

Decision Report

Application for Works Approval

Part V Division 3 of the Environmental Protection Act 1986

Works Approval Number W6562/2021/1

Applicant Indian Coast Resort Pty Ltd

ACN 090064627

File number DER2021/000182

Premises Agricultural Sand Supplies

Old Ledge Point Road Lancelin WA 6044

Legal description -

Lot 510 on Deposited Plan 302267

Certificate of Title Volume 1246 Folio 171

As defined by the premises maps attached to the issued works

approval

Date of report 12/08/2021

Decision Works approval granted

Lauren Edmands MANAGER, RESOURCE INDUSTRIES REGULATORY SERVICES

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

Works Approval: W6562/2021/1

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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 operations (including time limited operations) of the premises. As a result of this assessment, works approval W6562/2021/1 has been granted.

2. Scope of assessment

2.1 Regulatory framework

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

2.2 Application summary and overview of premises

On 8 April 2021, the applicant applied for a works approval to the department under section 54 of the *Environmental Protection Act 1986* (EP Act).

The application is to undertake construction works and operations (including time limited operations) relating to Category 12: Screening etc. of material at the premises. The applicant is proposing to screen up to 100,000 tonnes of sand per annum over a 5-year period.

The premises relates to the category and assessed production capacity under Schedule 1 of the *Environmental Protection Regulations 1987* (EP Regulations) which are defined in works approval W6562/2021/1. 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 2020b) are outlined in works approval W6562/2021/1.

2.1 Description of proposed activity

2.1.1 Construction

The proposed construction phase activities include the following works:

- placement and mobilisation of screening plant and associated infrastructure (including vehicle movements):
 - o one (1) mobile screening plant (Kleeman Mobiscreen MS952EVO or equivalent);
 - o two (2) wheeled front-end loaders (CAT 966H or equivalent); and
 - o 30,000 L water truck.

2.1.2 Operations (including time limited operations)

The proposed sand screening operations (including time limited operations) activities includes the following:

- screening of sand to remove stones;
- handling and stockpiling of material including loading of material into trucks;
- vehicle movements; and
- refueling and routine oil changes.

Operating hours are proposed to occur between 6 am and 6 pm Monday to Saturday.

Operations exclude Sundays and public holidays.

3. Native vegetation clearing

On 25 May 2021, the applicant applied for a clearing permit (CPS 9301/1) to clear native vegetation under the EP Act. This application is currently under assessment.

As a determination has not yet been made, clearing permit aspects have not been considered as part of this works approval assessment.

The Delegated Officer notes that a clearing permit is required to be obtained prior to any native vegetation clearing works proceeding. This works approval does not authorise any clearing activities to be undertaken.

4. 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 2020b).

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.

4.1 Source-pathways and receptors

4.1.1 Emissions and controls

The key emissions and associated actual or likely pathway during premises construction and operations (including time limited operations) which have been considered in this decision report are detailed in Table 1 below. Table 1 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	Construction							
Noise	Placement and mobilisation of screening plant and associated	Air/windborne pathway	All construction phase works will be undertaken during normal operating hours. See section 2.1.2.					
Dust	infrastructure (including vehicle movements)		Water for dust suppression will be applied as necessary by a 30,000 L water truck.					
Operations (in	cluding time limited o	perations)						
Hydrocarbons (hydraulic oil or diesel) and	Source: • operation of	Overland flow	Major maintenance will be carried out off- site.					
chemicals	vehicles, trucks and mobile		No fuel or oils will be stored on site.					
	equipment Activities:		 Machinery used on the site will be properly maintained to prevent leakage of oils, fuel, and hydraulic fluid. 					
	refueling		In the unlikely event of a spill or significant					

