



Application for Licence Amendment

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

Licence Number	L4511/1967/14
Licence Holder	Midland Brick Pty Ltd
ACN	635 664 710
File Number	2012/002146-1
Premises	Midland Brick 321 Great Northern Hwy MIDDLE SWAN WA 6056 Legal description – Part of Lot 103 on Plan 54208, Part Lot 87 on Plan 5036, Part Lot 72 on Plan 408605 As defined by the premises map in Schedule 1 and the premises coordinates in Schedule 2 of the Revised Licence
Date of Report	02/08/2022
Decision	Revised licence granted

Table of Contents

1. Decision summary	2
2. Scope of assessment	2
2.1 Regulatory framework	2
2.2 Application summary	2
2.3 Background	2
2.3.1 Premises occupancy	2
2.3.2 Environmental noise assessment	3
3. Risk assessment	4
3.1 Source-pathways and receptors	4
3.1.1 Emissions and controls	4
3.1.2 Receptors	5
3.2 Risk ratings	6
4. Consultation	8
5. Decision	8
6. Conclusion	8
6.1 Summary of amendments	8
References	9
Appendix 2: Application validation summary	10
Table 1: Licence holder controls	4
Table 2: Sensitive human and environmental receptors and distance from prescribed activity	5
Table 3. Risk assessment of potential emissions and discharges from the Premises during operation	7
Table 4: Consultation	8
Table 5: Summary of licence amendments	9
Figure 1: Lease and access areas for the existing licence	3

1. Decision summary

Licence L4511/1967/14 is held by Midland Brick Pty Ltd (licence holder) for the Midland Brick manufacturing facility (the Premises), located at 321 Great Northern Highway, Middle Swan.

This Amendment Report documents the assessment of potential risks to the environment and public health associated with the changes to the premises boundary proposed by the licence holder in its licence amendment application. As a result of this assessment, Revised Licence L4511/1967/14 has been granted.

The Revised Licence issued as a result of this amendment supersedes the Licence previously granted in relation to the Premises.

2. Scope of assessment

2.1 Regulatory framework

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

2.2 Application summary

On 26 April 2022 the licence holder submitted an application to the department to amend Licence L4511/1967/14 under section 59 and 59B of the *Environmental Protection Act 1986* (EP Act). The licence holder is seeking an amendment to change the boundary of the premises to remove lots no longer accessible to the licence holder. The lots proposed to be removed from the premises have previously been used for activities directly connected with the brickworks (brick stockpiling and operation of the now decommissioned kilns 7 and 8) but are proposed to be developed for urban and/or light industrial use. The licence holder has proposed to remove the following lots from the premises as they no longer have legal access to them:

- Lot 9000 on Plan 405292
- Lot 9002 on Plan 421407
- Lot 23 on Plan 77549
- Lots 194, 195 to 198 and Lots 160 to 169 on Plan 9113
- Part of Lot 72 on Plan 408605

2.3 Background

2.3.1 Premises occupancy

An automated brickworks has been operated on the premises by various companies since 1982. In 2020 the premises and some adjacent land was sold by the then licence holder (Boral Bricks Western Australia Pty Ltd) to Hesperia Limited (Hesperia), a land development consortium. Hesperia entered into a lease with the current licence holder to operate the brickworks on the premises, and licence L4511/1967/13 was transferred to the licence holder in October 2020.

The licence holder holds a lease for the north-eastern portion of the premises (north of Bassett Road) which kilns 9 and 10, and a masonry plant are located within, and has long term lease options to continue operation of the brickworks within this area. The licence holder also has a short-term access lease, until 30 April 2023, for the portion of the premises on which kiln 11 is located.

The landowner Hesperia is developing the area located to the east of Cranwood Crescent, into residential lots (Cranwood Crescent subdivision) and redevelopment of additional lots within the current brickworks premises boundary for urban and/or light industrial use is also planned. A licence amendment was granted on 31 August 2021 to modify the premises boundary to exclude areas to the east of Cranwood Crescent, which were approved for subdivision for residential purposes by the Western Australian Planning Commission (WAPC). At this time the stack for kilns 7 and 8 was also removed from the licence as an authorised emission point.

