Application for Works Approval

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

Works Approval Number	W6374/2020/1
Applicant	B. & J. Catalano Pty Ltd
ACN	008 961 975
File Number	DER2020/000106
Premises	Mogumber Gravel quarry 190 Cocking Road MOGUMBER WA 6506 Legal description: Part of Lot M1806 on Diagram 8582 and Part of Lot 6 on Diagram 19255 Certificate of Title Volume 2213 Folio 504 As defined by the Premises map attached to the issued works approval
Date of Report	22/07/2021
Decision	Works approval granted

Carmen Standring

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A/MANAGER, RESOURCE INDUSTRIES REGULATORY SERVICES

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

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1. Decision summary

This Decision Report documents the assessment of potential risks to the environment and public health from emissions and discharges during the construction and operation of the Premises. As a result of this assessment, Works Approval W6374/2020/1 has been granted.

2. Scope of assessment

2.1 Regulatory framework

In completing the assessment documented in this Decision Report, the department has considered and given due regard to its Regulatory Framework and relevant policy documents which are available at https://dwer.wa.gov.au/regulatory-documents.

2.2 Application summary and overview of Premises

On 27 February 2020, the applicant submitted an application for a works approval to the department under section 54 of the *Environmental Protection Act 1986* (EP Act). On 17 June 2020, the department requested further information from the applicant regarding the extent and condition of conservation significant flora identified in the area. Further information was also requested regarding the management of stormwater and hydrocarbons (fuel and oil), and the status of the Extractive Industries Licence (EIL) issued by the local government authority.

On 2 February 2021, the applicant provided a response to the further information request, which included a revised Premises boundary to take account of the presence of conservation significant flora, the extent and condition of which was confirmed during a targeted flora survey carried out in November 2020 (Plantecology Consulting 2021).

The Premises is approximately 7 km southeast of Mogumber townsite on private farmland (Freehold). The surrounding area is predominantly pasture on escarpment with areas of bushland located downslope to the north and west and vegetated drainage lines leading to nearby dams.

The application is to undertake construction works relating to gravel extraction and screening at the Premises. Constructions works will include clearing and stockpiling of topsoil, establishment of storm water retention basin infrastructure (bunds and detention ponds), and construction of a gravel access road.

Gravel extraction is proposed to be staged with construction of stormwater basins and stockpiling of topsoil to occur prior to each stage of gravel extraction commencing. Extractive operations within each stage will include topsoil removal, ripping, blading, crushing and stockpiling of gravel, and truck loading and export of extracted gravel. Approximately 3,000 to 5,000 tonnes of gravel will be extracted from each stage.

Stripped topsoil from each stage will be placed in windrows along the edges of the working area to serve as noise, stormwater and visual barriers. A bulldozer will rip the laterite and then blade it into the crusher sites until a large raw material stockpile has accumulated. It is anticipated that the ripping and blading phase of the operation will be undertaken for approximately one week for each stage.

Once all the raw material has been stockpiled, a crusher, screen and stacker will be deployed for a period of approximately eight to ten weeks per year. At the end of this period all material will be processed and ready for use. Trucks, as required, will enter and cart material out of the site.

The estimated operating period of the Premises is expected to be up to 10 years with 240,000 tonnes of gravel to be extracted.

The Premises relates to Category 12 – Screening of material (gravel) and assessed production capacity of 5,000 tonnes per month under Schedule 1 of the *Environmental Protection Regulations 1987* (EP Regulations), which are defined in Works Approval W6374/2020/1.

The infrastructure and equipment relating to the premises category and any associated activities which the department has considered in line with *Guideline: Risk Assessments* (DWER 2017) are outlined in Works Approval W6374/2020/1.

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 2017).

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 construction and operation which have been considered in this Decision Report are detailed in Table 1 below, which also details the proposed control measures the applicant has proposed to assist in controlling these emissions, where necessary.