Emission	Sources	Potential pathways	Proposed controls
	oil changesdamage to equipment causing leaks		leak, the spilled fluid and any spill-affected soil will be cleaned up and placed in a sealed container or removed from the site within 24 hours.
Stormwater - Sediment laden	 screening of sand handling and stockpiling of material including loading of material into trucks 	Overland runoff	 The applicant has not proposed any specific controls to manage contaminated stormwater. For noting: The applicant has advised that minimal stormwater run-off occurs within the site due to infiltration into the highly porous sands (Bayley 2021).
Noise	vehicle movements	Air/windborne pathway	 Normal operating hours (see section 2.1.2.). Operations exclude Sundays and public holidays. Mobile equipment will be fitted with standard noise attenuation equipment.
Dust			Water for dust suppression will be applied as necessary by a 30,000 L water truck. Water is sourced from another pit owned by the operator or from a public standpipe.
			Mobile screening plant will be fitted with water sprayers.
			 No screening or truck loading will occur in winds of greater than 40km/hr.
			 Screening will be carried out as necessary to meet demand for sand and stockpiling will be minimal.
			Progressive rehabilitation of quarried areas will mean that no more than 1 ha of sand is exposed at any one time.
			For noting:
			The applicant has advised that sand being quarried has negligible organic matter and a low fines content (<4% below 0.125 mm) and consequently a low propensity for dust generation (Bayley 2021).
			Sand extraction activities, including rehabilitation of pits, are considered outside the scope of Category 12 (sand screening) activities and therefore this works approval. Sand extraction is regulated by the local government.

4.1.2 Receptors

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

The premises is located approximately 4.1 km south-south-east of Lancelin.

Table 2 and Figure 1 below provides a summary of potential human and environmental receptors that may be impacted because of activities upon or emission and discharges from the prescribed premises (*Guideline: Environmental Siting* (DWER 2020a)).

Table 2: Sensitive human and environmental receptors and distance from prescribed premises boundary

Sensitive receptors	Distance from prescribed premises boundary	Pathway assessment
Human recept	ors	
Residential properties	Approximately 1.7 km north-north- east	Prevailing southerly and south-westerly winds are directed towards these residential properties in the afternoons (Figure 2) (BOM 2021); however, the distance to this receptor is greater than 1 km.
		The Delegated Officer considers that any noise or dust impacts due to sand screening activities at the premises are likely to be slight based on the distance to this receptor.
Lancelin Golf Club	 actual 'golf course' located approximately 728 m north; and actual 'clubhouse' located approximately 2.25 km north. 	Prevailing southerly winds are directed towards this receptor in the (Figure 2) (BOM 2021); however, the distance to the clubhouse is greater than 2 km and the distance to the golf course is greater than 700 m.
		The Delegated Officer considers that any noise or dust impacts due to sand screening activities at the premises are likely to be slight based on the distances to these receptors.
Lancelin Bowling Club	Approximately 2.08 km north-northwest.	No prevailing winds are directed towards the Lancelin Bowling Club (Figure 2) (BOM 2021).
		The distance to the bowling club (greater than 2 km) and lack of prevailing winds directed towards the receptor are sufficient to inform that project activity impacts are not foreseeable.
		The Delegated Officer has determined that this receptor is not considered to be impacted during construction or operations and therefore not further considered in the risk assessment.

Sensitive receptors	Distance from prescribed premises boundary	Pathway assessment
Environmenta	I receptors	
Groundwater	Premises is located within the Gingin Groundwater Area proclaimed under Rights in Water and Irrigation Act 1914.	Discharges of hydrocarbons (e.g. hydraulic oil or diesel) have potential to infiltrate to groundwater via soil causing impacts to groundwater quality.
	Groundwater is marginal with 500 to 1,000 Total Dissolved Solids (TDS) (DWER Geocortex).	Soil at the premises is calcareous and/or siliceous sands, which are considered to be highly permeable (Bayley 2021).
	Measurements of six onsite bores in October 2020 showed groundwater between 0.75-4.28 meters below ground level (mbgl). The applicant has stated that groundwater generally moves south-west towards the ocean (Bayley 2021).	
Priority flora	The following conservation significant flora species have been sighted during a survey undertaken by Ecoscape in 2007: • Stylidium maritimum (P3), 22 plants located within the southern portion of the premises; and • Conostylis pauciflora ssp. eurythipis (P4), occur across the dunes and swales in the central and southern portions of the premises.	The applicant has applied to clear native vegetation within the central and northern sections of the premises. A determination has not yet been made as the clearing permit application is currently under assessment. Depending on the outcome of the clearing permit assessment, some <i>Conostylis pauciflora</i> ssp. <i>eurythipis</i> (P4) may no longer be present during the proposed sand screening operations. Pathways via air/wind dispersion (dust) and overland runoff (sediment laden stormwater) can potentially lead to poor native vegetation/priority flora health.
Native vegetation	Based on floristic data and analysis (Bayley 2021), native vegetation units within the premises are considered:	vegetation/priority hora fleatin.
	floristic community types (FCT) 29a Coastal shrublands on shallow sands; and/or	
	FCT 29b Acacia shrublands on taller dunes.	
	Native vegetation within the north, west and south of the premises is considered 'Excellent' condition (except a single location situated centrally on the northern boundary, which is considered 'Completed Degraded') and native vegetation within the north-east, east and south-east ranges from 'Completely Degraded' to 'Very Good' (Bayley 2021).	

