by a suitably qualified person must be submitted to the City for its approval which plan addresses:
   (i) all site operations;
   (ii) site supervision arrangements;
   (iii) truck movements and access and driver supervision arrangements;
   (iv) prevention and management of spill material on the site and on roads; and
   (v) maintenance of plant and equipment to prevent spillage of lubricants and fuel.
9. Except to the extent of inconsistency with any other of these conditions, the undertaking of the landfill operations on the site is to comply in all respects and at all times with the approved management plan and any subsequent amendments to that management plan as may be directed in writing to the owner(s) of the land by the City.

CONFIRMED AT A COUNCIL MEETING HELD ON TUESDAY 25 AUGUST 2015

MAYOR (B W SAMMELS)

10. (i) Prior to the commencement of any development, a pre-works geotechnical report prepared by a suitably qualified person must be submitted to the City which plan addresses:
    (a) fill material composition and quality;
    (b) on-site drainage; and
    (c) compaction of fill material to appropriate staged lifts to the full depth in accordance with AS:3798-2007 within the land included in the Other Regional Road Reserve (future Nairn Drive).

    (ii) A post geotechnical report certifying that all landfill works have been carried out in accordance with the pre-works geotechnical report which must be submitted to the City.

11. The dust management plan prepared by Landform Research and dated November 2013 must be complied with at all times.

12. At all times:
    (i) all stockpiles of materials on the site; and
    (ii) the access road to and all trafficable areas on the site, must be watered down or treated and maintained in a manner which prevents or minimises the generation of airborne dust.

13. (i) The landfill operations must be carried out in accordance with the dust management, suppression and mitigation measures contained in the approved dust management plan.
    (ii) Without limiting Condition 13(i) no visible dust is permitted to leave the site.

14. At all times sufficient water must be accessible on-site to enable dust suppression pursuant to Conditions 12 and 13, if necessary by means of water transported by tanker onto the site.

15. When winds are sufficiently strong to negate the effects of the dust management, suppression and mitigation measures contained in the dust management plan, all landfill operations on the site must cease until conditions improve and compliance can be achieved.

16. In addition to any other condition, if an officer of the City inspects the site and is satisfied that any of the landfill operations on the site are generating an unreasonable amount of dust, or that any of those operations are not compliant with any of the conditions relating to dust emissions (including non-compliance with the dust management measures contained in the dust management plan), the City may direct in writing that:
    (i) an amended dust management plan is submitted and approved; or
    (ii) the activities on the site are brought into compliance with this approval, as the case may be.

    In this condition 'an unreasonable amount of dust' means visible dust crossing the site's boundary and visibly excessive dust on the site.

17. The asbestos management plan prepared by WA Limestone and dated November 2013 must be complied with at all times.

18. Prior to the commencement of development, a noise management plan prepared by a suitably qualified acoustic expert must be submitted to and approved by the City which plan addresses the measures required to be taken to ensure that the requirements of the Environmental Protection (Noise) Regulations 1997 are met.

19. The operator must at all times carry out the operations, including crusher, in accordance with, and must implement the noise management, suppression and mitigation measures contained in the approved Noise Management Plan.

20. Crushing is only to occur in the area within the bunds on the site.

21. All vehicles, equipment and machinery used on the site must not use reversing beepers unless those beepers are required for the safe conduct of operations on the site (in accordance with the provisions of the Occupational Safety and Health Regulations 1996

(WA) and the Environmental Protection (Noise) Regulations 1997 (WA) or it is demonstrated to the written satisfaction of the City that no acceptable alternative exists. Any reversing alarm on any vehicle, piece of equipment or machinery shall be broad-band reversing alarms, for example, 'croakers'.

22. In addition to any other condition, if an officer of the City inspects the site and is satisfied that any of the landfill operations on the site are generating an unreasonable amount of noise, or that any of those operations are not compliant with any of the conditions relating to noise emissions (including non-compliance with the noise management measures contained in the noise management plan), the City may direct in writing that:

    (i) an amended noise management plan is submitted and approved; or

    (ii) the activities on the site are brought into compliance with this approval, as the case may be.

    In this condition 'an unreasonable amount of noise' means noise which exceeds the levels assigned by the Environmental Protection (Noise) Regulations 1997.

23. A bund 3m above the pre-existing natural ground level must be constructed and maintained at all times along the southern, western and eastern edge of the landfill area.

24. Haulage of material on public roads is only permitted between the hours of 7:00am to 5:00pm Monday to Saturday, and not at all on Sunday or Public Holidays. No operation of haulage vehicles on site is permitted on any Sunday or Public Holiday.

25. Haulage vehicles are not permitted to park along Kulija Road at any time.

26. Prior to 1 January 2020 or not later than any earlier time agreed in writing between PMR Quarries and the City of Rockingham, a Survey Plan or Diagram of Survey must be prepared for the land required for the future construction of Nairn Drive on Lot 800 Kerosene Lane, reserved as 'Other Regional Roads' in the Metropolitan Region Scheme, and submitted to the City.

27. The final ground levels of the extraction area must reflect the profile design levels for Kulija Road and Nairn Drive, as determined by the City, unless an alternate profile design level for either road is approved in writing by the City.

28. (i) Prior to the commencement of any development, a groundwater sampling plan prepared by a suitably qualified person must be submitted to the City for the City's approval and implemented consistent with Groundwater Sampling and Analysis - A field guide (geoscience Australia) which plan must address:

        (a) Sampling locations;

        (b) Sampling frequency;

        (c) Sampling methodology (including collection, preservation and storage and testing (depth to groundwater and quality);

        (d) Data management and reporting; and

        (e) Details of the person/group that will undertake sampling.

    (ii) The approved ground water sampling plan must be observed and carried out at all times.

29. All landfill works must maintain a minimum vertical separation distance of 2m to the highest known water table level, for the duration of the development.

30. A 40m vegetation buffer from Kerosene Lane and Kulija Road to the landfill area and a 20m vegetation buffer from the eastern and western side boundaries must be maintained at all times. No removal of vegetation within the buffer areas is permitted.

31. All landfill works must only be carried out between the hours of 6:30am to 5:00pm Mondays to Saturdays and not at all on Sundays or Public Holidays. Crushing, processing and compacting must not occur prior to 7:00am and must not be carried out on Sundays and Public Holidays.

32. By 31 January each year an annual report must be submitted to the City which includes:
    (i) the progress of the inert landfill activities;
    (ii) the progress of rehabilitation undertaken and completed;
    (iii) the measures taken to suppress and minimise dust;
    (iv) the measures taken to suppress and minimise noise; and
    (v) the number and type of community complaints and responses.
33. The City may provide to the operator its comments and any recommendations as to how the operation of the site or the use should be changed in order to address any matter identified in the report.
34. The operator must alter the operation of the site or the manner in which the use is carried out as directed in writing by the City, in response to any comments and recommendations agreed between the operator and the City of Rockingham, and the operation of the site or the use shall thereafter be carried out in accordance with any such direction.

Carried en bloc

Tables

1. Definitions of terms and acronyms

In this Decision Report, the terms in Table 1 have the meanings defined.

Table 1: Definitions

Term	Definition
AACR	Annual Audit Compliance Report
ACN	Australian Company Number
AER	Annual Environment Report
Category/ Categories/ Cat.	Categories of Prescribed Premises as set out in Schedule 1 of the EP Regulations
CS Act	*Contaminated Sites Act 2003* (WA)
Decision Report	refers to this document.
Delegated Officer	an officer under section 20 of the EP Act.
Department	means 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.
EPBC Act	*Environment Protection and Biodiversity Conservation Act 1999*
EPA	Environmental Protection Authority
EP Act	*Environmental Protection Act 1986* (WA)
EP Regulations	*Environmental Protection Regulations 1987* (WA)
Existing Licence	The Licence issued under Part V, Division 3 of the EP Act and in force prior to the commencement of, and during this Review
Licence Holder	P.M.R Quarries Pty Ltd
m^3	cubic metres

Minister	the Minister responsible for the EP Act and associated regulations
MS	Ministerial Statement
mtpa	million tonnes per annum
NEPM	National Environmental Protection Measure
Noise Regulations	*Environmental Protection (Noise) Regulations 1997* (WA)
Occupier	has the same meaning given to that term under the EP Act.
PM	Particulate Matter
PM_{10}	used to describe particulate matter that is smaller than 10 microns (µm) in diameter
Prescribed Premises	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 Revised Licence
Risk Event	As described in *Guidance Statement: Risk Assessment*
UDR	*Environmental Protection (Unauthorised Discharges) Regulations 2004* (WA)
$\mu g/m^3$	micrograms per cubic metre
µg/L	micrograms per litre

2. Purpose and scope of assessment

This assessment has been undertaken as a result of the completion of works undertaken through Works Approval W5824/2015/1, with the submission of a compliance report received by DWER on 24 August 2017. This assessment is in relation to a new Licence for a portion of the existing prescribed premises which was previously operating under L8355/2009/2, and for the inclusion of additional categories, under its operation.

The application for a new Licence was received via email, on 16 May 2017 with the required compliance report for W5824/2015/1 and additional further information received on 24 August 2017.

The original noise assessment was revised by the applicant and was submitted to DWER Noise Branch for re-assessment, prior to finalisation of this Licence (See Appendix 1 relating to all relevant documentation used within this assessment process).

2.1 Application details

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
Email: WA Limestone Kerosene Lane Quarry – Licence Application Part 1 (with 7 attachments) received from Memory Ngucha, Environment & Planning, WA Limestone (Ref. W5824/2015/1)	16 May 2017
Attachment: 20170515 Kerosene Lane Licence Application Form	
Attachment 1A – Certificates of Title	
Attachment 1B – PMR ASIC Company Extract	
Attachment 1C – WAL Hennderdin Letter of Authority	
Attachment 2 – Map of Proposed Premises	
Attachment 5 – Licence L8355/2009/1	
Attachment 7 – Regional Landuse Map	
Email: WA Limestone Kerosene Lane Quarry - Licence Application Part 2 (with 1 attachment).	16 May 2017
Attachment 9B – Land Surface Restoration Report, November 2013	
Email: Kerosene Lane, DER Licence Application, Response to request for further information. Received from Renae Srdarev (WA Limestone).	24 August 2017
Attachment 9 – 20170515 Licence Application Supporting Document – Addendum to Land Surface Restoration Document, Kerosene Lane. Rev 0 (dated 15 May 2017).	6 October 2017

3. Background

The Applicant operates a limestone quarry on a portion of Lot 800 on Plan 72839, Baldivis, within the City of Rockingham. The premises was previously incorporated within active Licence L8355/2009/2 under a Category 12. However, it is now being split into two separate Licences with the northern section of the premises (Millar Road Quarry) continuing under active Licence L8355/2009/2, and the southern portion (Baldavis Pit/Kerosene Lane Quarry) now falling within the proposed new Licence L9064/2017/1. The new Licence will include Category 12 and three new categories 13, 62 and 63. The original Works Approval W5824/2015/1 was referred to the local government authority for comment on the addition of the new categories on 17 April 2015.

The premises is accessed primarily from the north via Millar Road, or from the south via Kerosene Lane.

The proposed new Licenced premises is owned and leased by Hennderdin Pty Ltd, being Lot 800 on Plan 72839. The operation of the premises will be carried out on only a portion of Lot 800 on Plan 72839 (not the entire premises), by P.M.R Quarry Pty Ltd.

Table 3 lists the prescribed premises categories that have been applied for.

