

# **Application for Licence Amendment**

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

Licence Number	L4513/1969/18
Licence Holder	BHP Iron Ore Pty Ltd
ACN	008 700 981
File Number	APP-0027437
Premises	BHP Port Operations, Port Hedland
	1 Wilson Street
	PORT HEDLAND WA 6721
	Legal description –
	Nelson Point Lease LGEI123403, Goldsworthy Rail Lease LGE J998591, Finucane Island Loop LGE I126342, Finucane Island Lease LGE J998595, PACE Wharf Lease K693809L, Utah Jild Lease K693814L, Harriet Point Lease K693808, Nelson Point Wharf Lease LGE I123400, Under Harbour Tunnel Lease K693815L, Finucane Island Substation Lease LGE G946533
	As defined by the coordinates in Schedule 1 of the Revised
	Licence
Date of Report	Licence 21 July 2025

Senior Environmental Officer, Industry Regulation

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

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# 1. Decision summary

Licence L4513/1969/18 is held by BHP Iron Ore Pty Ltd (Licence Holder) for the BHP Port Operations, Port Hedland (the Premises), located at 1 Wilson Street, Port Hedland WA 6721.

This Amendment Report documents the assessment of potential risks to the environment and public health from proposed changes to the emissions and discharges during the construction and operation of the Premises. As a result of this assessment, Revised Licence L4513/1969/18 has been granted.

# 2. Scope of assessment

## 2.1 Regulatory framework

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

## 2.2 Application summary

On 10 February 2025, the Licence Holder submitted an application to the department to amend Licence L4513/1969/18 under section 59 and 59B of the *Environmental Protection Act 1986* (EP Act). The following amendments are being sought largely relate to the works, emissions and discharges associated with construction works for Car Dumper 6 (CD6):

- a) Amendment of Category 62 solid waste depot, for a requested throughput of 90,000 tonnes per annual period from 42,000 to support the excavation works associated with the construction of CD6;
- b) Dewatering and aquifer reinjection activities associated with CD6 works; and
- c) Allow untreated water to be discharged into Lagoon 1 from Turkey's Nest;

Additional administrative amendments are also requested:

- a) to the described design capacity for Category 73 Bulk storage of chemicals, from '63,336 cubic metres in aggregate' to '63,336 cubic metres in aggregate of stored chemicals'; and
- b) other administrative amendments to correct wording within the licence to better reflect intent.

No changes to the aspects of the existing Licence relating to Category 5, 54, 58 and 61 have been requested by the Licence Holder. Table 1 below outlines the proposed throughput changes to the existing Licence.

Category	Current throughput capacity	Proposed throughput capacity	Description of proposed amendment
62	42,000 tonnes per annual period	90,000 tonnes per annual period	To allow for the excavation and management of soil associated with the construction of car dumper 6.
			Approximately 43,500 m <sup>3</sup> soil will be excavated.
			All excavated soils will be stored onsite for testing prior to reuse or disposal.

Table 1: Proposed throughput capacity changes

#### **CD6** Construction

Under Table 8, Schedule 2 of the current Licence, the Licence Holder has approval to construct a new car dumper (CD6) which will require dewatering due to the depth of the excavation required at its deepest point (25m below surface level), intersecting an upper and lower aquifer.

CD6 will be constructed on a site previously the location of an unlined oily waste lagoon. Preconstruction remediation works targeting soil and water remediation is currently being undertaken (part of previous amendment to the Licence in August 2024), to remove contaminants so far as reasonably practicable prior to CD6 construction commencing. The remediation works commenced in October 2024 and are expected to finish approximately mid-2025. At the completion of the remediation works, an assessment of soil and groundwater quality will be undertaken to describe the level of remediation achieved. This assessment will be used to inform the management of the CD6 construction works.

The CD6 construction works are proposed to utilise the same infrastructure associated with the licensed pre-construction remediation works. This includes the pre-existing lined turkey's nest, which is used for storing water (water from the construction and dewatering activities at the premises) and the lined soil handling area for potentially contaminated soils. Water stored in the lined turkey's nest will be directed to a reinjection well network, discharged into Lagoon 1 or used for construction purposes as shown in Figure 1. This varies from the currently approved discharge conditions found in Table 14 of the Licence, which authorises treated water discharges through the Lagoon 1 L7 discharge point only.