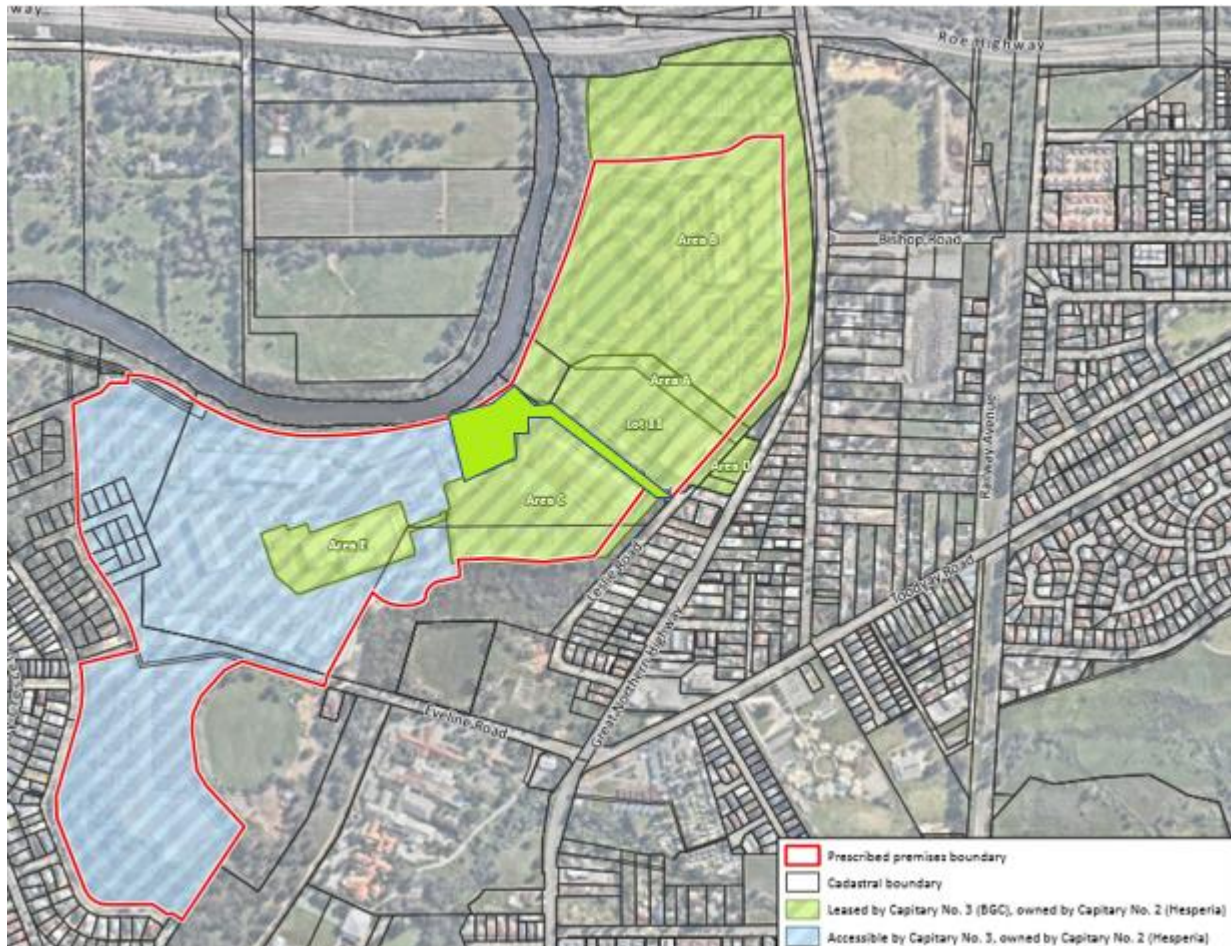


Figure 1 shows the current licence boundary (red) prior to this amendment and delineates areas proposed to be removed from the licence to enable redevelopment (illustrated in blue) as well as the remaining area proposed as the revised premises boundary for the amended licence (illustrated in green). The licence holder no longer has access to the blue area with only the green area currently leased by the licence holder.

This amendment is not associated with any proposed new residential lots.

