



Application for Licence

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

Licence Number	L9340/2022/1
Applicant	IB Operations Pty Ltd
ACN	165 513 557
File number	DER2018/001042-7
Premises	North Star Magnetite Project Mining Tenements L45/317; L45/318; L45/319 L45/360; L45/361; L45/364; L45/389; L45/435; L45/561; L45/569; L45/577 MARBLE BAR WA 6760
Date of report	2 November 2022
Decision	Licence granted

**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 operation of the premises. As a result of this assessment, Licence L9340/2022/1 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 17 May 2022, IB Operations Pty Ltd (the applicant) submitted to the department an application for a licence under section 57 of the *Environmental Protection Act 1986* (EP Act).

The application relates to the operation of multiple tracked mobile screening facilities, and excavators with screening buckets, to supply padding material for the construction of the Iron Bridge Magnetite project slurry and return underground pipelines (the project). The expected throughput is up to 1.0 million tonnes per annum (Mtpa).

The project consists of two underground pipelines approximately 135 km in length each. They will be located side-by-side within an infrastructure corridor defined by Ministerial Statement 993. The purpose of these pipelines is to transport magnetite ore slurry and reclaimed water between the ore processing facility at the North Star Magnetite Project (L8845/2014/1) and a concentrate handling facility in Port Hedland.

Works Approval W6529/2021/1 for the installation of the screening equipment was granted on the 27 July 2021 with compliance demonstrated by the applicant on 21 April 2022.

This Decision Report and associated Licence considers emissions and discharges from the operation of screening equipment only for the installation of the slurry and return pipelines. Any other operations have not been considered and are not covered by this Decision Report and Licence.

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 Licence L9340/2022/1. 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 2020) are outlined in licence L9340/2022/1.

2.2.1 Padding machines

The padding machines operate as singular mobile units utilising raw material from the excavated trench and/ or borrow pits as required by the project. The plant will track alongside the trench, reclaiming raw material into the screening plant by the hydrostatic escalator located at the front of the machine. The output feed will supply bedding/padding material for the pipeline trench via the output conveyor belt, oversized material will be discharged from the rear of the plant.

2.2.2 Screening buckets

The buckets will be mounted to excavators and reclaim raw material is to be screened through the modified buckets directly into the trench to provide safer egress points, as required under Ministerial Statement (MS) 993, and/ or screen material into plant limited locations throughout the pipeline trench. The screen rate is highly variable, based on the design and material encountered within the proposed prescribed premises boundary. Manufacturer theoretical calculations suggest the conservative capacity to be around 200 tonnes per hour (t/hr). The use of excavators with mounted screening buckets will not be a primary screening method throughout the pipeline project and used more so to supplement the project where the tracked plant may not be able to access or provide service.

2.3 Part IV of the EP Act

The project and its associated infrastructure corridors has been assessed under Part IV of the EP Act as EPA report number 1514. Ministerial Statement 993 (MS 993) was published on 5 January 2015 in relation to IB Operation Pty Ltd's proposal to develop an open cut iron ore mine and associated infrastructure. The result of the assessment defines the slurry corridor envelope and contains the following conditions:

- Ensuring that the project is implemented so that it does not affect the viability of *Pityrodia* sp;
- Ensuring that the linear infrastructure is sited and constructed in a manner that avoids declared rare flora, priority 1 flora species (including *Pityrodia* sp. Marble Bar) and threatened ecological communities where practicable, and minimises the impact to other conservation significant flora;
- Requiring that open trenches associated with construction of linear infrastructure are cleared of trapped fauna by fauna-rescue personnel at least twice daily; and
- Requiring that the proponent shall not undertake any ground disturbance activities for the construction of the linear infrastructure within the Slurry Corridor Development Envelope and the Infrastructure Corridor Development Envelope prior to preparing and submitting a Conservation Significant Flora and Vegetation Survey Plan, to the satisfaction of the CEO.