#### Figure 1: Disposal of dewatering water

The location of the proposed infrastructure for the CD6 construction and associated dewatering discharge locations are detailed in Figure 2.



# Figure 2: Location of proposed infrastructure for CD6 excavation and ground water abstraction and re-injection

The activities associated with the construction of CD6 are detailed in Sections 2.3, 2.4 and 2.5.

# 2.3 Soil excavation

Approximately 43,500 m<sup>3</sup> soil will be excavated during the CD6 construction works. The Licence Holder has indicated that the excavated soil will have a lower risk of contamination, however some higher risk contamination areas have been identified. Sampling is proposed to occur in the excavation footprint to determine the presence of potential contamination prior to excavation. All excavated soils will be stored onsite for testing prior to reuse or disposal (soils known or suspected to be contaminated will be stored on the existing licensed lined contaminated soil handling area). The Licence Holder has advised that there will not be any changes to infrastructure proposed with this amendment as the existing infrastructure will be used, and is sufficient to allow for the excavation and management of soil associated with the construction of car dumper 6.

#### 2.4 Bulk dewatering

As noted above, dewatering of groundwater is required to enable excavation of soil for the construction of CD6. Abstracted groundwater will be stored in the pre-existing lined turkey's nest to enable settlement of suspended solids before discharge. Water stored in the lined turkey's nest will be directed to a reinjection well network, discharged into Lagoon 1 or used for construction purposes.

CD6 construction bulk dewatering is planned to commence one month prior to start of excavation to allow groundwater drawdown to develop beneath the site. The Licence Holder has indicated that the dewatering rate will vary over the construction period as the excavation

progressively deepens and then is progressively infilled, with an 85% re-injection rate required to maintain a dry excavation and control potential contaminant mobilisation from surrounding sources into the dewatering system and ground stability. Indicative dewatering volumes and rates, and recharge volumes based on predictive modelling are shown in Table 2.

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Maximum Dewatering Rate (L/s)	Average Dewatering Rate (L/s)	Indicative Dewatering Volume (kL)	Indicative Recharge Volume (kL)
35	26	1,050,000	750,000 to 900,000 <sup>1</sup>

Groundwater levels will be monitored by new and existing monitoring wells within and surrounding the reinjection zone.

Dewatering and reinjection wells will be constructed as required to manage groundwater levels. The indicative dewatering and reinjection infrastructure layout is shown in Figure 3.



#### Figure 3: Indicative dewatering and reinjection infrastructure layout

Once the construction dewatering ceases, the Licence Holder considers that groundwater levels should recover back to pre-dewatering levels and the original flow gradients be re-established.

# 2.5 Reinjection

#### 2.5.1 Groundwater investigation modelling

Field investigations and historic data were used by the Licence Holder to produce a groundwater model and Dewatering Design Report (Fluor 2024A) for the CD6 construction works. The report provided information on:

- total volume and rate of dewatering required for the CD6 construction works
- extent of groundwater level drawdown in the surrounding area

- mobilisation of potential groundwater contaminants adjacent to the works area
- aquifer reinjection
- the vault remains dry during excavation
- groundwater drawdown below rail infrastructure is not greater than 1.5 m to provide geotechnical stability and prevent ground settlement
- Potential contaminants from surrounding sources do not enter the dewatering system

The report also informed the layout and design of the proposed groundwater management system, with the objectives of ensuring:

- the vault remains dry during excavation
- groundwater drawdown below rail infrastructure is not greater than 1.5 m to provide geotechnical stability and prevent ground settlement
- Potential contaminants from surrounding sources do not enter the dewatering system

Figure 4 and Figure 5 show maximum groundwater drawdown levels in the upper and lower aquifers. Figure 6 shows particle tracking around the reinjection wells.



Figure 4: Upper Aquifer particle modelling



Figure 5: Lower Aquifer particle modelling



Figure 6: Particle tracking around the reinjection wells

#### 2.5.2 Groundwater discharge rate and volume

The Licence Holder intends to reinject a minimum of 70% of the total dewatering volume to achieve the objectives of the proposed groundwater management system discussed in section 2.5.1, and considers that with 40 reinjection wells proposed, a 100% reinjection can be achieved if required.