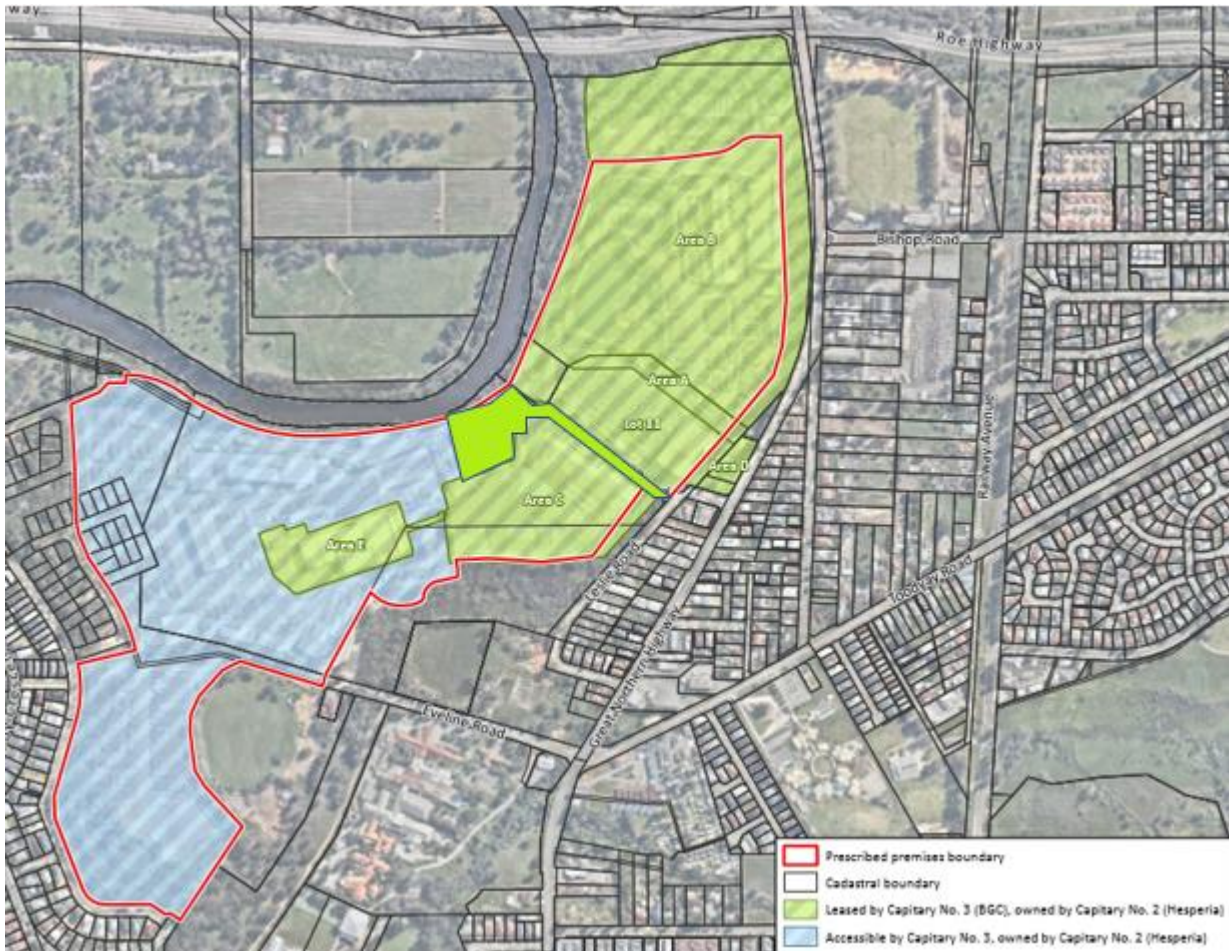


Figure 1: Lease and access areas for the existing licence

2.3.2 Environmental noise assessment

An environmental noise assessment was submitted in support of the Cranwood Crescent subdivision application (*Environmental Noise Assessment, Winston Crescent / Somerset Street, Viveash, Lloyd George Acoustics, December 2019*). The noise assessment considered noise impact from the operation of the premises. The assessment was reviewed by the department (to support the assessment of the subdivision application) and the noise modelling methodology, inputs and assumptions considered to be reasonable. Two scenarios were modelled with three kilns (kiln 9, 10 and 11) and the clay shed in operation with trucks operating for one scenario, and not operating for the other. Noise levels predicted to occur within the subdivision area were up to 49 dB L_{A10} (trucks operational) and up to 38 dB L_{A10} (trucks not operational) which exceed assigned night time noise levels required by the Noise Regulations by up to 15 dB L_{A10} when adjusted for the presence of tonality. A number of mitigation measures were proposed to address the predicted exceedances including restricting night time truck movement, establishment of a noise bund along the revised western boundary of the premises, noise treatments to kiln 11, architectural treatments to houses and localised noise walls.