The development of the pipeline corridor will require clearing of up to 315 ha which is authorised under MS 993. Any potential disturbance to flora and vegetation and fauna during construction of the slurry and return pipelines has been considered to comply with the conditions set out in MS 993.

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 decision report are detailed in Table 1 below. Table 1 also details

the 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
Operation			
Dust	Mobile screening plant operation and operational vehicle movements.	Air/windborne pathway	<ul style="list-style-type: none"> • Manage in accordance with the Mine and Rail Dust Management Plan • Enforce speed limits in work areas • Ongoing visual assessment based on atmospheric conditions. • Utilise water carts where possible
Noise	Mobile screening plant operation	Air/windborne pathway	<ul style="list-style-type: none"> • Inspection and maintenance of exhaust and silencing systems on machinery and equipment. • Use of low noise equipment where practicable.
Sediment laden stormwater	Mobile screening plant operation, waste rock	Overland runoff	<ul style="list-style-type: none"> • Screening plants to be located away from watercourses where practicable. • Work near major watercourses to be undertaken during dry conditions. • Waste rock to be managed onsite and contoured to ensure there is no impact to surface water
Contaminated runoff	Mobile screening plant operation. Operational vehicle movements	Overland runoff. Leachate into groundwater	<ul style="list-style-type: none"> • Store hydrocarbons, lubricants and greases in bunding in accordance with AS 1940-2004 and Chemical and Hydrocarbon Storage Procedure. • Position spill kits near areas with hydrocarbon spill potential. • Utilise spill trays and other containment mechanisms during maintenance.

3.1.2 Receptors

In accordance with the Guideline: Risk Assessment (DWER 2020), 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.

Table 2 and Figure 1 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
Town of Port Hedland	Within boundary of the Town, screening activities will get to within about 2.5km east of South Hedland residences at its closest point.
Environmental receptors	Distance from prescribed activity
<p>Proclaimed surface water regions Turner River and Turner River East</p> <p>These rivers are mostly dry and only flow following rainfall events.</p>	Premises intersects river three times, the pipeline has been proposed to cross underneath the riverbed.