Table 1: Proposed applicant controls

Emission	Sources	Potential pathways	Proposed controls
Construction			
Dust	Construction of internal access road and initial operational infrastructure (e.g. retention pond)	Air/windborne pathway	Limited duration (approximately 1 week) Water cart to be stationed on-site and used to wet down access roads and working areas in dry conditions and strong winds.
Noise		Air/windborne pathway	Reversing croakers used instead of alarms Construction only between “day-time” hours (6 am to 6 pm, Mon – Friday; 6 am to 12 pm Saturday)

Emission	Sources	Potential pathways	Proposed controls
Operation			
Dust	Crushing, screening and stockpiling gravel Loading and movement of trucks	Air/windborne pathway	Water cart to be stationed on-site and used to wet down access roads and working areas in dry conditions and strong winds Stockpiles located to minimise dust lift off from prevailing wind and treatment of stockpiles with water sprays and dust suppressant if required Internal roads will be surfaced with gravel Loads to be dampened if required Loads to be covered and on-site vehicle speeds limited to <20 kph Monitoring of wind conditions in times of strong prevailing winds in direction of closest sensitive receptors and modify operations accordingly to mitigate dust generation (i.e. cease or limit operations, wet down working area) Site supervisor and operators to proactively monitor visible dust crossing the boundary premises Implementation of Dust Management Plan (Lundstrom Environmental 2021).
Noise	Crushing, screening and stockpiling gravel Loading and movement of trucks	Air/windborne pathway	Reversing croakers used instead of alarms Use of modern equipment fitted with acoustic treatment Operations only between “day-time” hours (6 am to 6 pm, Mon – Friday; 6 am to 12 pm Saturday)
Sediment in stormwater	Stockpiling, material handling and screening areas	Direct discharge from overland flow	Staged extraction and screening Construction of detention ponds for each stage of excavation Diversion of run off from outside the defined sub-catchment via bunds
Hydrocarbons	Spillage during refueling or maintenance of plant and equipment	Direct discharge from overland flow or percolation to groundwater	No fuel stored on-site – refueling of plant and equipment will be done by mobile plant No major servicing of plant and equipment carried out on-site Implementation of spill response procedure

3.1.2 Receptors

In accordance with the *Guideline: Risk Assessment* (DWER 2017), the Delegated Officer has excluded employees, visitors and contractors of the applicant'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 and Figure 1 below provide 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 2016)).

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

Human receptors	**Distance from prescribed activity**
Closest residential receptor	1.6 km north-northwest from the Premises boundary
Other surrounding rural residences	2.1 km northwest from the Premises boundary 3.5 km southwest from the Premises boundary 900 m west from Premises entrance on Cocking Road
Environmental receptors	**Distance from prescribed activity**
Surface water dam	335 m east from the Premises boundary 450 m north from the Premises boundary
Surface water ephemeral creeks	Drainage lines from the Premises boundary to surface water dams
Groundwater	Fractured granite rock aquifers lacking connectivity (WCAA 2018) Note: the maximum depth of extraction will be approximately 1.0 m and is not expected to encounter groundwater
Conservation significant flora (listed Endangered under the *Environment Protection and Biodiversity Conservation Act 1999* (Cwlth)	Within 100 m north and west from the Premises boundary Note: the Premises boundary was revised in February 2021 to remove the catchment area containing the conservation significant flora, which was previously immediately downstream of the operational areas