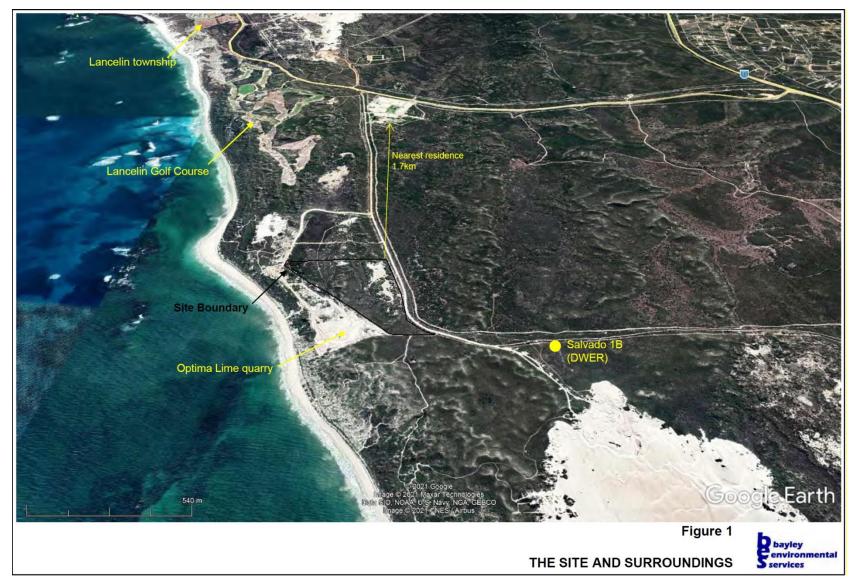


Figure 1: Distance to sensitive receptors

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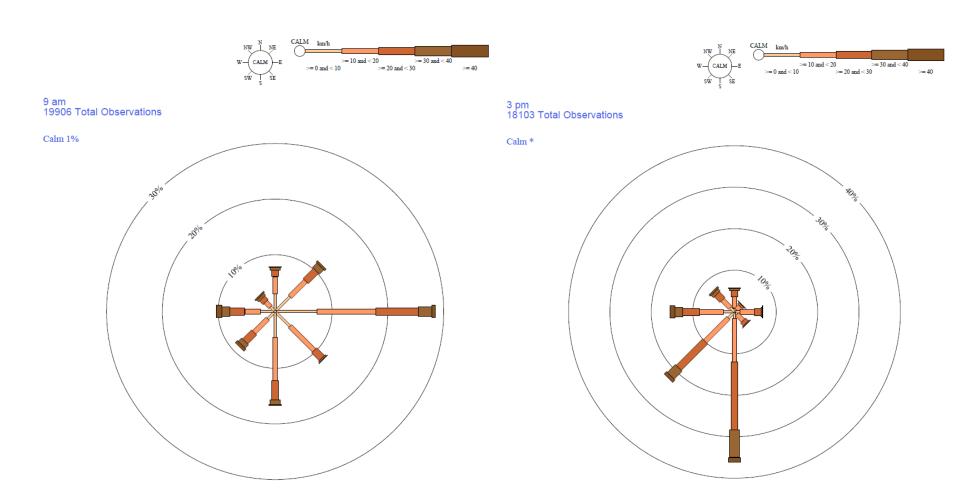


Figure 2: Annual wind rose at Lancelin – 9 am and 3 pm (BOM 2021)

4.2 Risk ratings

Risk ratings have been assessed in accordance with the Guideline: Risk Assessments (DWER 2020b) for each identified emission source and considers potential source-pathway and receptor linkages as identified in section 4.1. 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 4.1), 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 W6562/2021/1 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. screening of sand. 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 operations (including time limited operations)