The Licence Holder proposes to reinject groundwater extracted during the CD6 dewatering program back into the environment, with all water directed to the licensed lined Turkey's nest, to enable settlement of suspended solids before discharge. Most of the abstracted water will be reinjected back into the aquifer. The remaining water will be discharged to Lagoon 1, with a small proportion used as construction water for moisture conditioning during backfilling of the CD6 vault and dust management, as shown in Figure 1.

The Licence Holder also indicates that water will be recirculated into the dewatering system reducing additional surrounding water from being drawn into the vault excavation area and that once the construction dewatering ceases, the groundwater levels will recover back to predewatering levels and the original flow gradients will be re-established.

#### 2.5.3 Water quality monitoring

As part of the proposed works, the Licence Holder has developed a water monitoring and sampling program, as shown in Table 3. Fortnightly, weekly and daily samples are proposed to be taken from the commencement of the dewatering program until the excavation reaches below the Mangrove Muds layer, being the geological unit with the highest risk of encountering acid sulfate soils (ASS) and residual contamination. Once this level of excavation has been reached, and if water quality analytes remain below the trigger for action management criteria ('Trigger Levels') in Table 4, The Licence Holder proposes to alter the sampling frequency as detailed in Table 3.

Location	Monitoring parameters	Frequency	Period
Turkey's nest inlet	Turbidity, Total iron, Total dissolved solids, Flow meter reading (rate and volume), Electrical conductivity, pH, Total titratable acidity, Total alkalinity, Dissolved oxygen, Redox potential	Daily	During dewatering
	PFOS + TRH, PFOS, PFHxS, PFOA	Weekly until notification to DWER, then fortnightly	During dewatering
Reinjection wells (Turkey's nest outlet)	Turbidity, Total iron, Total dissolved solids, Flow meter reading (rate and volume), Electrical conductivity, pH, Total titratable acidity, Total alkalinity, Dissolved oxygen, Redox potential	Daily	During dewatering
	PFOS + TRH, PFOS, PFHxS, PFOA	Weekly until notification to DWER, then fortnightly	During dewatering
Discharge point (L7) (direct from Turkey's nest)	Turbidity, Total iron, Total dissolved solids, Flow meter reading (rate and volume), Electrical conductivity, pH, Total titratable acidity, Total alkalinity, Dissolved oxygen, Redox potential	Daily	During discharge
	PFOS + TRH, PFOS, PFHxS, PFOA	Weekly until notification to DWER, then fortnightly	During discharge

Table 3: CD6	construction	works water	monitoring	program
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Receiving environment locations (Lagoon 1a, Lagoon 1b and Lagoon 2)	Turbidity, Total iron, Total dissolved solids, Flow meter reading (rate and volume), Electrical conductivity, pH, Total titratable acidity, Total alkalinity, Dissolved oxygen, Redox potential	Fortnightly until notification to DWER, then monthly	One month before dewatering begins, to the cessation of discharge at L7.
Lagoon 1b (location adjacent to Lagoon 2)	Water level	Hourly using a logger	During dewatering and until the cessation of discharge at L7.

Table 4: Turkey's nest trigger and response actions for ASS

Trigger for action	Action
Total titratable acidity in range 40 mg/L to 100 mg/L And pH between 4 and 6	<ul> <li>Increase sediment settlement time.</li> <li>Aerate water.</li> <li>Undertake neutralisation treatment (liming).</li> </ul>
Total titratable acidity >100 mg/L Or pH <4 Or Total alkalinity <30 mg/L	<ul> <li>Cease discharge into Lagoon 1 and reinjection if any of these water quality parameters are exceeded at the Turkey's nest outlet.</li> <li>Increase neutralisation treatment (liming) rate, as required, and continue to monitor water quality.</li> <li>Cease dewatering if minimum freeboard cannot be maintained in the Turkey's nest.</li> </ul>

#### 2.5.4 Groundwater handling

A new network of pipes will be connected to the dewatering and reinjection wells for the CD6 construction works (as depicted in Figure 3). The pipe network will be inspected daily and any leaks isolated and repaired. The Turkey's nest has a capacity of approximately 6,000 kL and is split into two cells (ponds). The second cell can be used to segregate water if contamination is detected from certain dewatering wells. The Turkey's nest will be maintained with a minimum total volume of 1,260 kL to ensure settlement of solids can occur. This volume will provide approximately 6 to 10 hours retention time for settling suspended solids in line with DWER's Treatment and management of soil and water in acid sulfate soil landscapes guideline (DWER 2015b).