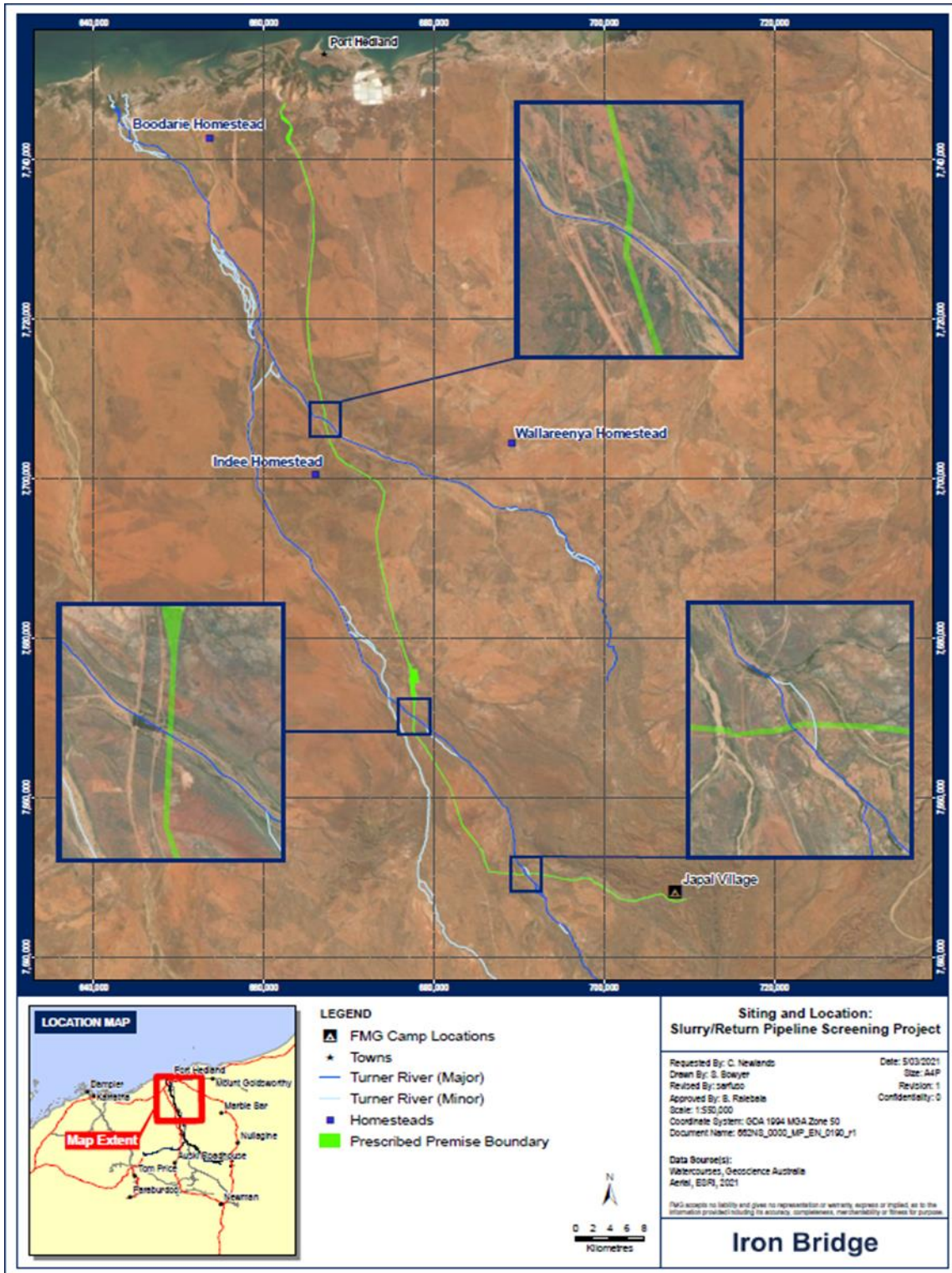


Figure 1: Distance to sensitive receptors

3.2 Risk ratings

Risk ratings have been assessed in accordance with the *Guideline: Risk Assessments* (DWER 2020) 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 licence 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.

Licence L9340/2022/1 that accompanies this decision report authorises emissions associated with the operation of the premises. The conditions in the issued licence, as outlined in Table 3 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 events					Risk rating ¹ C = consequence L = likelihood	Applicant controls sufficient?	Conditions ² of licence	Justification for additional regulatory controls
Sources / activities	Potential emission	Potential pathways and impact	Receptors	Applicant controls				
Operation								
Operation of mobile crushing and screening plant	Dust	Air / windborne pathway causing impacts to health and amenity	Town of South Headland (2.5 km East)	Refer to Section 3.1	C = Minor L = Rare Low Risk	Y	Conditions 1, 2, 3, 4 and 5	Applicant proposed controls included as operational requirements for dust controls. Standard records and reporting conditions included in the Licence.
	Noise	Air / windborne pathway causing impacts to health and amenity	Town of South Headland (2.5 km East)	Refer to Section 3.1	C = Minor L = Possible Medium Risk	Y	Conditions 1, 2, 3, 4 and 5	Applicant proposed controls included as operational requirements for noise controls. Standard records and reporting conditions included in the Licence. Provisions of the <i>Environmental Protection (Noise) Regulations 1997</i> apply.
	Contaminated stormwater runoff	Overland runoff potentially causing ecosystem disturbance or impacting surface water quality	Turner River (intercepts on multiple occasions), Pilbara Proclaimed surface water area	Refer to Section 3.1	C = Minor L = Possible Medium Risk	Y	Conditions 1, 3, 4 and 5	Applicant proposed controls included as operational requirements for mitigating contaminated stormwater runoff. General provisions of the EP Act apply regarding Environmental

Risk events					Risk rating ¹ C = consequence L = likelihood	Applicant controls sufficient?	Conditions ² of licence	Justification for additional regulatory controls
Sources / activities	Potential emission	Potential pathways and impact	Receptors	Applicant controls				
								Harm. General provisions of the <i>Environmental Protection (Unauthorised discharges) Regulation 2004</i> apply.