Risk Event									
Source/Activities	Potential emission	Potential pathways	Potential adverse impacts	Receptors	Applicant controls	C = consequence L = likelihood	Applicant controls sufficient?	Conditions ² of works approval	Justification for additional regulatory requirements
Construction	Construction								
	Noise	Air/Wind dispersion	Impacts to health and amenity	Lancelin Golf Club (728 m and 2.25 km north) Residential properties (1.7 km north-north-east)	Refer to Table 1, section 4.1.1	C = Slight L = Unlikely Low Risk	Yes	N/A	N/A
Placement and mobilisation of screening plant and associated infrastructure (including vehicle		Air/Wind	Impacts to health and amenity	Lancelin Golf Club (728 m and 2.25 km north) Residential properties (1.7 km north-north-east)	Refer to Table 1, section 4.1.1	C = Slight L = Unlikely Low Risk	Yes	N/A	N/A
movements)	Dust	dispersion	Impacts to native vegetation/priority flora health	Native vegetation (throughout premises)/Priority flora (central and southern portions of premises)	Refer to Table 1, section 4.1.1	C = Slight L = Unlikely Low Risk	Yes	N/A	N/A
Operations (including	time limited oper	ations)							
Source: • operation of vehicles, trucks and mobile equipment Activities: • refuelling and routine oil changes; and • damage to equipment causing leaks.	Hydrocarbons (e.g., hydraulic oil or diesel) and chemicals	Overland flow	Infiltration to groundwater via soil causing impacts to groundwater quality Impacts to native vegetation/priority flora health	Groundwater (between 0.75-4.28 mbgl) Native vegetation/TEC (immediately west, east and south)	Refer to Table 1, section 4.1.1	C = Minor L = Unlikely Medium Risk	Yes	Condition 7 (Table 2, item 2)	The Delegated Officer has determined that due to the highly porous sands and shallow groundwater levels at the premises, an additional regulatory control has been applied to ensure appropriate management of hydrocarbon spills. For noting: Discharges to the environment are also regulated under the Environmental Protection (Unauthorised Discharges) Regulations 2004

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Risk Event					Risk rating ¹	Applicant	Conditions ²		
Source/Activities	Potential emission	Potential pathways	Potential adverse impacts	Receptors	Applicant controls	C = consequence L = likelihood	controls sufficient?	of works approval	Justification for additional regulatory requirements
screening of sand;handling and stockpiling of	Stormwater - Sediment laden	Overland runoff	Impacts to native vegetation/priority flora health	Native vegetation (throughout premises)/Priority flora (central and southern portions of premises)	Refer to Table 1, section 4.1.1	C = Minor L = Unlikely Medium Risk	No	Condition 7 (Table 2, item 1)	The applicant has advised that minimal stormwater run-off occurs within the site due to infiltration into the highly porous sands (Bayley 2021). The Delegated Officer has determined that due to the presence of native vegetation and priority flora within the premises boundary, an additional regulatory control has been applied to ensure appropriate management of stormwater.
material including loading of material into trucks; and	Noise	Air/Wind dispersion	Impacts to health and amenity	Lancelin Golf Club (728 m and 2.25 km north) Residential properties (1.7 km north-north-east)	Refer to Table 1, section 4.1.1	C = Slight L = Unlikely Low Risk	Yes	Condition 6	N/A
vehicle movements.		Air/Wind	Impacts to health and amenity	Lancelin Golf Club (728 m and 2.25 km north) Residential properties (1.7 km north-north-east)	Refer to Table 1, section 4.1.1	C = Slight L = Unlikely Low Risk	Yes	Condition 1 Condition 7	N/A
	Dust	dispersion	Impacts to native vegetation/priority flora health	Native vegetation (throughout premises)/Priority flora (central and southern portions of premises)	Refer to Table 1, section 4.1.1	C = Slight L = Possible Low Risk	Yes	Condition 1 Condition 7	N/A

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

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

5. 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 on 25/06/2021	None received	N/A
Local Government Authority advised of proposal on 25/06/2021	None received	N/A
Lancelin Golf Club advised of proposal on 25/06/2021	The Lancelin Golf Club provided comment on 2 July 2021. The Lancelin Golf Club (and its 51 members) do not support the application for a works approval and their summarised comments are provided below: • any destructive activity within the dunes will negatively affect the overall ambience of Lancelin, which is considered a tourist area; and • the landscape around the township of Lancelin is very badly scarred due to the continual removal of sand, steps should be put in place to reduce destructive activities rather than facilitate new ones.	Works approval W6562/2021/1 only regulates the sand screening operations. Considering this, community members should directly contact the Shire with respect to any concerns in relation to dune and tourism impacts.
Applicant was provided with draft documents on 23/07/2021	On 23 July 2021, the applicant provided DWER with a copy of the granted Development Application. On 8 August 2021, the applicant provided a name for the premises and no further comments were provided.	N/A

6. 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. Bayley Environmental Services (Bayley) 2021, *Proposed Sand Extraction Lot 510 Old Ledge Point Road, Lancelin Environmental Assessment*, South Fremantle, Western Australia.
- 2. Bureau of Meteorology (BOM) 2021, *Lancelin (Site number: 009114)*, website: http://www.bom.gov.au/climate/averages/tables/cw_009114.shtml
- 3. Department of Environment Regulation (DER) 2015, *Guidance Statement: Setting Conditions*, Perth, Western Australia.
- 4. Department of Water and Environmental Regulation (DWER) 2020a, *Guideline: Environmental Siting*, Perth, Western Australia.
- 5. DWER 2020b, Guideline: Risk Assessments, Perth, Western Australia.