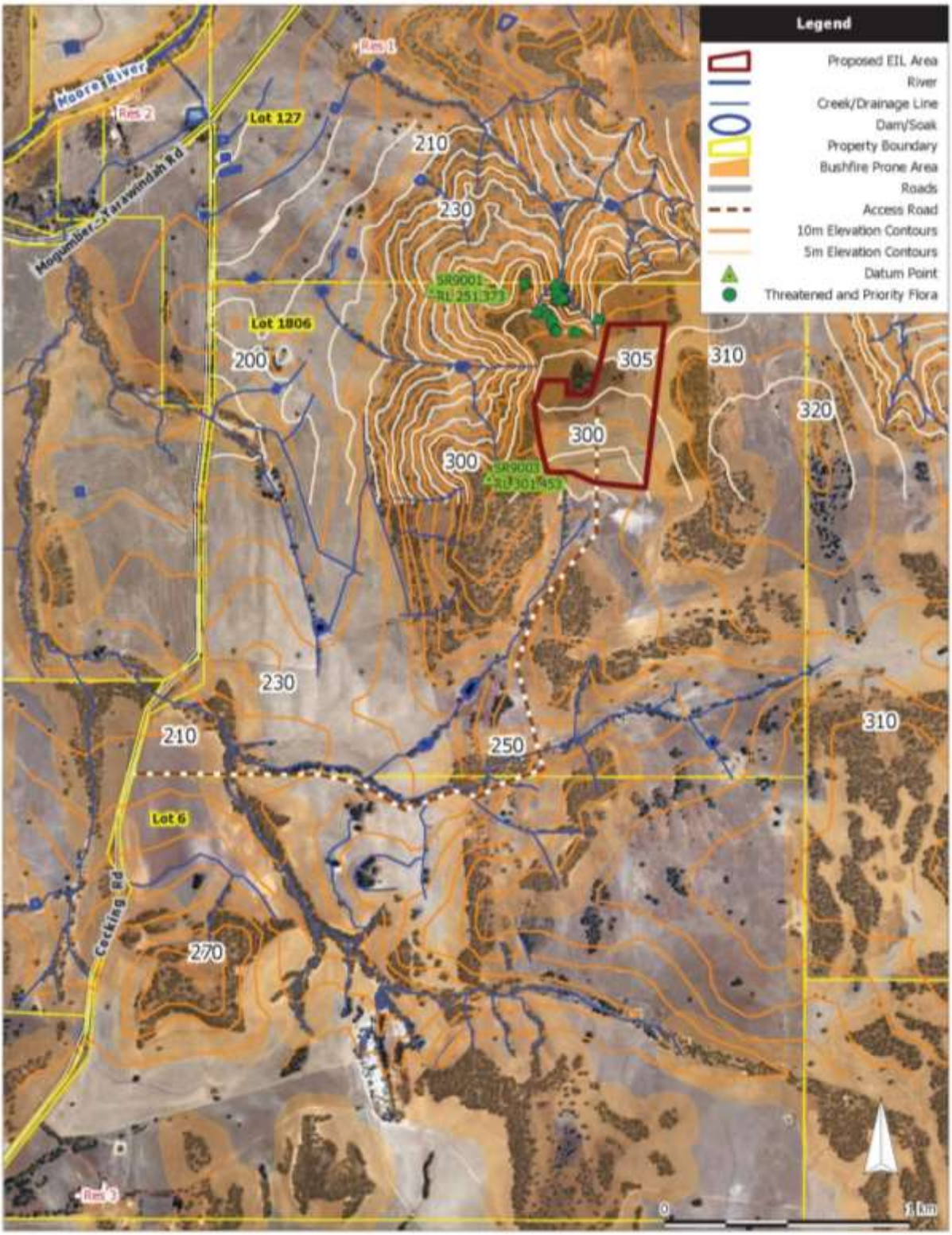

Figure 1: Distance to sensitive receptors

3.2 Risk ratings

Risk ratings have been assessed in accordance with the *Guideline: Risk Assessments* (DWER 2017) for each identified emission source and takes 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 the applicant has proposed mitigation measures/controls (as detailed in Section 3.1), these have been considered when determining the final risk rating. Where the Delegated Officer considers the applicant's proposed controls to be critical to maintaining an acceptable level of risk, these will be incorporated into the works approval as regulatory controls.

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

Works Approval W6374/2020/1 that accompanies this Decision Report authorises construction and time-limited operations. The conditions in the issued Works Approval, as outlined in Table 3 have been determined in accordance with *Guidance Statement: Setting Conditions* (DER 2015).

A licence is required following the time-limited operational phase authorised under the works approval to authorise emissions associated with the ongoing operation of the Premises i.e. crushing and screening activities. A risk assessment for the operational phase has been included in this Decision Report, however licence conditions will not be finalised until the department assesses the licence application.

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

Risk Event					Risk rating[1] C = consequence L = likelihood	Applicant controls sufficient?	Conditions[2] of works approval	Justification for additional regulatory controls
Source/Activities	**Potential emission**	**Potential pathways and impact**	**Receptors**	**Applicant controls**				
Construction								
Construction of internal access road and initial operational infrastructure (e.g. detention pond)	Dust	Air/windborne pathway causing impacts to human health and amenity	Residences 1.5 km NW from Premises boundary and 900 m W from Premises entrance	Refer to Section 3.1	C = Minor L = Unlikely **Medium Risk**	Y	No conditions	N/A
		Dust deposition impacting vegetation photosynthesis, respiration, transpiration	Conservation significant flora within 100 m of Premises boundary	Refer to Section 3.1	C = Minor L = Unlikely **Medium Risk**	Y	No conditions	N/A
	Noise	Air/windborne pathway causing impacts to human health and amenity	Residences 1.5 km NW from Premises boundary and 900 m W from Premises entrance	Refer to Section 3.1	C = Slight L = Unlikely **Low Risk**	Y	No conditions *Environmental Protection (Noise) Regulations 1997* apply	N/A
Operation (including time-limited-operations operations)								
Crushing, screening and stockpiling gravel Loading and movement of trucks	Dust	Air/windborne pathway causing impacts to human health and amenity	Residences 1.5 km NW from Premises boundary and 900 m W from Premises entrance	Refer to Section 3.1	C = Minor L = Unlikely **Medium Risk**	Y	**<u>Conditions 1, 6</u>** Condition 7	Dust suppression system on crusher and screen discharge points and dust aprons on plant transfer points specified as per standard requirements for screening plant infrastructure
		Dust deposition impacting vegetation photosynthesis, respiration, transpiration	Conservation significant flora within 100 m of Premises boundary	Refer to Section 3.1	C = Major L = Unlikely **Medium Risk**	Y		
Crushing, screening and stockpiling gravel Loading and movement of trucks	Noise	Air/windborne pathway causing impacts to human health and amenity	Residences 1.5 km NW from Premises boundary and 900 m W from Premises entrance	Refer to Section 3.1	C = Minor L = Unlikely **Medium Risk**	Y	Condition 8	N/A