Table 3: Prescribed Premises Categories in the Existing Licence

Classification of Premises	Description	*Approved Premises throughput*
Category 12	Screening, etc. of material: premises (other than premises within category 5 or 8) on which material extracted from the ground is screened, washed, crushed, ground, milled, sized or separated.	500,000 tonnes per annual period
Category 13	Crushing of building material: premises on which waste building or demolition material (for example, bricks, stones or concrete) is crushed or cleaned.	100,000 tonnes per annual period
Category 62	Solid waste depot: premises on which waste is stored, or sorted, pending final disposal or reuse.	100,000 tonnes per annual period
Category 63	Class I 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” published by the Chief Executive Officer and as amended from time to time) is accepted for burial.	100,000 tonnes per annual period

4. Overview of Premises

4.1 Operational aspects

The applicant proposes to undertake the following:

- Backfill sand, rock, clay, soils, inert waste type 1 (construction and demolition waste) and clean, non-putrescible material into the quarry void to bring the level of the excavated pit back up to surrounding natural ground levels. The waste received to the premises will be screened, and recovered limestone, brick and concrete material will be crushed for usable construction materials or fill for commercial purposes. No tyres or asbestos will be accepted. The floor of the excavated areas within the quarry will be smoothed to prepare the floor for the placement of fill material. The material will then be compacted by driving trucks across it and track rolling. The floor of the quarry will be left at 9-11 AHD,

approximately 6 m above the highest known water table. A final layer of 1-2 m of sand will be placed over the fill and seeded with grass.

- The final contour of the premises is required to be suitable for use as industrial land, in accordance with the granted planning approval from the City of Rockingham.
- Stockpiles of imported material/ waste will be maintained at less than 4,000 tonnes for ease of handling so as to manage and monitor for asbestos.
- Up to 200 000 tonnes of material will be brought to the premises annually to be sorted, recycled and placed to fill.

The restoration of the quarry with fill material is anticipated to take approximately five years with the section nearest Kerosene Lane to be completed within three years.

The applicant has identified that approximately 22 trucks per day are expected at the premises, over an eleven hour day.

The applicant will continue to remove limestone from the quarry pit during the backfilling operations.

The proposed activities at the premises have been determined by the applicant to comply with the following guidelines:

- *Code of Practice, Rural Landfill Management, 1 November 2000, Department of Environment.*
- *Guidelines of the Acceptance of Solid Waste to Landfill, October 2002, Department of Environment (as amended).*
- *Landfill Waste Classifications and Definitions, July 2005.*
- *Code of Practice for Inert Landfilling Operations, 1997 Department of Environment.*
- *2005 Review of Waste Classification and Waste Definitions 1996 (as amended).*
- *Environmental Guidelines for Construction and Demolition Waste Recycling Facilities, DER 2009.*
- *Guidelines for Managing Asbestos at Construction and Demolition Waste Recycling Facilities, DER, 2012.*

4.2 Infrastructure

The Baldivis Pit facility infrastructure, as it relates to Category 12, 13, 62 and 63 activities, is detailed in Table 4 and with reference to the Site Plan.

Table 4 lists infrastructure associated with each prescribed premises category.

Table 4: Baldivis Pit facility Categories 12, 13, 62 and 63 infrastructure

	Infrastructure	**Site Plan Reference**
	Prescribed Activity Category 12	
Screening of limestone, backfill sand, clay and soils		
1	1 x Screening/ processing plant	See Appendix 1.
	Prescribed Activity Category 13	
Crushing of inert waste type 1 - construction and demolition waste for reuse		

	Infrastructure	Site Plan Reference
1	1 x mobile crushing plant	See Appendix 1.
2	Screens, stackers and conveyors	
3	1 x Loader	
4	1 x Rock breaker	
	Prescribed Activity Category 62	
Receival of sand, clay, soils, inert waste type 1 and clean, non-putrescible material for reuse for commercial purposes		
1	1 x Bull dozer	See Appendix 1.
2	1 x Loader	
	Prescribed Activity Category 63	
Burial of sand, clay, soils, inert waste type 1 and clean, non-putrescible material within the quarry pit (void) to return to pre-existing ground levels		
1	1 x Excavator	See Appendix 1
	Directly related activities	
Brief description of activities and how they directly relate to Primary activity		
1	Semi-trailer trucks, truck and trailer combinations	See Appendix 1.
2	Weigh bridge (Mundijong entrance)	
3	1 x 10,000L Water tanker	
4	Mobile fuel storage tankers	
	Other activities	
1	Water sprayers	Attachment 9B (See Appendix 1)
2	Site office, toilet (septic) system, storage sheds	Attachment 9B, Section 4.11 (See Appendix 1)

4.3 Exclusions to the Premises

The assessment does not consider the activities or operation of the site office, septic toilet system and general storage sheds or aspects pertaining to Occupational Health and Safety issues.

The assessment also does not include any operation within the residential/ rural premises located on Lot 1284 on Plan 163094, as originally included within the Licence application, as none of the prescribed premises activities will be occurring within that premises boundary (See Section 4.2).

5. Legislative context

Table 5 summarises approvals relevant to the assessment.

Table 5: Relevant approvals and tenure

Legislation	Number	Subsidiary	Approval
Rights in Water and Irrigation Act 1914	*GWL 166509*	*WA Limestone*	*Allowance of 20,000 kL per year for dust suppression use from Lot 2407, Millar Road.*
Land Act 1893	*290/DP202704* *(Lot 290 on Plan 202704)* *291/DP202704* *(Lot 291 on Plan 202704)*	*Hennderdin Pty Ltd*	*Now known as Lot 800 on Plan 72839.*

5.1 Contaminated sites

Assessment of the premises against DWER GIS dataset has confirmed that the premises is not recorded or registered as contaminated.

5.2 Other relevant approvals

5.2.1 Planning approvals

The City of Rockingham advised, via email from Mr Chris Parlane on 16 November 2017, that:

> In relation to the Category 12 Licence, the City advises that the proposed throughput is consistent with the existing development approval granted on 1 July 2014 as the screening plant will operate intermittently over time, while it is noted the DWER throughput is calculated based on maximum operational capacity of the screening machine.
>
> In relation to the Category 13, 62, 63 Licences, the City advises that the throughput is within the scope of the existing development approval granted on 28 January 2015.
>
> As such, the City has no objection to the proposed licence application for the screening of material; crushing of building material; solid waste depot and Class I inert landfill site.

The City of Rockingham Council gave conditional planning approval to the applicant on 20 July 2015 for "*Landform Reconstruction by Inert Landfill to raise the site to a similar contour to its pre-excavation level*."

The applicant appealed conditions 2, 5, 7 and 26 which were subsequently revised by Council, as required by the State Administrative Tribunal (SAT) at the Councils ordinary meeting held on 28 July 2015. The Planning Approval and revised conditions are shown in Appendix 4.

Planning Approval is valid for a period of 10 years, until 24 August 2025.

5.2.2 Office of the Environmental Protection Authority

The initial application for the operation of the premises, as approved in 2009 under Licence L8355/2009/2, was not submitted to the OEPA historically for assessment or review relating to mining, excavation or filling activities at the premises (as per the Environmental Protection (Swan Coastal Plain Lakes) Policy 1992 requirements)).

Environmental Protection (Kwinana)(Atmospheric Wastes) Policy and Regulations 1999 requires management of Sulphur dioxide and Total Suspended Particulate (TSP) emissions. The premises operation does not result in sulphur emissions predominantly, however TSP emissions will occur as a result of the premises operation. The ambient air quality standards and ambient air quality limits for TSP are defined as follows for Area C (as applicable to the prescribed premises):

Item	Area	Standard (µg/m^3)	Limit (µg/m^3)	Averaging period
1	Policy Area	—	1 000	15 minutes
2	Area A	150	260	24 hours
3	Area B	90	260	24 hours
4	Area C	90	150	24 hours

Note: Excerpt from the ***Error! Use the Home tab to apply Name of Act/Reg to the text that you want to appear here.***

5.2.3 Department of Sustainability, Environment, Water, Population and Communities

A clearing approval for Lot 800 on Plan 72839, Kerosene Lane was referred to the Department of Sustainability, Environment, Water, Population and Communities for review during 2013.

The determination was that the proposed clearing of 22 ha of native vegetation within the premises was considered to not be a 'controlled action' and therefore did not require further assessment and approval, as defined under Chapter 2 of the EPBC Act.

5.3 Part V of the EP Act

5.3.1 Applicable regulations, standards and guidelines

The overarching legislative framework of this assessment is the EP Act and EP Regulations.

The guidance statements which inform this assessment are:

- *Guidance Statement: Regulatory Principles (July 2015)*
- *Guidance Statement: Setting Conditions (October 2015)*
- *Guidance Statement: Land Use Planning (February 2017)*
- *Guidance Statement: Licence Duration (August 2016)*
- *Guidance Statement: Publication of Annual Audit Compliance Reports (May 2016)*
- *Guidance Statement: Decision Making (November 2016)*
- *Guidance Statement: Risk Assessments (November 2016)*

5.3.2 Works approval and licence history

Table 6 summarises the works approval and licence history for the premises.

Table 6: Works approval and licence history

Instrument	Issued	Nature and extent of works approval, licence or amendment
L8355/2009/1	6/07/2009	New Licence
L8355/2009/2	26/06/2014	Licence reissue
L8355/2009/2	13/11/2014	Licence amendment

W5824/2015/1	11/06/2015	Works Approval
L9064/2017/1	DRAFT	New Licence as a result of the splitting of the prescribed premises area under L8355/2009/2, with the inclusion of additional categories.

5.3.3 Key and recent works approvals

This assessment is based on Works Approval W5824/2015/1. The compliance report for the completed works was received from WA Limestone via email on 24 August 2017.

5.3.4 Compliance inspections and compliance history

Assessment of the premises operation under Licence L8355/2009/2 identified no noise incidents or complaints recorded within the DWER Incidents and Complaints Management System (ICMS).

No other statutory controls such as ministerial statements, infringements or non-compliances have been identified in relation to the operation or management of the premises.

5.3.5 Clearing

The original clearing permit was issued to Hennderdin Pty Ltd (landowner) on 21 June 2009 (CPS 1953/1) with the vegetation on the pit footprint cleared predominantly during September to November 2013. The permit expires on 21 June 2023 and has seven specified conditions (See Appendix 3).

Assessment of the premises through DWER's GIS dataset identified that the premises exists within a number of environmentally sensitive areas (see Section 8.3 below).

DWER Clearing Branch have defined under 'Regulation Fact Sheet 24' that:

- threatened ecological communities; and
- areas covered by the lakes to which the *Environmental Protection (Swan Coastal Plain Lakes) Policy 1992*

are known as Environmentally Sensitive Areas (ESA's) in accordance with section 51B of the EP Act.

Any intent to clear such areas requires a clearing permit. No original permit to clear the land has been identified.

6. Modelling and monitoring data

The active Licence L8355/2009/2 (as amended 13 November 2014) does not require any monitoring of any emissions from the premises.

Review of the applicant noise modelling and assessment submitted (as undertaken by 'Herring Storer Acoustics') was completed by DWER Noise Branch who have determined that:

"Day time operations are likely to not exceed the assigned levels at all locations other than at R4a (249 Kerosene Lane – expected to exceed prescribed day-time noise levels by 8 dB). The status of this location as a receiver needs to be determined.