Appendix 2: Application validation summary

SECTION 1: APPLICATION SUMMARY (as updated from validation checklist)							
Application type							
Works approval	\boxtimes						
		Relevant works approval number:		None	-		
		Has the works approva with?	al been complied	Yes 🗆 No 🗆			
Licence	₽	Has time limited operations?	strated-	Yes □ No	N/A 🗆		
		Environmental Compliance Report /- Critical Containment Infrastructure Report submitted?		Yes □ No □			
		Date report received:					
Renewal	Ф	Current licence number:					
Amendment to works approval	Ф	Current works approval number:					
Amendment to licence	Ф	Current licence- number:					
Amenament to ilcence	₽	Relevant works approval number:		N/A			
Registration-	Ф	Current works approval number:		None	-		
Date application received		8 April 2021					
Applicant and premises details							
Applicant name/s (full legal name/s)		Indian Coast Resort Pty Ltd					
Premises name		Agricultural Sand Supplies					
		Lot 510, Old Ledge Point Road					
Premises location		Lancelin WA 6044					
Local Covernment Authority		Lot 510 on Deposited Plan 302267					
Local Government Authority		Shire of Gingin					
Application documents							
HPCM file reference number:		DER2021/000182					
Key application documents (addition application form):	al to	Environmental Assessi					
Scope of application/assessment		Flora and Vegetation S	oui vey				

SECTION 1: APPLICATION SUMMARY (as updated from validation checklist) Works approval Construction: Placement and mobilisation of screening plant and associated infrastructure (including vehicle movements): one (1) mobile screening plant (Kleeman Mobiscreen MS952EVO or equivalent); two (2) wheeled loaders (CAT 966H or equivalent); and Summary of proposed activities or 30,000 L water truck. changes to existing operations. Operations (including time limited operations): Screening of sand to remove stones; handling and stockpiling of material including loading of material into trucks; vehicle movements; and refuelling and routine oil changes. Category number/s (activities that cause the premises to become prescribed premises) Table 1: Prescribed premises categories Prescribed premises category Proposed changes to the Assessed production or and description production or design capacity design capacity (amendments only) Category 12: Screening etc. of 100,000 tonnes per annum material 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: N/A 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: N/A EPA Report No: N/A
Has the proposal been referred and/or assessed under the EPBC Act?	Yes □	No ⊠	Reference No: N/A
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: Development Approval granted by the Shire of Gingin. Expiry date: 20 July 2027 If N/A explain why?

SECTION 1: APPLICATION SUMMARY (as updated from validation checklist)					
Has the applicant applied for, or have an existing EP Act clearing permit in relation to this proposal?	Yes ⊠ No □	CPS No: CPS 9301/1 On 25 May 2021, the applicant applied for a clearing permit (CPS 9301/1) to clear native vegetation under the <i>Environmental Protection Act 1986</i> (EP Act). This application is currently under assessment.			
Has the applicant applied for, or have an existing CAWS Act clearing licence in relation to this proposal?	Yes □ No □ N/A ⊠	Application reference No: N/A Licence/permit No: N/A			
Has the applicant applied for, or have an existing RIWI Act licence or permit in relation to this proposal?	Yes □ No ⊠	Application reference No: N/A Licence/permit No: N/A 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: Gingin Groundwater Area Type: Proclaimed Groundwater Area under Rights in Water and Irrigation Act 1914. 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?	Yes □ No ⊠	 Planning and Development Act 2005 Environmental Protection (Noise) Regulations 1997 Environmental Protection (Unauthorised Discharges) Regulations 2004 Environmental Protection (Controlled Waste) Regulations 2004 			
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 20032 Classification: N/A Date of classification: N/A	SECTION 1: APPLICATION SUMMARY (as updated from validation checklist)						
Contaminated Sites Act 2003!		Yes □ No ⊠					