Water will be monitored for ASS parameters (pH and total acidity) and treated if required (Table 4). Treatment is, however, not expected given the alkaline conditions and high buffering capacity of the groundwater. Following settlement of suspended solids and treatment for ASS (as required), water will be pumped to the:

- Groundwater reinjection wells.
- L7 discharge point, subject to meeting water quality criteria (Table 3 and Table 5).
- A small amount of Turkey's nest water will be used as construction water as required.

Analyte	Lagoon 1	Limit of	L7 discharge criteria			
	Background concentration	reporting	Trigger for action	Threshold Limit		
Physical stressors and visual criteria						
Total iron (mg/L)	0.41	0.05	0.7	1		
Turbidity (NTU)	-	5	10	20		
Sheen	-			Visible sheen at discharge point		
Hydrocarbons and chlorobenzenes (m	g/L)					
TRH C6-C10 fraction minus BTEX	<0.02	0.02	0.32	0.45		
TRH >C10-C16 fraction minus naphthalene	-	0.1	0.32	0.45		
TRH >C16-C34 fraction	-	0.1	0.32	0.45		
TRH >C34-C40 fraction	-	0.1	0.32	0.45		
Benzene	<0.005	0.001	0.05	0.07		
Naphthalene	-	0.005	0.05	0.07		
Chlorobenzene	<0.005	0.005	0.04	0.055		
1,2-dichlorobenzene	<0.005	0.005	0.11	0.16		
1,3-dichlorobenzene	<0.005	0.005	0.18	0.26		
1,4-dichlorobenzene	<0.005	0.005	0.04	0.06		
Per-and poly-fluoroalkyl substances (P	FAS) (ug/L)					
PFOS	0.02	0.002	0.015	0.02		
PFOS + PFHxS	0.05	0.002	0.035	0.05		
PFOA	0.02	0.005	0.015	0.02		

 Table 5: Trigger levels and threshold limits for discharge

#### 2.5.5 Reinjection well discharge

The reinjection well system consists of approximately 40 reinjection wells, all of which will be installed in the Lower Aquifer as shown in Figure 3. The reinjection zone is shown in Figure 2. Figure 6 shows the general reinjection well construction details.

9		
8		Cement Grout
_7		
6	Fill	Blank casing
5		Bentonite Seal
-4		
3	Mangrove Mud	
2		
-	Calcarenite	
	Paleosol	
-1		
-3		
-4		
-5		
-6		
-7		
-8		
-9	Red Beds	
-10		
-11		
-12		
-13		
-24		
-10		
-17		
-18		
-19		
-20		
-21		Filterpack
-22		
-23	Conglemerate / Condition -	Well screen
-24	Congiomerate / Sandstone	
-25		
-26		
-28		
-29		
-30		
-31		
-32		
-33	Upper Crepite	
-34	opper Granite	
-35		
-36	Granite	
-37		

Figure 6: Indicative reinjection well design

The reinjection is proposed to be conducted in a manner that will maintain geotechnical stability underneath surrounding rail lines and ensure potential contaminants from surrounding sources do not enter the dewatering system (i.e., maintaining environmental values).

The abstracted water will be discharged into the aquifer without treatment as it will be reinjected directly into the aquifer of origin. Some residual levels of hydrocarbons and PFAS will be present. This approach is consistent with the Heads of the Environmental Protection Authorities (HEPA 2020) management plan, which states that managed aquifer recharge of PFAS containing water to maintain environmental values is acceptable, provided it does not result in an unacceptable or increased risk to human health or the environment. Advice obtained by the Licence Holder from the engaged DWER-accredited contaminated sites auditor also indicates that "Since the predominant disposal method for abstracted water is recharged to the aquifer of origin in the immediate vicinity of the works, disposal of water through this means will not create unacceptable risk".