Night time operations are likely to not exceed the assigned levels at locations R1 to R4 if the operations consist of truck, or truck and loader noise if present for less than 10 % of the time. If the night time operations consist of truck and loader noise the noise is likely to exceed at the majority of locations if present for greater than 10% of the time. If the night time operations

consists of truck noise only the noise is likely to not exceed the assigned levels if present for less than 10 % of the time and to marginally exceed (+1 dB) at location R3 if present for greater than 10% of the time.

The equipment present during night time operation and the length of time they will be operating needs to be confirmed. No comment is provided on the effect of noise from night time operations at locations other than R1 to R4."

The applicant's operational hours are restricted by the Planning Approval which requires operation during day time hours only.

7. Consultation

A request for comment on the applicants' proposal was provided to the City of Rockingham (City), on 9 October 2017. See section 5.2.1 and Appendix 1 within the Decision report.

8. Location and siting

8.1 Siting context

The prescribed premises is located approximately 25 km south of Perth within Baldivis, City of Rockingham, on a portion of Lot 800 on Plan 72839.

The purpose of the Category 63 – Class 1 landfill (Inert waste type 1) was proposed to enable the site to be backfilled such that a future proposed extension of Nairn Road (a public road), can be built through the site and the quarry itself can be rehabilitated for future use as an industrial site. The Class I landfill will also divert material which is currently disposed of in the neighbouring City of Rockingham Landfill on Millar Road, thereby extending the life of the City's Landfill (See map below).

As detailed in the application, the premises will operate under the following parameters:

- *Waste acceptance will be undertaken in accordance with the DER Asbestos guidelines.*

- *The proposed recycling and fill placement will utilize road trucks to bring the waste to site.*
- *Loaders will be used to sort and load the screen. Recoverable materials will be placed in stockpiles and loaded to road trucks for transport from the site. The loader or excavator will be used to place the fill in the landfill, which will then be compacted by compactor and or bulldozer.*
- *Screens will be used to separate the recovered materials into the various grades of material. A rock cruncher attached to the excavator will be used to crush oversize construction materials such as concrete.*
- *Truck routes will remain unchanged apart from entry from Kulija Road, when constructed, rather than Millar Road. There will be no access from Kerosene Lane.*
- *Sorting and storage will be undertaken at a compacted hardstand area.*
- *Waste acceptance and management will be undertaken in accordance with section 4 of the Land Surface Restoration Document.*
- *Stockpiles will be managed at heights that cannot be viewed by the public.*
- *Asbestos, wood, putrescible waste will not be accepted at the facility.*

The quarry/ pit lowest excavated floor level at the premises has been defined as 8 – 14 metres AHD.

8.2 Residential and Sensitive Premises

The distances to residential and sensitive receptors are detailed in Table 7.

Table 7: Receptors and distance from activity boundary

Sensitive Land Uses	Distance from Prescribed Activity
Residential Premises	*Approximately 80 m from primary activity area.*
Zoned 'Rural' area under Town Planning Scheme No. 2.	*Adjoining western boundary of prescribed premises*
Zoned 'Rural' under Town Planning Scheme No. 2	*Adjoining eastern boundary of prescribed premises*
Zoned 'Development' under Town Planning Scheme No. 2	*Adjoining southern boundary of prescribed premises*

8.3 Specified ecosystems

Specified ecosystems are areas of high conservation value and special significance that may be impacted as a result of activities at the premises, or Emissions and Discharges from the Premises. The distances to specified ecosystems are shown in Table 8. Table 8 also identifies the distances to other relevant ecosystem values which do not fit the definition of a specified ecosystem.

The table has also been modified to align with the *Guidance Statement: Environmental Siting.*

Table 8: Environmental values

Specified ecosystems	**Distance from the Premises**
Environmental Protection (Swan Coastal Plain Lakes) Policy 1992	Located within the demarcated area for this policy
Environmental Protection (Peel Inlet – Harvey Estuary) Policy 1992	Eastern half of the premises is located within the demarcated area for this policy (relates to nutrient enrichment issues from clearing or phosphorus inputs).
Environmental Protection (Kwinana)(Atmospheric Wastes) Policy and Regulations 1999	Entire premises is located within the demarcated area – Area C, predominantly rural & residential, for this policy (relates to emissions of sulphur dioxide and Total Suspended Particulates).
Threatened Ecological Communities and Priority Ecological Communities	Located approximately 241 m west of the prescribed premises boundary
Biological component	**Distance from the Premises**
Threatened/Priority Flora	Located within the Prescribed Premises (Banksia sp.)
Threatened/Priority Fauna	Priority ecological sites located approximately 575 m west of the prescribed premises boundary (Threatened/ endangered species – priority status). Threatened ecological sites located within the eastern section of the prescribed premises.
Other relevant ecosystem values	**Distance from the Premises**
N/A	*N/A*

8.4 Groundwater and water sources

Groundwater directional flow was determined by the applicant in Works Approval W5824/2015/1 as being west south west across the premises, towards Lake Coolongup.

Groundwater water is abstracted from the adjoining Millar Road Quarry (L8355/2009/2) in the north under GWL 166509. An additional Licence GWL153582 is used for fire suppression.

The applicant has advised that depth to groundwater at the premises from the base of the existing quarry pit floor (prior to landfilling activities that are to be undertaken) is 6 mBGL.

The applicant has confirmed that *"the location of the sand and its proposed excavation* [at the premises] *complies with all Advice and Recommendations, of the Policy (Numbers 1 – 62)"* [Water Quality Protection Note 15: *Extractive Industries near sensitive water resources]*.

The distances to groundwater and water sources are shown in Table 9.

Table 9: Groundwater and water sources

Groundwater and water sources	**Distance from Premises**	**Environmental value**
Public drinking water source areas (PDWSA)	The premises is not within, adjacent to, or in close proximity to any PDWSA.	The premises is not within, adjacent to, or in close proximity to any PDWSA.
Major watercourses/waterbodies	The premises is located	-

	approximately 1.45 km east of a perennial major tributary (Lake Coolonup)	
Minor river (Peel Main Drain)	Located approximately 1.03 km east of the premises boundary	Canalised river.
Groundwater	WIN Groundwater monitoring bores, within the south west corner of the premises, identify depth to ground water between 15-18 mBGL. (Based on available DWER GIS dataset –WIN Groundwater Sites).	Water quality is fresh and used for domestic/ household and livestock (TDS 338 mg/L). Groundwater system forms part of the Murray River basin and the Peel Estuary _Serpentine River catchment.

8.5 Soil type

DWER GIS dataset defines the entire geology of the general area for the proposed prescribed premises as being Tamala limestone (predominantly Calcarenite and kankar). Tamala limestone is known to be karstic in nature, with undefined preferential water pathways. A small section of the north-eastern corner of the premises is high in quartz sand.

Table 10 details soil types and characteristics relevant to the assessment.

Table 10: Soil and sub-soil characteristics

Groundwater and water sources	Details	Environmental Value
Soil type classification	*Tamala limestone (predominantly Calcarenite and kankar)*	*Porous sand and limestone*
Acid sulfate soil risk	*N/A (Assessed by Lindsay Stephens of Landform Research)*	*N/A*

8.6 Meteorology

8.6.1 Wind direction and strength

The application advises that the prevailing wind direction for the premises is north-east to east in the mornings and from the south west predominantly in the afternoons.

8.6.2 Rainfall

The application advises that rainfall in the general vicinity of the premises is approximately 762 mm per year.

9. Risk Assessment

9.1 Determination of emission, pathway and receptor

In undertaking its risk assessment, DWER will identify all potential emissions pathways and potential receptors to establish whether there is a Risk Event which requires detailed risk assessment.

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. Where there is no actual or likely pathway and/or

no receptor, the emission will be screened out and will not be considered as a Risk Event. In addition, where an emission has an actual or likely pathway and a receptor which may be adversely impacted, but that emission is regulated through other mechanisms such as Part IV of the EP Act, that emission will not be risk assessed further and will be screened out through Table 11.

The identification of the sources, pathways and receptors to determine Risk Events are set out in Table 11 below.

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

Risk Events						Continue to detailed risk assessment	Reasoning
Sources/Activities		**Potential emissions**	**Potential receptors**	**Potential pathway**	**Potential adverse impacts**		
Acceptance, Stockpiling and processing of waste	*Crushing & Screening; Movement of machinery, vehicles and waste through conveyors, truck loadouts and at stockpile areas.*	*Noise*	*Residential receptors approximately 80 m from the primary activity area*	*Air/ wind dispersion*	*Health/ amenity*	*Yes*	*See Section 9.4*
	Dust particulates from operational activities	*Fugitive dust particulates/ asbestos fibres*			*Health/ amenity*	*Yes*	*See Section 9.5*
	Fire (abnormal operation)	*Fire, smoke and particulates*	*Residential receptors approximately 80 m from primary activity area*	*Land/ air*	*Health/ Amenity* *Risk to residential properties*	*No*	*Not within scope of Part V of the EP Act.* *Fire protection measures for extractive industry in place.* *Rural firebreaks will be maintained in accordance with City of Rockingham bylaws and Bush Fires Act 1954.* *Water available on site for fire suppression.*
Category 63 – Class I landfill (Inert waste type 1)	*Disposal/ burial of inert waste type 1 within the quarry void*	*Leachates & gaseous emissions*	*Residential receptors approximately 80 m from the primary activity area.* *Depth to groundwater is approximately 6m within limestone/ quartz sand geology from the quarry/ pit floor which is 8-14 m AHD below pre-existing ground levels.*	*Land, air and groundwater*	*Health/ amenity* *Risk to residential properties* *Impact to aquatic ecosystems*	*No*	*Inert waste type 1 will include construction and demolition waste (excluding tyres) that has been inspected prior to disposal within the void, for ACM/ Asbestos.* *No putrescible waste is proposed for burial at the premises therefore the generation of leachates and gaseous emissions is not expected to occur.* *Regulatory controls will exist within the prescribed premises Licence to limit/ control types of wastes received to the premises for disposal.*

Risk Events						Continue to detailed risk assessment	Reasoning
Sources/Activities		Potential emissions	Potential receptors	Potential pathway	Potential adverse impacts		
Bulk storage of chemicals	*Bulk fuel storage (mobile fuel tankers)*	*Breach of containment causing hydrocarbon discharge to land*	*Ecosystems adjacent to storage area*	*Direct discharge*	*Soil contamination inhibiting vegetation growth and survival, and health impacts to fauna.* *Groundwater contamination*	*Yes*	*See Section 9.6*

9.2 Consequence and likelihood of risk events

A risk rating will be determined for risk events in accordance with the risk rating matrix set out in Table 12 below.

Table 12: Risk rating matrix

Likelihood	Consequence				
	Slight	Minor	Moderate	Major	Severe
Almost certain	Medium	High	High	Extreme	Extreme
Likely	Medium	Medium	High	High	Extreme
Possible	Low	Medium	Medium	High	Extreme
Unlikely	Low	Medium	Medium	Medium	High
Rare	Low	Low	Medium	Medium	High

DWER will undertake an assessment of the consequence and likelihood of the Risk Event in accordance with Table 13 below.