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

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
Local Government Authority advised of proposal on 21 July 2022	The Shire of East Pilbara replied on 21 July 2022 to confirm they had no objections to the proposal.	Noted
Applicant was provided with draft documents on 21/09/2022.	Comments received 24/10/2011. Refer to Appendix 1	DWER provided an email response to Applicants comments on 26/10/22. Refer to Appendix 1 for DWER's response. Phone call with Applicant (Jamie Sansom) at 9.45am on 27/10/22 to discuss DWERs response. Applicant happy to see Licence progress to final signing but was just waiting for final endorsement from other sections in FMG. Email from Applicant 28/10/2022. <i>Hi Paul,</i> <i>Thanks for providing me with the below and all valid responses. Can we please proceed with finalising this Licence.</i> <i>Cheers</i> Jamie Sansom Licensing – Environmental Approvals

5. Conclusion

Based on the assessment in this decision report, the delegated officer has determined that a licence 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) 2020, *Guideline: Environmental Siting*, Perth, Western Australia.
3. DWER 2020, *Guideline: Risk Assessments*, Perth, Western Australia.
4. *Environmental Protection Act 1986 (WA)*, Ministerial Statement 993, *North Star Magnetite Project*, Published 5 January 2015

Appendix 1: Summary of applicant's comments on risk assessment and draft conditions

Condition	Summary of applicant's comment	Department's response
4 (c)	Clarification required around type of maintenance to be recorded. Request to state 'Major Repairs' as minor daily services and maintenance is undertaken.	<p>Not supported.</p> <p>This Licence condition is a standard condition used by DWER for similar type premises and requires the licence holder to record:</p> <p>(c) any maintenance of infrastructure that is performed in the course of complying with condition 1 of this licence;</p> <p>The intent of this condition is to make sure records are kept that show the Licence Holder has taken reasonable steps to ensure the infrastructure is being maintained appropriately so it continues to function as intended by the manufacturer, and in accordance with condition 1 of the Licence. Recording maintenance does not necessarily have to be an onerous task and can be as simple as an initialled checklist which shows the weekly routine maintenance (i.e. lubrication) has been undertaken.</p>
4 (d)	Note only - Works Approval indicated reporting amount of waste rock produced. Clarification that reporting will only require the volume of screened material produced and does not include volume of waste rock produced.	<p>Comment noted. Condition has been updated to only require the Licence Holder to estimate the volume of extracted material screened through the infrastructure.</p> <p>This update now aligns the condition requirement with the requirements set out for an Environmental Protection Regulations 1987 category 12 premises, whereby the volume of material extracted from the ground and then screened is determined.</p>
Table 2, Definitions	Request to amend the reporting period to align with L8845/2014/1 of the annual period 1 January to 31 December with reporting due 31 March each year.	<p>Supported.</p> <p>Licence definition updated.</p>