Risk Event					Risk rating[1] C = consequence L = likelihood	Applicant controls sufficient?	Conditions[2] of works approval	Justification for additional regulatory controls
Source/Activities	**Potential emission**	**Potential pathways and impact**	**Receptors**	**Applicant controls**				
Stockpiling, material handling and screening areas	Sediment laden stormwater	Direct discharge from overland flow or percolation to groundwater impacting water quality	Creek lines and surface water dams 335 m E and 450 m N of Premises boundary	Refer to Section 3.1	C = Minor L = Unlikely **Medium Risk**	Y	Conditions 1, 6, 9	N/A
Refueling and maintenance of plant and equipment	Hydrocarbons	Spill or leak and direct discharge from overland flow or percolation to groundwater impacting water quality	Creek lines and surface water dams 335 m E and 450 m N of Premises boundary	Refer to Section 3.1	C = Minor L = Rare **Low Risk**	Y	No conditions	N/A

Note 1: Consequence ratings, likelihood ratings and risk descriptions are detailed in the *Guideline: Risk Assessments* (DWER 2017).

Note 2: Proposed applicant 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
Application advertised on the department's website (20 August 2018)	None received	N/A
Local Government Authority (Shire of Victoria Plains) advised of proposal (16 June 2020)	None received	The department requested a copy of the applicant's Extractive Industries Licence (EIL) which was provided on 2 February 2021. The EIL was issued on 4 June 2020 for Lot M1806 and Lot 6. The EIL expires on 31 December 2029.
Department of Conservation, Biodiversity and Attractions (DBCA) advised of proposal (16 June 2020)	DBCA replied on 6 July 2020 providing further information regarding conservation significant flora on Lot M1806 and Lot 894. The response advised that: • A targeted flora should be carried out to determine the population extent. • A recent soil survey identified that soil erosion posed a threat to the population • Specialist hydrogeologist advice should be sought to ascertain whether the proposed activity will impact the amount of water available to the plants • An environmental management plan may be considered necessary • The population should be monitored over the life of the operation.	On 17 June 2020, the department requested further information from the applicant regarding the conservation significant flora. On 2 February 2021, the applicant provided a response to the further information request, which included a revised Premises boundary to take account of the presence of conservation significant flora, the extent and condition of which was confirmed during a targeted flora survey carried out in November 2020 (Plantecology Consulting 2021). The revised Premises boundary was modified to remove the catchment area containing the conservation significant flora. It is recommended that the applicant provides a copy of the Targeted Flora Survey to DBCA and develops a monitoring plan that should be submitted to DBCA for comment and approval.
Applicant was provided with draft documents on 21/5/2021	Applicant provided comment on 21/7/2021 requesting works approval to be finalised	N/A

5. Conclusion

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

References

1. Department of Environment Regulation (DER) 2015, *Guidance Statement: Setting Conditions*, Perth, Western Australia.
2. Department of Water and Environmental Regulation (DWER) 2016, *Guideline: Environmental Siting*, Joondalup, Western Australia.
3. DWER 2017, *Guideline: Risk Assessments*, Joondalup, Western Australia.
4. Lundstrom Environmental Consultants 2021, *Dust Management Plan*, report prepared for B & J Catalano Pty Ltd, Lot 1806 Jindabyne Farm , Cocking Road, Mogumber, Shire of Victoria Plains, February 2021.
5. Plantecology Consulting 2021, *Lot M1806 Cocking Rd Mogumber Targeted Flora Survey*, report prepared for Lundstrom Environmental Consultants Pty Ltd, January 2021.
6. Water Corporation and Aroona Alliance (WCAA) 2018, *Review of environmental factors Jindabyne Farm L9179,* Perth, Western Australia.