Table 13: Risk criteria table

Likelihood		**Consequence**		
The following criteria has been used to determine the likelihood of the Risk Event occurring.		**The following criteria has been used to determine the consequences of a Risk Event occurring:**		
			Environment	**Public health* and amenity (such as air and water quality, noise, and odour)**
Almost Certain	The risk event is expected to occur in most circumstances	Severe	• **onsite impacts**: catastrophic • **offsite impacts local scale**: high level or above • **offsite impacts wider scale:** mid-level or above • Mid to long-term or permanent impact to an area of high conservation value or special significance^ • Specific Consequence Criteria (for environment) are significantly exceeded	• Loss of life • **Adverse health effects:** high level or ongoing medical treatment • Specific Consequence Criteria (for public health) are significantly exceeded • **Local scale impacts:** permanent loss of amenity
Likely	The risk event will probably occur in most circumstances	Major	• **onsite impacts**: high level • **offsite impacts local scale**: mid-level • **offsite impacts wider scale**: low level • Short-term impact to an area of high conservation value or special significance^ • Specific Consequence Criteria (for environment) are exceeded	• **Adverse health effects:** mid-level or frequent medical treatment • Specific Consequence Criteria (for public health) are exceeded • **Local scale impacts**: high level impact to amenity
Possible	The risk event could occur at some time	Moderate	• **onsite impacts**: mid-level • **offsite impacts local scale**: low level • **offsite impacts wider scale**: minimal • Specific Consequence Criteria (for environment) are at risk of not being met	• **Adverse health effects:** low level or occasional medical treatment • Specific Consequence Criteria (for public health) are at risk of not being met • **Local scale impacts:** mid-level impact to amenity
Unlikely	The risk event will probably not occur in most circumstances	Minor	• **onsite impacts**: low level • **offsite impacts local scale**: minimal • **offsite impacts wider scale**: not detectable • Specific Consequence Criteria (for environment) likely to be met	• Specific Consequence Criteria (for public health) are likely to be met • **Local scale impacts:** low level impact to amenity
Rare	The risk event may only occur in exceptional circumstances	Slight	• **onsite impact**: minimal • Specific Consequence Criteria (for environment) met	• **Local scale**: minimal to amenity • Specific Consequence Criteria (for public health) met

^ Determination of areas of high conservation value or special significance should be informed by the *Guidance Statement: Environmental Siting.*

* In applying public health criteria, DWER may have regard to the Department of Health's *Health Risk Assessment (Scoping) Guidelines.*
"onsite" means within the Prescribed Premises boundary.

9.3 Acceptability and treatment of Risk Event

DWER will determine the acceptability and treatment of Risk Events in accordance with the Risk treatment table 14 below:

Table 14: Risk treatment table

Rating of Risk Event	Acceptability	Treatment
Extreme	Unacceptable.	Risk Event will not be tolerated. DWER may refuse application.
High	May be acceptable. Subject to multiple regulatory controls.	Risk Event may be tolerated and may be subject to multiple regulatory controls. This may include both outcome-based and management conditions.
Medium	Acceptable, generally subject to regulatory controls.	Risk Event is tolerable and is likely to be subject to some regulatory controls. A preference for outcome-based conditions where practical and appropriate will be applied.
Low	Acceptable, generally not controlled.	Risk Event is acceptable and will generally not be subject to regulatory controls.

9.4 Risk Assessment – Noise Emissions

9.4.1 Description of noise emissions

Noise emissions are expected from the premises as a result of operation of crushing and screening equipment, conveyors and the operation of trucks and other plant.

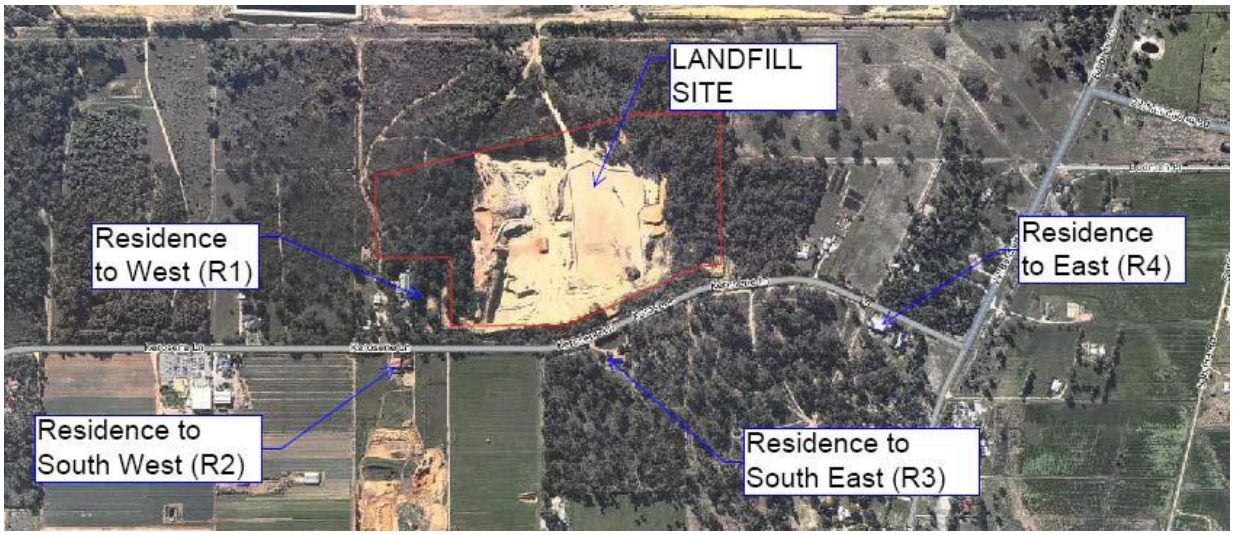
A revised noise risk assessment was submitted to DWER Noise Branch for review in September 2017.

A noise management plan was submitted within the Works Approval W5824/2015/1 Application supporting documentation (See Appendix 1). The mitigation and management measures proposed have been assessed within this decision report.

9.4.2 Identification and general characterisation of emission

The original noise assessment undertaken in 2006, with an addendum included in 2013, was revised and submitted by the applicant to DWER. The assessment (as undertaken by Herring Storer Acoustics) has determined that noise emissions will be compliant with the *Environmental Protection (Noise) Regulations 1997*. The assessment was undertaken with consideration of:

- the current operational footprint of the premises (approximately 80 m buffer from current receptors);
- plant equipment based in the north of the premises; and
- the following sensitive receptor locations:



According to the 'Herring Storer Acoustics' assessment, activities at the premises have an influencing factor of +2dB and may be considered as tonal (penalty of +5dB).

The applicant did not identify, within the submitted noise assessment and modelling, that a sensitive receptor is located approximately 132 m east of the premises boundary (Lot 293 on Plan 202704) – which is understood to be a residence associated with the adjacent fish farm.

9.4.3 Description of potential adverse impact from the emission

Noise emissions have the potential to affect health and amenity of sensitive receptors within the environment, via air/ wind dispersion.

9.4.4 Criteria for assessment

The submitted noise assessment and modelling has been reviewed by DWER Environmental Services, Noise Branch to determine the accuracy of the potential risks involved, as a result of the operation of the premises. The applicant is required to ensure that the premises operation complies with the *Environmental Protection (Noise) Regulations 1997*.

9.4.5 Applicant controls

This assessment has reviewed the following controls set out in Table 15 below.

Table 15: Applicant's proposed controls for noise emissions

Site infrastructure	Description	Operation details	Reference to issued licence plan
Controls for noise emissions			
Vegetation barrier	*Mature trees exist in the 40 metre wide buffers along Kerosene Lane, around the perimeter of the site and near the existing dwelling to the south west.*	*Monitoring of buffers will be undertaken, with replanting as necessary.*	*Application supporting documentation (See Appendix 1).*
Perimeter bunding	*Earthen noise bund*	*Maintain existing 5m earthen bunding and increase perimeter bunding, if*	*Works Approval W5824/2015/1 Application supporting*

Site infrastructure	Description	Operation details	Reference to issued licence plan
		required to mitigate any noise impacts identified.	*documentation, pg. 13 – Appendix 1*
Noise assessment	*Compliance to the Environmental Protection (Noise) Regulations 1997.*	*Noise modelling (Herring Storer Acoustics)*	*Works Approval W5824/2015/1 Application supporting documentation – Attachment 1*
Operational activities	*Development of a Noise Management Plan*	*Increasing of perimeter bunding.*	*Works Approval W5824/2015/1 supporting documentation – Section 5.2 and Attachment 9 (See Appendix 1)*
	Extraction and location	*All screening and recycling of inert waste will be conducted on the floor of the pit, well below natural ground level and near the centre of the site, away from the dwellings to the south west.*	
	Crushing activities	*To occur within a bunded area only, within the northern most area of the premises (150 m north of Kerosene Lane), and approximately 200 m from residential receptors.*	
	Equipment operation	*Maintain all equipment in good condition;* *Use of low frequency beepers (croakers).* *Minimisation of equipment in use at any given time.* *Limiting of operational hours.* *Delay or cessation of operations during periods of high winds.*	
	Complaints register	*Record and action all complaints received.*	

9.4.6 Key findings

The Delegated Officer has reviewed the information regarding noise emissions and has found:

1. *The premises will not be operational during night time hours.*
2. *DWER review of the submitted Noise assessment and modelling has determined that noise emissions at the closest eastern receptor will exceed acceptable levels by approximately 8 dB, if operations occur at pre-existing ground levels.*

3. *Applicant has revised the submitted operating methodology and confirmed that crushing/ screening activities will be undertaken in a northerly direction along the pit floor, and that crushing/processing equipment at the premises will be located at between 8-14m below pre-existing ground levels.*
4. *The Delegated Officer considers that the revised operational methodology will significantly attenuate noise, and compliance with the prescribed noise levels at the eastern receptor is expected.*

9.4.7 Consequence

The Delegated Officer has determined that the impact of *noise emissions* will be low level, off-site impacts at a local scale. Therefore, the Delegated Officer considers the consequence of *noise* to be **moderate**.

9.4.8 Likelihood of Risk Event

The Delegated Officer has determined that the likelihood of impacts from *noise emissions* could occur at some time. Therefore, the Delegated Officer considers the likelihood of noise emissions to be **possible**.

9.4.9 Overall rating of noise emissions

The Delegated Officer has compared the consequence and likelihood ratings described above with the risk rating matrix (Table 12) and determined that the overall rating for the risk of *noise emissions* is ***medium***.

The Delegated Officer has determined this outcome in conjunction with the noise assessment information and modelling supplied by 'Herring Storer Acoustics' for the premises operation, applicant controls and regulatory controls defined within the proposed Licence.

9.5 Risk Assessment – Asbestos and General Dust Emissions

9.5.1 Description of general dust emissions

Dust emissions are expected as a result of the crushing and screening of waste type 1 Inert materials with dust particulates and potential asbestos fibre becoming airborne.

9.5.2 Identification and general characterisation of emission

The applicant is proposing to receive, crush and screen construction and demolition (C&D) wastes which have the potential of containing asbestos fibres. This type of waste stream is considered high risk in accordance with DER Asbestos guidelines. The C&D waste will be received from external suppliers and from the City of Rockingham landfill for processing at the premises for reuse/ commercial purposes.

No asbestos is proposed for receival or processing as the premises. Any asbestos received is expected to be inadvertently present requiring all batches received to the premises to be inspected prior to acceptance.

9.5.3 Description of potential adverse impact from the emission

Dust particulates and asbestos fibres may become airborne through air/ wind dispersal, causing impact to the health and amenity of the environment.

Asbestos fibres may cause significant health impacts to receptors including asbestosis, lung cancer and mesothelioma.

9.5.4 Criteria for assessment

The applicant is required to ensure compliance against the *Environmental Protection (Kwinana)(Atmospheric Wastes) Policy and Regulations 1999* and the *Environmental Protection (Unauthorised Discharges) Regulations 2004.* Asbestos fibres should not be present in emissions from the premises.