Appendix 2: Application validation summary

SECTION 1: APPLICATION SUMMARY						
Application type						
Works approval	<input type="checkbox"/>					
Licence	<input checked="" type="checkbox"/>	Relevant works approval number:	W6529/2021/1	None	<input type="checkbox"/>	
		Has the works approval been complied with?			Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> DWER determined compliant 18/5/2022. (A2101978)	
		Has time limited operations under the works approval demonstrated acceptable operations?			Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" type="checkbox"/>	
		Environmental Compliance Report submitted?			Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
		Date Report received: 21 April 2022				
Renewal	<input type="checkbox"/>	Current licence number:				
Amendment to works approval	<input type="checkbox"/>	Current works approval number:				
Amendment to licence	<input type="checkbox"/>	Current licence number:				
		Relevant works approval number:		N/A	<input type="checkbox"/>	
Registration	<input type="checkbox"/>	Current works approval number:		None	<input type="checkbox"/>	
Date application received		17 May 2022				
Applicant and Premises details						
Applicant name/s (full legal name/s)		IB Operations Pty Ltd				
Premises name		North Star Magnetite Project				
Premises location		Mining Tenements L45/317, L45/318, L45/319, L45/360, L45/361, L45/364, L45/389, L45/435, L45/561, L45/569 and L45/577 MARBLE BAR WA 6760				
Local Government Authority		Shire of East Pilbara				
Application documents						
HPCM file reference number:		DER2018/001042-7				
Key application documents (additional to application form):		Only other documentation provided was occupier status, Premises boundary maps and company extract. No other supporting documentation. The applicant has referenced the				

	works approval application supporting documentation.	
Scope of application/assessment		
Summary of proposed activities or changes to existing operations.	<p>Operation of a Category 12 screening plant.</p> <p>The applicant is applying to operate multiple mobile tracked screening plants, as well as excavators with screening buckets. The purpose is for the supply of 'padding' (screened earth) material which will be placed around a pipeline while it is being buried to reduce the risk of large rocks causing damage to the pipeline.</p> <p>The activities are estimated to operate for 9 months. The Applicant has applied for 1 Mtpa throughput although they expect it to be closer to 0.5 Mtpa.</p>	
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	Multiple mobile screening plants for a proposed combined throughput of 1.0 Mtpa	
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: 993 EPA Report No: 1514
Has the proposal been referred and/or assessed under the EPBC Act?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Reference No: EPBC 2012/6689
Has the applicant demonstrated occupancy (proof of occupier status)?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Certificate of title <input type="checkbox"/> General lease <input type="checkbox"/> Expiry: Mining lease / tenement <input checked="" type="checkbox"/> Expiry: L45/317 – 07/12/2036 L45/318 – 25/02/2036 L45/319 – 12/04/2038 L45/360 - 09/04/2035

		L45/361 – 15/04/2035 L45/364 – 03/08/2035 L45/389 – 04/02/2037 L45/435 – 06/08/2041 L45/561 – 1/11/2042 L45/569 – 11/05/2043
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: If N/A explain why? Mining acceptable land use so not required.
Has the applicant applied for, or have an existing EP Act clearing permit in relation to this proposal?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	CPS No: CPS 5427/5, CPS 6106/2 and CPS 6236/2
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"/>	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 <input checked="" type="checkbox"/> No <input type="checkbox"/>	Licence/permit No: GWL 161699(5), GWL161897(5) and GWL161717(5)
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"/>	Name: Type: Has Regulatory Services (Water) been consulted? Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/> Regional office:
Is the Premises situated in a Public Drinking Water Source Area (PDWSA)?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Name: Priority: P1 / P2 / P3 / Are the proposed activities/landuse compatible with the PDWSA (refer to WQPN 25)? Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>

<p>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>)</p>	<p>Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p>	<p><i>Dangerous Goods Safety Act 2004</i></p>
<p>Is the Premises within an Environmental Protection Policy (EPP) Area?</p>	<p>Yes <input type="checkbox"/> No <input checked="" type="checkbox"/></p>	
<p>Is the Premises subject to any EPP requirements?</p>	<p>Yes <input type="checkbox"/> No <input checked="" type="checkbox"/></p>	
<p>Is the Premises a known or suspected contaminated site under the <i>Contaminated Sites Act 2003</i>?</p>	<p>Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p>	<p>Site possibly contaminated near Port Hedland, covering tenement L45/561 (pending). Description- BHP Billiton Port Hedland, Boodarie Iron Hot Briquetted Iron Plant Classification: Possibly contaminated – investigation required (PC–IR) Date of classification: 03/07/2009</p>