The department considered that compliance with the Noise Regulations within the subdivision could be achieved but is dependent on implementation of adequate noise mitigation measures at the premises. The proposed noise bund (sea container wall) has been established west of the proposed revised premises boundary to mitigate noise impacts on the Cranwood Crescent Subdivision. This has been undertaken by the land developer to comply with the conditions of the Cranwood Crescent Subdivision Development Approval. It is noted the noise modelling indicates assigned noise levels are likely to be complied with at the residential receptors when a noise bund is established.

The amendment will result in cessation of truck movements in the brick stockpiling yards east of the residential subdivision, and a reduction in noise is expected as a result. It's expected that there will be a further contraction of brickmaking operations to the area north of Bassett Road, to allow for proposed development of areas to the south.

3. Risk assessment

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

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

3.1 Source-pathways and receptors

3.1.1 Emissions and controls

The key emissions and associated actual or likely pathway during premises operation which have been considered in this Amendment Report are detailed in Table 1 below. Table 1 also details the existing control measures the licence holder has in place to assist in controlling these emissions relevant to the emission.

Table 1: Licence holder controls

Emission	Sources	Potential pathways	Existing controls
Dust	Storage and handling of clays for making bricks	Air/windborne pathway	Enclosed clay storage shed and conveyors. Sprinklers available to dampen stockpiles. Brick storage area on asphalt hardstand.
Noise	Screening of clays, kiln stacks, fans, and motors, trucks.	Air/windborne pathway	Clay preparation occurs within the clay shed. Stacks have an internally insulated flue. Stack fan exhausts incorporate silencers Sea container wall has been constructed to the southwest of the revised premises boundary.
Air emissions including acid gases HCl and HF, SO ₂ , CO, NO _x , VOCs and particulates (PM ₁₀ and PM _{2.5})	Firing of dried bricks in high temperature kilns	Air/windborne pathway	Kiln exhaust gas emissions are treated via dry injection fabric filter (DIFF) scrubbers to remove pollutants prior to discharge via a 40 m high stack. The licence requires the scrubbers are operated in accordance with manufacturer's specifications. The licence requires quarterly monitoring of stack emissions, specifies limits for HCl, HF and SO ₂ and required continuous ambient air monitoring for HF at two locations.

3.1.2 Receptors

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

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

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

Human receptors	Distance from prescribed activity
Leslie Road residential receptors	Residential properties are located approximately 400 metres south east of the kiln 11 stack and 60 metres south east of the clay shed, in Leslie Road. No change in the distance to these receptors as a result of the amendment.
Cranwood Crescent residential receptors	Residential properties are currently located approximately 540 m west south west of the kiln 11. New residential properties within the Cranwood Crescent subdivision will be located approximately 450 m west south west of the kiln 11 stack.
Environmental receptors	Distance from prescribed activity
Swan River	Immediately adjacent to parts of the northern and western boundary.
Blackadder Creek	Immediately adjacent to parts of the southern boundary.
Threatened Fauna <i>Dasyurus geoffroii</i>	Identified within the boundary of the site (<i>D. geoffroii</i> very certain 2017)

3.2 Risk ratings

Risk ratings have been assessed in accordance with the *Guideline: Risk Assessments* (DWER 2020a) for those emission sources where there may be a reduced separation distance to receptors as a result of the amendment. The risk ratings take into account potential source-pathway and receptor linkages as identified in Section 3.1. Where linkages are in-complete they have not been considered further in the risk assessment.

Where existing mitigation measures/controls are already in place (as detailed in Section 3.1), these have been considered when determining the final risk rating.