9.5.5 Applicant controls

This assessment has reviewed the controls set out in Table 16 below.

Table 16: Applicant's proposed controls for asbestos and general dust emissions

Site infrastructure	Description	Operation details	Reference to issued licence plan
Controls for dust			
Operational activities	*Location and operation of processing equipment*	*To be located on the northern side of the proposed prescribed premises to enable a buffer of 200 m from sensitive residential receptors.* *All crushers, screens and stockpiles to be equipped with water sprays.* *Maintain stockpiles heights at lower levels than perimeter bunding.* *Crushing operations are watered as required to supress dust.* *Dust covers and equipment shields are maintained on all static plant where they are practicable.* *Regular emptying of any dust collection devices and the renewal of any filter devices in programmed in site operations.*	*Attachment 9B – Section 4.7 (See Appendix 1)*
	Waste material received to the premises	*All trucks to be covered with a tarpaulin to prevent dust or other material lift-off.*	*Attachment 9B – Section 4.12 (See Appendix 1)*

Site infrastructure	Description	Operation details	Reference to issued licence plan
		All wind-blown litter will be collected.	
	Meteorological conditions	*When winds are sufficiently strong to negate the effects of the dust management, suppression and mitigation measures contained in the dust management plan, all landfill* *operations on the site must cease until conditions improve and compliance can be achieved*	*Planning Approval (See Appendix 1)*
	Dust and Asbestos Management Plans	*Compliance to DER Guidelines for Managing Asbestos at Construction and Demolition Waste Recycling Facilities, 2012.*	*Attachment 9B – Sections 4.6, 5.3 and Attachments 2 & 3 (See Appendix 1)*
	Inspections	*Daily monitoring* *Regular visual inspections.*	*Attachment 9B - Section 4.3 (See Appendix 1)*
	Monitoring of dust	*Use of static dust monitors to be placed to the east, west and south and measured monthly.* *Video monitoring of sensitive areas (along southern boundary).*	*Appendix 9B - Section 5.3 (See Appendix 1).*
	Complaints register	*Operation of a complaints register to record and action all complaints received.*	*Attachment 9B – Sections 4.6 (See Appendix 1)*
	Compliance to Landfill Waste Classification and Waste Definitions 1996 (as amended).	*Fill to consist of inert waste type 1 to contain < 0.5% organic or putrescible wastes.*	
	Closure and rehabilitation plan		*Attachment 9B – Section 7 (See Appendix 1)*

9.5.6 Key findings

The Delegated Officer has reviewed the information regarding asbestos and general dust emissions and has found:

1. *Dust emissions have the potential become an increased risk as the level of the void floor is built up to surrounding pre-existing ground level. The applicant has proposed to raise the outer edge of the premises first which will assist in mitigating some of the dust particulates from being dispersed, and to maintaining buffers and bunds.*
2. *The premises will continue to operate within close proximity to sensitive residential receptors, and require rigorous management on-site.*
3. *Asbestos will not be explicitly accepted to the premises for processing although there is potential for inadvertent acceptance of contaminated waste if appropriate controls are not in place. The applicant has developed an Asbestos Management Plan and additional regulatory controls will be considered within the Licence.*

9.5.7 Consequence of General Dust Emissions

If *dust emissions* occur*, then* the Delegated Officer has determined that the impact of general *dust particulates* will be *mid-level, on-site impacts with low level off-site impacts at a local scale*. Therefore, the Delegated Officer considers the consequence of general *dust emissions* to be **moderate**.

9.5.8 Likelihood of General Dust Emissions

The applicant has no history of non-compliance in relation to dust emissions or complaints from the premises operation under the current operation Licence L8355/2009/2, according to DWER ICMS, since 2009.

The Delegated Officer has determined that the likelihood of *dust emission* impacts occurring could happen *at some time*. Therefore, the Delegated Officer considers the likelihood of general dust emissions to be **possible**.

9.5.9 Overall rating of General Dust Emissions

The Delegated Officer has compared the consequence and likelihood ratings described above with the risk rating matrix (Table 12) and determined that the overall rating for the risk of general *dust emissions* is ***medium***.

9.5.10 Consequence of Asbestos Fibre Emissions

If impacts from *asbestos fibre emissions* occur*, then* the Delegated Officer has determined that the impact of *asbestos fibre emissions* may result in *high level off-site impacts at a local scale*. Therefore, the Delegated Officer considers the consequence of *asbestos fibre emissions* to be ***severe***.

9.5.11 Likelihood of Asbestos Fibre Emissions

The applicant has no history of non-compliance in relation to dust emissions or complaints from the premises operation under the current operation Licence L8355/2009/2, according to DWER ICMS, since 2009.

The Delegated Officer has determined that the likelihood of impacts from *asbestos fibre emissions* may only occur in exceptional circumstances. Therefore, the Delegated Officer considers the likelihood of general dust emissions to be ***rare***.

9.5.12 Overall rating of Asbestos Fibre Emissions

The Delegated Officer has compared the consequence and likelihood ratings described above with the risk rating matrix (Table 12) and determined that the overall rating for the risk of general *dust emissions* is ***high***.

9.6 Risk Assessment – Hydrocarbon Emissions

9.6.1 Description of hydrocarbon emissions

Hydrocarbon emissions are possible as a result of spills and leaks from ruptured containment vessels, tanks, hoses or malfunction of equipment as a result of the operation of trucks, tanks, plant infrastructure and storage infrastructure.

9.6.2 Identification and general characterisation of emission

The applicant will receive and store hydrocarbons at the premises (unknown volumes) which will also be transferred across the premises in mobile tankers. The hydrocarbons will be used to operate all infrastructure and plant equipment for the associated activities of the premises.

9.6.3 Description of potential adverse impact from the emission

Hydrocarbon emissions may cause contamination of land and groundwater resources.

9.6.4 Criteria for assessment

There no specific assessment criteria for hydrocarbon spills or leaks. The impact of hydrocarbon emissions to sensitive receptors (land and groundwater) may cause potential environmental harm or pollution. The applicant is required to ensure compliance against the *Environmental Protection (Unauthorised Discharges) Regulations 2004.*

9.6.5 Applicant controls

This assessment has reviewed the controls set out in Table 17 below.

Table 17: Applicant's proposed controls for hydrocarbon emissions

Site infrastructure	Description	Operation details	Reference to issued licence plan
Controls for hydrocarbons			
Operational activities	*Storage and handling of hydrocarbons*	*Chemicals and fuels stored in accordance with: Dangerous Goods Safety (Storage and handling of non-explosives) Regulations, AS1940 The storage and handling of flammable & combustible liquids , and the DG Code of Practice*	*Attachment 9B – Risk assessment, Pg 22 (See Appendix 1).*
	Refuelling	*Carried out using mobile tankers from on-site storage on the floor of the quarry void.*	*Attachment 9B – Section 5.4.10 (See Appendix 1)*

Site infrastructure	Description	Operation details	Reference to issued licence plan
	Equipment maintenance	*DOW – DMP Water Quality Protection Guidelines for Mining and Mineral Processing, Mechanical servicing and workshop facilities and Aboveground fuel and chemical storage*	*Attachment 9B – Section 5.4.10 (See Appendix 1)*
	Spills/ leaks	*Minor spills to be managed with the use of soil microbial material.* *Spills > 5 litre to be recorded, investigated and remediated. DoW, City of Rockingham to be notified.* *Spill kits to be available at all times.* *Large spills will be removed from the site to an approved disposal area.* *No major servicing of equipment to occur onsite.* *Waste hydrocarbons (including canisters, filters) will be transported off-site and disposed of to an approved landfill.* *No vehicle wash down is to occur at the premises.*	*Attachment 9B – Section 5.4.11 (See Appendix 1)*
	Groundwater monitoring	*A groundwater monitoring bores will be established on the eastern, northern and south western side of the premises. Six monthly sampling to occur and forwarded to DWER and City of Rockingham.*	*Attachment 9B – Section 5.4.12 (See Appendix 1)*
Controls for hydrocarbon emissions			
Refuelling within a designated, bunded hardstand area	*1) Hardstand area to be compacted to a low permeability (1 x 10^{-9} m/s).* *2) All vehicle or tanker refuelling to occur within hardstand area that must be bunded to reduce potential discharge to the premises in the event of an abnormal operation.* *3) All static fuel storage tankers to be self bunded or within an impermeable, bunded area that can contain 110% of the contents held within.*		

9.6.6 Key findings

The Delegated Officer has reviewed the information regarding hydrocarbon emissions and has found:

1. *Hydrocarbon storage and volume within the premises boundary has not been clearly defined within the application supporting documentation.*
2. *Limestone has a high absorbency capacity and the premises is located within Tamala limestone geology that is karstic in nature. This allows preferential pathways for groundwater flow, and pollutants to be rapidly transported extensive distances.*
3. *The applicant has implemented a number of controls considered suitable to the management of hydrocarbons.*

9.6.7 Consequence

If *hydrocarbon emissions* occur*, then* the Delegated Officer has determined that the impact of *hydrocarbons* will be *low-level, on-site impacts with minimal off-site impacts at a local scale*. Therefore, the Delegated Officer considers the consequence of *hydrocarbon emissions* to be **minor**.

9.6.8 Likelihood of Risk Event

The applicant has no history of non-compliance in relation to hydrocarbon emissions or complaints from the premises operation under the current operation Licence L8355/2009/2, according to DWER ICMS, since 2009.

The Delegated Officer has determined that the likelihood of impacts from *hydrocarbon emissions* occurring could happen *at some time*. Therefore, the Delegated Officer considers the likelihood of dust emissions to be **possible**.

9.6.9 Overall rating of hydrocarbon emissions

The Delegated Officer has compared the consequence and likelihood ratings described above with the risk rating matrix (Table 12) and determined that the overall rating for the risk of *hydrocarbon emissions* is ***medium****.*

9.7 Summary of acceptability and treatment of Risk Events

A summary of the risk assessment and the acceptability or unacceptability of the risk events set out above, with the appropriate treatment and control, are set out in Table 18 below. Controls are described further in section 11.

Table 18: Risk assessment summary

	Description of Risk Event			Applicant controls	Risk rating	Acceptability with controls (conditions on instrument)
	Emission	**Source**	**Pathway/ Receptor** **(Impact)**			
1.	Noise	Movement of machinery, vehicles and waste through conveyors, truck loadouts and at stockpile areas.	Air/ wind to sensitive residential receptors	Vegetation buffers, earthen bunds, operation below ground level, noise attenuation equipment,	Moderate consequence Possible likelihood **Medium risk**	Acceptable subject to regulatory controls
2.	Fugitive Dust	General dust particulates from operational activities	Air/ wind to sensitive receptor causing health impacts from inhalation of dust.	Water sprayers, water tankers, screens, earthen bunds, vegetation buffers and meteorological & dust/ particulate monitoring.	Moderate consequence Possible likelihood **Medium risk**	Acceptable subject to regulatory controls
		Asbestos dust and fibre particulates (abnormal operations)		Signage stating no asbestos to be received to the premises. Regular inspections to remove asbestos from C&D waste received. Testing of any recycled product.	Severe consequence Rare likelihood **High risk**	Acceptable subject to regulatory controls
3.	Hydrocarbons	Bulk fuel (hydro-carbon) storage and use.	Direct discharge to land	Spills and leaks management, equipment maintenance, groundwater monitoring.	Minor consequence Possible likelihood **Medium Risk**	Acceptable subject to regulatory controls.