Appendix 1: Application validation summary

SECTION 1: APPLICATION SUMMARY (as updated from validation checklist)					
Application type					
Works approval	☒				
Licence	☐	Relevant works approval number:		None	☐
		Has the works approval been complied with?		Yes ☐ No ☐	
		Has time limited operations under the works approval demonstrated acceptable operations?		Yes ☐ No ☐ N/A ☐	
		Environmental Compliance Report / Critical Containment Infrastructure Report submitted?		Yes ☐ No ☐	
		Date Report received:			
Renewal	☐	Current licence number:			
Amendment to works approval	☐	Current works approval number:			
Amendment to licence	☐	Current licence number:			
		Relevant works approval number:		N/A	☐
Registration	☐	Current works approval number:		None	☐
Date application received		27 February 2020			
Applicant and Premises details					
Applicant name/s (full legal name/s)		B. & J. Catalano Pty Ltd			
Premises name		190 Cocking Road, Mogumber WA 6506			
Premises location		Part of Lot M1806 on Diagram 8582 and Part of Lot6 on Diagram 19255 Certificate of Title Volume 2213 Folio 504			
Local Government Authority		Shire of Victoria Plains			
Application documents					
HPCM file reference number:		DER2020/000106-1			
Key application documents (additional to application form):		N/A			

Scope of application/assessment	
Summary of proposed activities or changes to existing operations.	Works approval: Construction and operation of gravel crushing and screening activity.

Category number/s (activities that cause the premises to become prescribed premises)

Table 1: Prescribed premises categories

Prescribed premises category and description	Proposed production or design capacity	Proposed changes to the production or design capacity (amendments only)
Category 12: Screening etc. of material	60,000 tonnes per year (assumes 5,000 tonnes per month for 12 months)	N/A

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 ☐ No ☒	Referral decision No: Managed under Part V ☐ Assessed under Part IV ☐
Does the applicant hold any existing Part IV Ministerial Statements relevant to the application?	Yes ☐ No ☒	Ministerial statement No: EPA Report No:
Has the proposal been referred and/or assessed under the EPBC Act?	Yes ☐ No ☒	Reference No:
Has the applicant demonstrated occupancy (proof of occupier status)?	Yes ☒ No ☐	Certificate of title ☒ General lease ☐ Expiry: Mining lease / tenement ☐ Expiry: Other evidence ☐ Expiry:
Has the applicant obtained all relevant planning approvals?	Yes ☒ No ☐ N/A ☐	Approval: MQ2020-05 Expiry date: 31/12/2029 If N/A explain why?
Has the applicant applied for, or have an existing EP Act clearing permit in relation to this proposal?	Yes ☐ No ☒	CPS No: N/A No clearing is proposed.
Has the applicant applied for, or have an existing CAWS Act clearing licence in relation to this proposal?	Yes ☐ No ☒	Application reference No: N/A Licence/permit No: N/A No clearing is proposed.
Has the applicant applied for, or have an existing RIWI Act licence or permit in relation to this proposal?	Yes ☐ No ☒	Application reference No: Licence/permit No: 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 ☐ No ☒	Name: N/A Type: N/A Has Regulatory Services (Water) been consulted? Yes ☐ No ☐ N/A ☒ Regional office: N/A
Is the Premises situated in a Public Drinking Water Source Area (PDWSA)?	Yes ☐ No ☒	Name: N/A Priority: N/A Are the proposed activities/ landuse compatible with the PDWSA (refer to WQPN 25)? Yes ☐ No ☐ N/A ☒.
Is the Premises subject to any other Acts or subsidiary regulations (e.g. *Dangerous Goods Safety Act 2004, Environmental Protection (Controlled Waste) Regulations 2004, State Agreement Act*)	Yes ☐ No ☒	N/A
Is the Premises within an Environmental Protection Policy (EPP) Area?	Yes ☐ No ☒	N/A
Is the Premises subject to any EPP requirements?	Yes ☐ No ☒	N/A
Is the Premises a known or suspected contaminated site under the *Contaminated Sites Act 2003*?	Yes ☐ No ☒	Classification: N/A Date of classification: N/A