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

The Revised Licence L4511/1967/14 that accompanies this Amendment Report authorises emissions associated with the operation of the Premises. The conditions in the revised licence have been determined in accordance with *Guidance Statement: Setting Conditions* (DER 2015).

Table 3. Risk assessment of potential emissions and discharges from the Premises during operation

Risk Event					Risk rating ¹ C = consequence L = likelihood	Conditions of licence	Reasoning
Source/Activities	Potential emission	Potential pathways and impact	Receptors	Existing controls			
Category 41: Clay bricks manufacturing (operation of kilns, preparation of bricks within a clay shed, storage of bricks)	Dust	Air/windborne pathway causing impacts to health and amenity	Existing residents 60 metres to south east of clay shed (no change to separation distance as a result of the amendment).	Refer to Table 3	C = Minor L = Unlikely Medium Risk	NA	There is no change to the activities which generate dust emissions on the premises or the distance to receptors closest to the activities therefore there is no change to the risk profile associated with dust emissions. The Delegated Officer determined that the existing licence conditions for fugitive dust remain adequate and appropriate for the risk of dust impacts.
	Noise	Air/windborne pathway causing impacts to amenity	Existing residents 340 m south east of kiln 11 (no change to separation distance as a result of the amendment).		C = Moderate L = Possible Medium Risk	NA	A noise barrier (sea container wall) has been constructed to the southwest of the revised premises boundary to prevent unreasonable noise affecting new residential lots being developed west of the plant.
	Air emissions including acid gases HCl and HF, SO ₂ , CO, NO _x , VOCs and particulates (PM ₁₀ and PM _{2.5})	Air/windborne pathway causing impacts to health and amenity	Existing residents 340 m south east of kiln 11 (no change to separation distance as a result of the amendment).		C = Minor L = Unlikely Medium Risk	No new conditions. Premises boundary in Schedule 1 and Schedule 2 revised to remove the area the licence holder previously had access to but no longer has a lease over.	There is no change to the risk of air emissions impacting on resident's health or amenity as a result of the amendment. The delegated officer considers the existing air emission controls in the licence relating to infrastructure operation and maintenance (scrubbers), limits, monitoring and reporting associated with air emissions sufficiently mitigate the risk associated with air emissions.

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

Note 2: Proposed licence holder's controls are depicted by standard text. **Bold and underline text** depicts additional regulatory controls imposed by department.

4. Consultation

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

Table 4: Consultation

Consultation method	Comments received	Department response
Local Government Authority advised of proposal 17 May 2022	N/A	N/A
Licence holder was provided with draft documents on 20 July 2022	Licence holder replied 29 July 2022 commenting that the map in the decision report was slightly different to the map in the licence and requesting that it be changed to prevent confusion.	The map in the decision report has been modified to include a small area north of the clay shed which is included in the licence.

5. Decision

The delegated officer has determined to amend licence L4511/1967/14 by revising the premises boundary to exclude areas the licence holder no longer has access to. In assessing the changes the delegated officer determined that there is no significant change in the risk profile of emissions and discharges from the premises and the proposed amendment is unlikely to result in a material increase to the overall risk profile of the premises.

In making these determinations the delegated officer took into account:

- The licence holder no longer has legal access to the following lots:
 - Lot 9000 on Plan 405292
 - Lot 9002 on Plan 421407
 - Lot 23 on Plan 77549
 - Lots 194, 195, 198 and Lots 160 to 169 on Plan 9113
 - Part of lot 72 on Plan 408605
- There is no significant change to the risk profile for point source emissions to air as there has been no change in distance to sensitive receptors as a result of the amendment.
- The risk of noise amenity impacts is expected to be reduced because of the closure of the brick yards in the southern and western parts of the existing premises and associated cessation of truck movements in these yards.

6. Conclusion

Based on the assessment in this Amendment Report, the delegated officer has determined that a Revised Licence will be granted, subject to conditions commensurate with the determined controls and necessary for administration and reporting requirements.

6.1 Summary of amendments

Table 5 provides a summary of the proposed amendments and will act as record of implemented changes. All proposed changes have been incorporated into the revised licence as part of the amendment process.