10. Determination of Licence conditions

The conditions in the Licence in Attachment 1 have been determined in accordance with the *Guidance Statement: Setting Conditions*.

The Licence is proposed to expire on 24 August 2025 as per the expiry date of the planning approval in accordance with DWER's *Guidance Statement: Licence Duration*.

Table 19 provides a summary of the conditions to be applied to this licence.

Table 19: Summary of conditions to be applied

Condition Ref	Grounds
Environmental Compliance Condition 1	Environmental compliance is a valid, risk-based condition to ensure appropriate linkage between the licence and the EP Act.
Throughput restrictions Conditions 2 to 3	These conditions define the throughput volume limitations for the prescribed premises as applied for by the Applicant and assessed by DWER.
Infrastructure and Equipment Conditions 4 and 5	Condition 4: This condition is based on the applicant's commitments and will assist in mitigating dust/noise impacts to sensitive receptors. Condition 5: This condition contains applicant proposed controls for infrastructure and equipment as well as controls deemed necessary by the Delegated Officer. These conditions are valid, risk-based and contain appropriate controls.
Waste type restrictions and waste classification Conditions 6 to 11	These conditions define what waste type may be accepted to the premises. The condition set also includes protocols for the management of waste potentially contaminated with asbestos as per the applicant's asbestos management plan and DWER's asbestos guidelines.
Acceptance and unloading inspection Conditions 12 to 18; Product testing and supply Conditions 21 and 22	These conditions further define the management of waste potentially contaminated with asbestos as per the applicant's asbestos management plan and DWER's asbestos guidelines.
Dust management Conditions 19 to 20	These conditions relate to the management of dust at the Premises and include the applicant's monitoring/action commitments as well as general controls deemed necessary by the Delegated Officer to mitigate dust impacts at sensitive receptors – which have the potential to increase as ground levels are raised.
Emissions Condition 23	This condition outlines authorised emissions from the premises and is valid, risk-based and consistent with the EP Act.
Noise emission controls Condition 24	These conditions mirror the applicant's commitments to assist in the mitigation of noise

	impacts. Conditions will also assist in mitigating dust impacts.
Emission Monitoring 25 and 26	These conditions are based on the applicant's monitoring commitments related to dust and asbestos particulates.
Information and Record keeping 27 to 31	These conditions are valid and are necessary administration and reporting requirements to ensure compliance with licence conditions.

DWER notes that it may review the appropriateness and adequacy of controls at any time and that, following a review, DWER may initiate amendments to the Licence under the EP Act.

11. Applicant's comments

The Applicant was provided with the draft Decision Report and draft Licence on 31 October 2017. A response was received from the applicant via email on 3 November 2017 with comments. A summary of the applicant's comments on risk assessment and draft conditions is included within Appendix 2 of the Decision report.

12. Conclusion

This assessment of the risks of activities on the Premises has been undertaken with due consideration of a number of factors, including the documents and policies specified in this Decision Report (summarised in Appendix 1).

Based on this assessment, it has been determined that the Issued Licence will be granted subject to conditions commensurate with the determined controls and necessary for administration and reporting requirements.

Steve Checker

MANAGER LICENSING (WASTE INDUSTRIES)
Delegated Officer under section 20 of the *Environmental Protection Act 1986*

Appendix 1: Key documents

	Document title	In text ref	Availability
1.	Email: WA Limestone Kerosene Lane Quarry – Licence Application received from Memory Ngucha, Environment & Planning, WA Limestone (Ref. W5824/2015/1) Part 1 (with 7 attachments): • *20170515 Kerosene Lane Licence Application Form* • *Attachment 1A – Certificates of title* • *Attachment 1B – PMR ASIC Company Extract* • *Attachment 1C – WAL Hennderdin Letters of Authority* • *Attachment 2 – Map of Proposed Premises* • *Attachment 5 – Licence L8355/2009/1* • *Attachment 7 – Regional Landuse Map*	-	DWER records (A1431766)
2.	Email: WA Limestone Kerosene Lane Quarry – Licence Application Part 1 received from Memory Ngucha, Environment & Planning, WA Limestone (Ref. W5824/2015/1) Part 2 (1 Attachment): • *Attachment 9B – Land surface restoration report*	Attachment 9B	DWER records (A1431769)
3.	Email: Kerosene Lane, DER Licence Application. Response to request for further information. Received 24 August 2017. Received from Renae Srdarev, WA Limestone. (Includes: Compliance document, confirmation of throughput, planning approval, revised noise assessment)	Council Minutes, Tuesday 28 July 2015. PDS-047/15	DWER records (A1510694)
4.	Email: Renae Srdarev, WA Limestone. Dropbox: Attachment 9 – Licence application supporting documentation.	6/10/2017	DWER records (A1536303)
5.	Land Surface Restoration, Lot 800 Kerosene Lane, Baldivis. WA Limestone.	-	DWER records (A879947) DER2015/000445

	November 2013.		W5824/2015/1
6.	Email: Clearing Permit - Elysia Harradine, DWER Clearing Regulation Officer, 5 October 2017.	CPS1953/2	DWER records (A15636054)
7.	Licence L8355/2009/2 – Baldivis Pit	L8355/2009/2	DWER records (A777266/ A831265)
8.	EPBC Clearing Approval - Lot 800, Kerosene Lane	EPBC Ref. 2013/6832	DWER records (A801036)
9.	DER, July 2015. *Guidance Statement: Regulatory principles.* Department of Environment Regulation, Perth.	DER 2015a	accessed at www.dwer.wa.gov.au
10.	DER, October 2015. *Guidance Statement: Setting conditions.* Department of Environment Regulation, Perth.	DER 2015b	
11.	DER, August 2016. *Guidance Statement: Licence duration.* Department of Environment Regulation, Perth.	DER 2016a	
12.	DER, November 2016. *Guidance Statement: Risk Assessments*. Department of Environment Regulation, Perth.	DER 2016b	
13.	DER, November 2016. *Guidance Statement: Decision Making*. Department of Environment Regulation, Perth.	DER 2016c	
14.	DWER Environmental Services, Noise Branch – review: CEO 1561/17: WA Limestone, Lot 800 on Plan 72839, Kerosene Lane, Baldivis	-	DWER records (A1540674)
15.	Email: Licence Application L9064/2017/1 - Lot 800 Kerosene Lane, Baldivis - PMR Quarries Pty Ltd received from Chris Parlane (City of Rockingham response to draft Licence documentation)	16/11/2017	DWER records (A1564444)
16.	Email: RE: Baldivis Pit - L9064 - Revised Drafts received from Renae Srdarev on 16 November 2017 (additional information)	-	DWER records (A1565071)

Appendix 2: Summary of applicant's comments on first draft of risk assessment and draft conditions

Condition	Summary of Licence Holder comment	DWER response
-	Landfill appears to have been assessed as though it is open to the public.	Given the restricted access, Condition 6(2) is amended to remove signage requirements stipulating waste acceptance.
3	The Millar Road Quarry is a separate prescribed premises and WA Limestone has received advice that conditions can only be imposed within the prescribed premises. Each quarry maximum throughput is 500,000 tonnes per annum. WA Limestone request that this condition is deleted as it conflicts with condition 2.	Condition 3 – Deleted. Agreed.
6(3)	It is not practical for road ways and all stockpiles to remain wetted down at all times. The road ways are extremely porous and dry rapidly and the amount of water required to be wet at all times would not be environmentally acceptable. Wet limestone turns to sludge and creates a safety risk plus tracks limestone on to the road creating amenity issues. Stockpiles will be wetted were possible however it is impossible for them to be wet at all times. Please note that the landfill is not in operation at all times and is only expected to operate for intermittent contracts. Existing dust management at the premises has been sufficient for the previous 30 plus years. WA Limestone request that part 3 of condition 6 is deleted or reworded so that road ways and stockpiles are target wetted, where required. Suggested rewording: Roadways and all stockpiles must be target wetted, where required.	Condition 6(3) - Revised. Wording replaced with: *'Roadways and stockpiles must be kept damp through targeted wetting when visible dust lift-off is occurring. Roadways and stockpiles must be kept damp through targeted wetting when visible dust lift-off is occurring. Targeted wetting must occur during tipping and when material handling such as reclaiming of Waste from the stockpiles has the potential to generate fugitive dust.'*

Condition	Summary of Licence Holder comment	DWER response
	Targeted wetting must occur during tipping and when material handling such as reclaiming of Waste from the stockpiles has the potential to generate fugitive dust.	
6(4)	The site works are now complete and the compliance document has been submitted and accepted confirming this. The bore has been installed and is not a fast fill arrangement. Existing dust management at the premises has been sufficient for the previous 30 plus years without the use of a fast fill water stand pipe. WA Limestone request that part 4 of condition 6 is deleted or updated to reflect the bore available on site. Suggested rewording: Bore and storage tank and stand pipe - To allow fast fill of water truck.	Condition 6(4) – Revised. Wording replaced with: *'Bore and storage tank and stand pipe - To allow fast fill of water truck.'*
6(5)	A protective crust will not form on waste stockpiles as wetting will push minute particles into the stockpile. The quarry has operated for more than 30 years without dedicated sprinklers on limestone stockpiles which have the greater capacity to generate dust compared to inert waste stockpiles. No complaints have been received in regard to dust management. WA Limestone requests that part 5 of condition 6 is reworded so that sprinklers are operated as required. Suggested rewording: Series of sprinklers on top of stockpiles to supplement wetting by water truck sprays the prevention of fugitive dust from this source. Effective sprinklers on the stockpiles need to achieve an appropriate coverage and produce a fine water droplet cloud to effectively suppress airborne dust particles. The positioning and setup of sprinklers must effectively deliver water to stockpiles. Sprinklers to be maintained in good working order to ensure continuous availability.	Condition 6(5) – Revised. Wording replaced with: *'Series of sprinklers on top of stockpiles to supplement wetting by water truck sprays to prevent dust particulates becoming air borne. Effective sprinklers on the stockpiles need to achieve an appropriate coverage and produce a fine water droplet cloud to effectively suppress airborne dust particles. The positioning and setup of sprinklers must effectively deliver water to stockpiles.* *Sprinklers to be maintained in good working order to ensure continuous availability.'*

Condition	Summary of Licence Holder comment	DWER response
6(7)	b) Bunds are established with vegetation and proven effective. No further changes to bund height are required or proposed. WA Limestone request that part b of condition 6 is deleted.	Condition 6(7) – amended. The City of Rockingham Development Approval (1 July 2014) requires a 3 m bund height. The Licence application supporting document, 15 May 2017, identified bunds as part of the applicant controls for noise management (Risk Assessment, pg 21 of Addendum to Land Surface Restoration Document). Condition revised: *'(b) Earthen bunds must be a minimum of 3m above pre-existing ground levels along the western, southern and eastern edge of the landfill area;'*
6(8)	Although no construction commitments for hydrocarbon storage were required by the works approval, WA Limestone committed to aligning with AS1940 The storage and handling of flammable and combustible liquids and DMIRS Storage and handling of dangerous goods code of practice. This condition does not align with AS1940 or the code of practice. WA Limestone request that this part of condition 6 is amended as a commitment to comply with AS1940 has been made in the licence application. No additional construction work will be undertaken. Works are now complete and the compliance document has been submitted and accepted. Suggested rewording: Hydrocarbon storage must comply with the relevant parts of AS1940 The storage and handling of flammable and combustible liquids.	Condition 6(8) – Revised. Hydrocarbon storage facilities were not defined in the application, however condition 6(8) has been revised to require general compliance with standards and to include operational controls as per the application.

Condition	Summary of Licence Holder comment	DWER response
21	Repeat of condition 6 WA Limestone request that this condition is deleted.	Condition 21 – Deleted. The Delegated Officer considers this condition to be adequately covered within Condition 6, Table 4 of the Licence.
22	It is not practical to wet product including sand and limestone prior to being removed from premises. Dust is mitigated by all trucks being covered as required by Department of Transport. WA Limestone request that this condition is deleted.	Condition 22 – Deleted with inclusion. Condition 22 has been deleted and replaced with an additional requirement within Condition 6, part 7 of: *(d) All trucks leaving the premises must be covered so as to prevent visible lift-off of dust.* The Delegated Officer considers that the relevant controls within the Licence should be sufficient to adequately manage dust emissions. The loading of sand and product into the back of trucks should result in a short drop/ fall into trucks which should minimise lift off.
23	The quarry operates under safe speed limits as required by DMIRS. WA Limestone request that this condition is deleted.	Condition 23 – Deleted. The Delegated Officer considers that the control measures proposed within the Licence are adequate for the purposes of managing the majority of fugitive dust emissions, during operational hours at the premises.
24	The works approval did not require the installation of dust monitors however WA Limestone has committed to the installation of static dust monitors. Static dust monitors do not have the capability of recording	Condition 24 – Amended. DWER Air Quality Services have advised that they are not familiar with the term ‘static dust monitors’, however it is inferred from the

Condition	Summary of Licence Holder comment	DWER response
	and reporting exceedance > 90 µg/m^3 within 72 hours. Static monitors will report monthly. WA Limestone request that this condition is updated to reflect static monitoring systems.	applicant's comments that this refers to depositional dust monitoring. Condition updated accordingly. NSW EPA Guideline value for nuisance dust of 4g/m^2/month is applicable.
24	Asbestos monitoring will be undertaken with static monitors. WA Limestone asbestos monitoring will be carried out in accordance to DMIRS CONTAM requirements therefore there will be no residual environmental impacts. WA Limestone request that this condition is deleted as OSH regulation is required by DMIRS.	Condition 24 – Amended. As above. The proposed condition of the Licence is considered appropriate in accordance with DWER regulatory controls and guidance and in accordance with the *Environmental Protection Act 1986*.
28	Repeat of condition 6. WA Limestone request that this condition deleted.	Condition 28 – Deleted. The Delegated Officer considers this condition to be adequately covered within Condition 6, Table 4 of the Licence.
30	The works approval did not require the installation of dust monitors however WA Limestone has committed to the installation of static dust monitors. Static dust monitors which do not have the capability of recording and reporting 15 minute rolling averages. Static monitors will report monthly. The standard quoted is not applicable to static monitors ad is for beta attenuation monitors (BAM). WA Limestone asbestos monitoring will be carried out in accordance to DMIRS CONTAM requirements therefore there is not expected to be residual environmental impacts. WA Limestone request that this condition deleted or updated to reflect the proposed dust monitoring and DMIRS asbestos monitoring.	Condition 30 – Amended. See 24 above.

Condition	Summary of Licence Holder comment	DWER response
36	Part c) is unenforceable as it refers to a separate prescribed premises. WA Limestone has received advice that conditions can only be imposed within the prescribed premises. WA Limestone request that pact c) of this condition is deleted.	Condition 36 – Revised. This condition has been revised as a result of the removal of condition 3 of the proposed Licence, as follows: *'a summary by month of the cumulative throughput ~~for~~ ~~Category 12 operations~~ for the* ***Premises operation*** *~~and the~~ ~~**Millar Road Quarry**~~ as defined ~~required~~ by Condition ~~3~~2.'*

Summary of applicant's comments on second/ final draft of risk assessment and draft conditions

Condition	Summary of Licence Holder comment	DWER response
24 **(Table 5)**	Specified action and method agreed as per the condition of the Licence:	No change proposed to the condition of the Licence for dust particulates. Asbestos fibre monitoring removed (see explanation below).

Condition	Summary of Licence Holder comment	DWER response
	Assess the operational effectiveness of dust management measures on the Premises and if required undertake improvements to ensure dust management measures are operating to their design specification as detailed in Table 4.	
30 **(Table 7)**	Amend column 5 'method' for Asbestos fibre, as follows: Undertake periodical monitoring. If the exposure has the potential to be above the EL, engineering controls and work practices will be used to keep levels at or below the EL. In addition to engineering controls and risk mitigation work practices, P3 respiratory protection will be used to reduce the exposures to the lowest level achievable.	The Delegated Officer has determined, through consultation with DWER Scientific Services, that no suitable standard or methodology for asbestos fibre monitoring is available through the use of depositional monitors. The applicant has submitted OH&S personal monitoring protocol as undertaken on site, however this is not considered appropriate within the conditions of the Licence. The Delegated Officer has determined that personal asbestos in an OH&S matter and monitoring will be adequately addressed WorkSafe requirements. The requirements for asbestos fibre monitoring have therefore not been included in the Licence.

Appendix 3: Clearing Permit CPS1953/2

GOVERNMENT OF WESTERN AUSTRALIA

CLEARING PERMIT

Granted under section 51E of the Environmental Protection Act 1986

PERMIT DETAILS
Area Number: 1953/2
File Number: DEC3728
Duration of Permit: From 21 June 2009 to 21 June 2023

PERMIT HOLDER
Hennderdin Pty Ltd

LAND ON WHICH CLEARING IS TO BE DONE
Lot 800 on Deposited Plan 72839, Baldivis

AUTHORISED ACTIVITY
The Permit Holder must not clear more than 11.6 hectares of native vegetation, within the area hatched yellow on attached Plan 1953/2.

CONDITIONS

1. **Type of clearing authorised**
   The Permit Holder shall not clear native vegetation unless extraction activities are enacted within six months of the clearing being undertaken.

2. **Period in which clearing is authorised**
   The Permit Holder shall not clear any native vegetation after 21 June 2018.

3. **Dieback and weed control**
   When undertaking any clearing or other activity authorised under this Permit, the Permit Holder must take the following steps to minimise the risk of the introduction and spread of *weeds* and *dieback*:
   (a) clean earth-moving machinery of soil and vegetation prior to entering and leaving the area to be cleared;
   (b) shall not move soils in wet conditions;
   (c) ensure that no *dieback* or *weed*-affected soil, *mulch*, *fill* or other material is brought into the area to be cleared; and
   (d) restrict the movement of machines and other vehicles to the limits of the areas to be cleared.

4. **Fauna Management**
   (a) Prior to clearing pursuant to this Permit during the months of September through to February the areas shall be inspected by a *fauna specialist* who shall identify the presence of *Merops ornatus* (Rainbow Bee-eater) and their nesting burrows.

   (b) The permit holder shall not clear during the months of September through to February if *Merops Ornatus* (Rainbow Bee-eater) or their nesting burrows are identified under condition 4(a).

   (c) Prior to undertaking any clearing authorised under this Permit, the area shall be inspected by a *fauna specialist* who shall identify habitat/*habitat tree(s)* suitable to be utilised by fauna species listed below:
   (i) Carnaby's Black Cockatoo (*Calyptorhynchus latirostris*)
   (ii) Baudin's Black Cockatoo (*Calyptorhynchus baudinii)*
   (iii) Western False Pipistrelle (*Falsistrellus mackenziei)*
   (iv) Honey Possum (*Tarsidpes rostratus)*
   (v) Brush Tailed Possum (*Trichosurus vulpecula)*

(d) Prior to clearing any habitat/*habitat tree(s)* identified by condition 4(c) shall be inspected by a *fauna clearing person* for the presence of fauna listed in condition 4(c).

(e) Prior to clearing, the Permit Holder shall ensure that any fauna identified in condition 4(d) shall be removed and relocated by a *fauna clearing person*, in accordance with a licence issued by the Department.

5. Retain vegetative material and topsoil, revegetation and rehabilitation

The Permit Holder shall:

(a) retain the vegetative material and topsoil removed by clearing authorised under this Permit and stockpile the vegetative material and topsoil in an area that has already been cleared.

(b) within 3 months following the completion of extractive activities, *revegetate* and *rehabilitate* the area(s) that are no longer required for the purpose for which they were cleared under this Permit by:
  (i) re-shaping the surface of the land so that it is consistent with the surrounding 5 metres of uncleared land; and
  (ii) ripping the ground on the contour to remove soil compaction; and
  (iii) ripping the pit floor and contour batters within the extraction site; and
  (iv) laying the vegetative material and topsoil retained under condition 5(a) on the cleared area(s) that are no longer required for the purpose for which they were cleared under this Permit; and

(c) within 24 months of undertaking *revegetation* and *rehabilitation* in accordance with condition 5(b) of this Permit:
  (i) engage an *environmental specialist* to determine the species composition, structure and density of the area *revegetated* and *rehabilitated*; and
  (ii) where, in the opinion of an *environmental specialist*, the composition structure and density determined under condition 5(c)(i) of this Permit will not result in a similar species composition, structure and density to that of pre-clearing vegetation types in that area, *revegetate* the area by deliberately *planting* and/or *direct seeding* native vegetation that will result in a similar species composition, structure and density of native vegetation to pre-clearing vegetation types in that area and ensuring only *local provenance* seeds and propagating material are used.

(d) where additional *planting* or *direct seeding* of native vegetation is undertaken in accordance with condition 5(c)(ii) of this permit, the Permit Holder shall repeat condition 5(c)(i) and 5(c)(ii) within 24 months of undertaking the additional *planting* or *direct seeding* of native vegetation.

(e) where a determination by an *environmental specialist* that the composition, structure and density within areas *revegetated* and *rehabilitated* will result in a similar species composition, structure and density to that of pre-clearing vegetation types in that area, as determined in condition 5(c)(i) and (ii) of this permit, that determination shall be submitted for the CEO's consideration. If the CEO does not agree with the determination made under condition 5(c)(ii), the CEO may require the Permit Holder to undertake additional *planting* and *direct seeding* in accordance with the requirements under condition 5(c)(ii).

6. Records must be kept

The Permit Holder must maintain the following records for activities done pursuant to this Permit:

(a) In relation to the clearing of native vegetation authorised under this Permit:
  (i) the species composition, structure and density of the cleared area;
  (ii) the location where the clearing occurred, recorded using a Global Positioning System (GPS) unit set to Geocentric Datum Australia 1994 (GDA94), expressing the geographical coordinates in Eastings and Northings or decimal degrees;
  (iii) the date that the area was cleared; and
  (iv) the size of the area cleared (in hectares).

(b) In relation to fauna management pursuant to condition 4 of this Permit:
  (i) the number of species identified, and that have been observed utilising the area;
  (ii) the species of fauna reasonably likely to utilise, or that have been observed utilising the habitat/*habitat tree(s);*
  (iii) the location and date where relocated fauna was released, recorded using a Global Positioning System (GPS) unit set to Geocentric Datum Australia 1994 (GDA94), expressing the geographical coordinates in Eastings and Northings.

(c) In relation to the *revegetation* and *rehabilitation* of areas pursuant to condition 5 of this Permit:
  (i) the location of any areas *revegetated* and *rehabilitated*, recorded using a Global Positioning System (GPS) unit set to Geocentric Datum Australia 1994 (GDA94), expressing the geographical coordinates in Eastings and Northings or decimal degrees;
  (ii) a description of the *revegetation* and *rehabilitation* activities undertaken;
  (iii) the size of the area *revegetated* and *rehabilitated* (in hectares);
  (iv) the species composition, structure and density of *revegetation* and *rehabilitation*, and
  (v) a copy of the environmental specialist's report.