Table 5: Summary of licence amendments

Condition no.	Proposed amendments
Cover page	The legal description has been updated to remove lots the licence holder no longer has legal access to. Premises legal description has been changed by removing Part Lot 9000 on Plan 405292, Part Lot 9002 on Plan 421407, Part Lot 23 on Plan 77549, Part Lot 194, Lots 195 to 198, and Lots 160 to 169 on Plan 9113
Schedule 1 Premises Maps	A new premises boundary map has been inserted in Schedule 1 Figure 1.
Schedule 2 Premises Boundary	New boundary co-ordinates have been included in Schedule 2.

References

1. Department of Environment Regulation (DER) 2015, *Guidance Statement: Setting Conditions*, Perth, Western Australia.
2. Department of Water and Environmental Regulation (DWER) 2020, *Guideline: Environmental Siting*, Perth, Western Australia.
3. DWER 2020a, *Guideline: Risk Assessments*, Perth, Western Australia.

Appendix 2: Application validation summary

SECTION 1: APPLICATION SUMMARY			
Application type			
Amendment to licence	<input checked="" type="checkbox"/>	Current licence number:	L4511/1967/14
Date application received		26 April 2022	
Applicant and Premises details			
Applicant name/s (full legal name/s)		Midland Brick Pty Ltd	
Premises name		Midland Brick	
Premises location		Part Lot 103 on Plan 54208, Part Lot 87 on Plan 5036, Part Lot 72 on Plan 408605, Part Lot 9000 on Plan 405292, MIDDLE SWAN WA 6056 Part Lot 23 on Plan 77549, Part Lot 194, Lots 195 to 198, and Lots 160 to 169 on Plan 9113, VIVEASH WA 6056	
Local Government Authority		City of Swan	
Application documents			
HPCM file reference number:		A2098410	
Key application documents (additional to application form):		Site Water Management Plan	
Scope of application/assessment			
Summary of proposed activities or changes to existing operations.		Licence amendment Operation of Category 41 and Category 77 premises. The licensee is seeking to amend the boundary of the premises.	
Category number/s (activities that cause the premises to become prescribed premises)			
Table 1: Prescribed premises categories			
Prescribed premises category and description	Assessed production or design capacity	Proposed changes to the production or design capacity (amendments only)	
Category 41: clay brick manufacture	1,000,000 tonnes per annum	Not change to production or design capacity	
Category 77: Cement product manufacturing	200,000 tonnes per annum	Not change to production or design capacity	
Legislative context and other approvals			
Has the applicant referred, or do they intend to refer, their proposal to the EPA under Part IV of the EP Act as a significant proposal?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Referral decision No: Managed under Part V <input type="checkbox"/> Assessed under Part IV <input type="checkbox"/>	
Does the applicant hold any existing Part IV Ministerial Statements relevant to the application?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Ministerial statement No: EPA Report No:	

Has the proposal been referred and/or assessed under the EPBC Act?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Reference No:
Has the applicant demonstrated occupancy (proof of occupier status)?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Certificate of title <input checked="" type="checkbox"/> General lease <input checked="" type="checkbox"/> Expiry:
Has the applicant obtained all relevant planning approvals?	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" type="checkbox"/>	Approval: Expiry date:
Has the applicant applied for, or have an existing EP Act clearing permit in relation to this proposal?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	No clearing is proposed.
Has the applicant applied for, or have an existing CAWS Act clearing licence in relation to this proposal?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	No clearing is proposed.
Has the applicant applied for, or have an existing RIWI Act licence or permit in relation to this proposal?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Licence / permit not required.
Does the proposal involve a discharge of waste into a designated area (as defined in section 57 of the EP Act)?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Is the Premises situated in a Public Drinking Water Source Area (PDWSA)?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Is the Premises subject to any other Acts or subsidiary regulations (e.g. <i>Dangerous Goods Safety Act 2004</i> , <i>Environmental Protection (Controlled Waste) Regulations 2004</i> , <i>State Agreement Act xxxx</i>)	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	<i>Environmental Protection (Concrete Batching and Cement Product Manufacturing) Regulations 1998</i>
Is the Premises within an Environmental Protection Policy (EPP) Area?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Is the Premises subject to any EPP requirements?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Is the Premises a known or suspected contaminated site under the <i>Contaminated Sites Act 2003</i> ?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Classification: possibly contaminated – investigation required (PC-IR) Date of classification: 17/9/2013