7. Reporting

(a) The Permit Holder must provide to the CEO on or before 30 June of each year, a written report:
  (i) of records required under condition 6 of this Permit; and
  (ii) concerning activities done by the Permit Holder under this Permit between 1 January to 31 December of the preceding year.

(b) If no clearing authorised under this Permit was undertaken between 1 January to 31 December of the preceding year, a written report confirming that no clearing under this permit has been carried out, must be provided to the CEO on or before 30 June of each year.

(c) Prior to 21 March 2023, the Permit Holder must provide to the CEO a written report of records required under condition 6 of this Permit where these records have not already been provided under condition 7(a) of this Permit.

Definitions

The following meanings are given to terms used in this Permit:

dieback means the effect of *Phytophthora* species on native vegetation;

direct seeding means a method of re-establishing vegetation through the establishment of a seed bed and the introduction of seeds of the desired plant species;

environmental specialist means a person who is engaged by the Permit Holder for the purpose of providing environmental advice, who holds a tertiary qualification in environmental science or equivalent, and has experience relevant to the type of environmental advice that an environmental specialist is required to provide under this Permit;

fill means material used to increase the ground level, or fill a hollow;

mulch means the use of organic matter, wood chips or rocks to slow the movement of water across the soil surface and to reduce evaporation;

fauna clearing person means a person who has obtained a licence from the Department, issued pursuant to the *Wildlife Conservation Regulations 1970* authorising them to take fauna;

fauna specialist means a person with training and specific work experience in fauna identification or faunal assemblage surveys of Western Australian fauna;

habitat tree(s) means trees that have a diameter, at average adult human chest height, of greater than 70cm, healthy but with dead limbs and broken crowns that are likely to contain hollows and roosts suitable for native fauna, or where these are not present then healthy but with the potential to contain hollows and roosts;

local provenance means native vegetation seeds and propagating material from natural sources within 10-40 kilometres of the area cleared;

planting means the re-establishment of vegetation by creating favourable soil conditions and planting seedlings of the desired species;

regenerate/ed/ion means re-establishment of vegetation from in situ seed banks and propagating material (such as lignotubers, bulbs, rhizomes) contained either within the topsoil or seed-bearing *mulch*;

rehabilitate/ed/ion means actively managing an area containing native vegetation in order to improve the ecological function of that area;

revegetate/ed/ion means the re-establishment of a cover of *local provenance* native vegetation in an area using methods such as natural *regeneration*, *direct seeding* and/or *planting*, so that the species composition, structure and density is similar to pre-clearing vegetation types in that area.

weed/s means any plant -

(a) that is a declared pest under section 22 of the *Biosecurity and Agriculture Management Act 2007*; or
(b) published in the Department of Environment and Conservation Regional Weed Assessments, regardless of ranking; or
(c) not indigenous to the area concerned.

M Warnock
MANAGER
NATIVE VEGETATION CONSERVATION BRANCH

Officer delegated under Section 20
of the Environmental Protection Act 1986

23 May 2013

Appendix 4: Council Minutes

Excerpt of revised final Council resolution held on 28 July 2015

Council Resolution

That Council ***APPROVE*** the application seeking Planning Approval for Landform Reconstruction by Inert Landfill at Lot 800 Kerosene Lane, Baldivis, subject to the following conditions:

1. This approval is valid for a period of 10 years only commencing on the date of the issue of this approval.
2. Only one access is permitted from the future Nairn Drive to the subject site at any one time.
3. Prior to the construction of an access to the site from the future Nairn Drive, engineering drawings and specification are to be submitted to and approved by the City of Rockingham. Construction of the access must in accordance with the approved engineering drawings and specifications.
4. No material is to be deposited on the site other than sand, clay, soils, bricks or concrete and other similar inert building waste.
5. Without limiting Condition No.4, no putrescible material, asbestos, or contaminated or hazardous material is to be deposited on the site.
6. Filling of land must occur in accordance with the revised Staging Plan dated 07.05.2015.
7. Each stage of the landfill area is to be rehabilitated when final contour levels and grades for each stage have been completed in accordance with the application and the rehabilitation is to commence immediately and be completed within 12 months of the completion of each stage. For the purpose of this condition rehabilitation means the covering of the inert fill with clean sand fill which is stabilised with grass seed to the satisfaction of the City.
8. Prior to the commencement of any development, a management plan prepared by a suitably qualified person must be submitted to the City for its approval which plan addresses:
   (i) all site operations;
   (ii) site supervision arrangements;
   (iii) truck movements and access and driver supervision arrangements;
   (iv) prevention and management of spill material on the site and on roads; and
   (v) maintenance of plant and equipment to prevent spillage of lubricants and fuel.
9. Except to the extent of inconsistency with any other of these conditions, the undertaking of the landfill operations on the site is to comply in all respects and at all times with the approved management plan and any subsequent amendments to that management plan as may be directed in writing to the owner(s) of the land by the City.

CONFIRMED AT A COUNCIL MEETING HELD ON TUESDAY 25 AUGUST 2015

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10. (i) Prior to the commencement of any development, a pre-works geotechnical report prepared by a suitably qualified person must be submitted to the City which plan addresses:
    (a) fill material composition and quality;
    (b) on-site drainage; and
    (c) compaction of fill material to appropriate staged lifts to the full depth in accordance with AS:3798-2007 within the land included in the Other Regional Road Reserve (future Nairn Drive).
    (ii) A post geotechnical report certifying that all landfill works have been carried out in accordance with the pre-works geotechnical report which must be submitted to the City.
11. The dust management plan prepared by Landform Research and dated November 2013 must be complied with at all times.
12. At all times:
    (i) all stockpiles of materials on the site; and
    (ii) the access road to and all trafficable areas on the site, must be watered down or treated and maintained in a manner which prevents or minimises the generation of airborne dust.
13. (i) The landfill operations must be carried out in accordance with the dust management, suppression and mitigation measures contained in the approved dust management plan.
    (ii) Without limiting Condition 13(i) no visible dust is permitted to leave the site.
14. At all times sufficient water must be accessible on-site to enable dust suppression pursuant to Conditions 12 and 13, if necessary by means of water transported by tanker onto the site.
15. When winds are sufficiently strong to negate the effects of the dust management, suppression and mitigation measures contained in the dust management plan, all landfill operations on the site must cease until conditions improve and compliance can be achieved.
16. In addition to any other condition, if an officer of the City inspects the site and is satisfied that any of the landfill operations on the site are generating an unreasonable amount of dust, or that any of those operations are not compliant with any of the conditions relating to dust emissions (including non-compliance with the dust management measures contained in the dust management plan), the City may direct in writing that:
    (i) an amended dust management plan is submitted and approved; or
    (ii) the activities on the site are brought into compliance with this approval, as the case may be.

    In this condition 'an unreasonable amount of dust' means visible dust crossing the site's boundary and visibly excessive dust on the site.
17. The asbestos management plan prepared by WA Limestone and dated November 2013 must be complied with at all times.
18. Prior to the commencement of development, a noise management plan prepared by a suitably qualified acoustic expert must be submitted to and approved by the City which plan addresses the measures required to be taken to ensure that the requirements of the Environmental Protection (Noise) Regulations 1997 are met.
19. The operator must at all times carry out the operations, including crusher, in accordance with, and must implement the noise management, suppression and mitigation measures contained in the approved Noise Management Plan.
20. Crushing is only to occur in the area within the bunds on the site.
21. All vehicles, equipment and machinery used on the site must not use reversing beepers unless those beepers are required for the safe conduct of operations on the site (in accordance with the provisions of the Occupational Safety and Health Regulations 1996

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(WA) and the Environmental Protection (Noise) Regulations 1997 (WA) or it is demonstrated to the written satisfaction of the City that no acceptable alternative exists. Any reversing alarm on any vehicle, piece of equipment or machinery shall be broad-band reversing alarms, for example, 'croakers'.

22. In addition to any other condition, if an officer of the City inspects the site and is satisfied that any of the landfill operations on the site are generating an unreasonable amount of noise, or that any of those operations are not compliant with any of the conditions relating to noise emissions (including non-compliance with the noise management measures contained in the noise management plan), the City may direct in writing that:

    (i) an amended noise management plan is submitted and approved; or

    (ii) the activities on the site are brought into compliance with this approval, as the case may be.

    In this condition 'an unreasonable amount of noise' means noise which exceeds the levels assigned by the Environmental Protection (Noise) Regulations 1997.

23. A bund 3m above the pre-existing natural ground level must be constructed and maintained at all times along the southern, western and eastern edge of the landfill area.

24. Haulage of material on public roads is only permitted between the hours of 7:00am to 5:00pm Monday to Saturday, and not at all on Sunday or Public Holidays. No operation of haulage vehicles on site is permitted on any Sunday or Public Holiday.

25. Haulage vehicles are not permitted to park along Kulija Road at any time.

26. Prior to 1 January 2020 or not later than any earlier time agreed in writing between PMR Quarries and the City of Rockingham, a Survey Plan or Diagram of Survey must be prepared for the land required for the future construction of Nairn Drive on Lot 800 Kerosene Lane, reserved as 'Other Regional Roads' in the Metropolitan Region Scheme, and submitted to the City.

27. The final ground levels of the extraction area must reflect the profile design levels for Kulija Road and Nairn Drive, as determined by the City, unless an alternate profile design level for either road is approved in writing by the City.

28. (i) Prior to the commencement of any development, a groundwater sampling plan prepared by a suitably qualified person must be submitted to the City for the City's approval and implemented consistent with Groundwater Sampling and Analysis - A field guide (geoscience Australia) which plan must address:

        (a) Sampling locations;

        (b) Sampling frequency;

        (c) Sampling methodology (including collection, preservation and storage and testing (depth to groundwater and quality);

        (d) Data management and reporting; and

        (e) Details of the person/group that will undertake sampling.

    (ii) The approved ground water sampling plan must be observed and carried out at all times.

29. All landfill works must maintain a minimum vertical separation distance of 2m to the highest known water table level, for the duration of the development.

30. A 40m vegetation buffer from Kerosene Lane and Kulija Road to the landfill area and a 20m vegetation buffer from the eastern and western side boundaries must be maintained at all times. No removal of vegetation within the buffer areas is permitted.

31. All landfill works must only be carried out between the hours of 6:30am to 5:00pm Mondays to Saturdays and not at all on Sundays or Public Holidays. Crushing, processing and compacting must not occur prior to 7:00am and must not be carried out on Sundays and Public Holidays.

32. By 31 January each year an annual report must be submitted to the City which includes:

    (i) the progress of the inert landfill activities;

    (ii) the progress of rehabilitation undertaken and completed;

    (iii) the measures taken to suppress and minimise dust;

    (iv) the measures taken to suppress and minimise noise; and

    (v) the number and type of community complaints and responses.

33. The City may provide to the operator its comments and any recommendations as to how the operation of the site or the use should be changed in order to address any matter identified in the report.

34. The operator must alter the operation of the site or the manner in which the use is carried out as directed in writing by the City, in response to any comments and recommendations agreed between the operator and the City of Rockingham, and the operation of the site or the use shall thereafter be carried out in accordance with any such direction.

Carried en bloc

Attachment 1: Licence L9064/2017/1