The Licence Holder has developed a dewatering management plan (*Port Debottlenecking Project (PDP2) - Car dumper 6 (CD6) and conveyor tunnel, Dewatering management plan, December 2024, Fluor Pty Ltd)* that includes details on the location, frequency and monitoring suite for managing and monitoring the dewatering activities associated with the construction works. This includes managing groundwater levels to ensure that groundwater levels are not less than 1 metre below the seasonal low, and no higher than the seasonal high beneath existing rail lines.

#### 2.5.6 Lagoon 1 discharge

The Licence Holder is proposing that water stored within the lined Turkey's nest will be directed to the L7 discharge point when water quality, as tested through the proposed monitoring program (Table 3) is below the threshold limits as detailed in Table 5.

Management approaches are proposed to be implemented if trigger levels and threshold limits in Table 5 are exceeded. If trigger levels are exceeded the water will be treated to remove contaminants and the reinjection rates increased. For threshold levels exceedances, discharge at the L7 discharge point will cease and 100% of the turkey's nest water will be diverted to the reinjection system.

Water discharged at the L7 discharge point drains into Lagoon 1. Approximately 92% of the discharge water is likely to infiltrate with the remaining 8% evaporating. Modelling indicates that based on the volume of discharge and rate of evaporation and infiltration, the risk of overflow from Lagoon 1 to the adjacent Lagoon 2 is very low. The Licence Holder plans to monitor water quality at both lagoon 1 and 2 (Table 3).

#### 2.6 DWER Technical review of proposed dewatering and reinjection

A technical review of the proposed dewatering and reinjection plan was conducted by the department. The technical review suggests that the proposed plan is generally sound and is based on reasonable assumptions and information, however it identified that due to the risk associated with the dissolution and mobilisation of metals, that monitoring for mercury and lead is included due to the potential for dissolution of these metals associated with the dewatering process (reinjection of oxygenated water inducing oxidation reactions).

## 2.7 Concrete batching

An onsite mobile concrete batching plant will be utilised to produce the concrete required to construct the vault (approximately 53,000 m<sup>3</sup>). The operation of the mobile concrete batching plant will be managed under the *Environmental Protection (Concrete Batching and Cement Product Manufacturing) Regulations 1998* and existing dust controls will be implemented as required. The inclusion of Category 77 Concrete Batching (as per Schedule 1 of the *Environmental Protection Regulations 1987*) is not considered required as all concrete produced by the batching plant will be used within the Premises.

#### 2.8 Contaminated Sites Act

As indicated in the 2024 Amendment Report, all matters related to soil and groundwater contamination at the site are being managed under the provisions of the *Contaminated Sites Act 2003*, and a contaminated sites auditor oversees the investigation and remediation works at the site.

# 2.9 Rights in Water and Irrigation Act

The Licence Holder holds licence GWL210272(1) and is permitted under Section 5C of the *Rights in Water and Irrigation Act 1914* (RIWI Act) to abstract groundwater from the Pilbara Coastal Saline Aquifer and under Section 26 of the RIWI Act to drill wells and abstract groundwater to facilitate dewatering for the CD construction works. The Licence Holder has submitted an application for the abstraction of 1.5GL/yr from the coastal saline aquifer for the purposes of this project. The Delegated Officer notes that the department will undertake a separate assessment of groundwater abstraction risks for a RIWI licence or permit and therefore these aspects have not been risk assessed as part of this licence amendment process.

# 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 construction which have been considered in this amendment report are detailed in Table 6 below. Table 6 also details the proposed control measures the Licence Holder has proposed to assist in controlling these emissions, where necessary.

	Table	6:	Licence	holder	controls
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Emission	Sources	Potential pathways	Proposed controls
Construction	•	·	
Dust	Movement and storage of excavated material	Air/windborne pathway	Construction and stockpiled material will be sprayed with water as required.
			<ul> <li>Laydown areas will be compacted to reduce dust liftoff.</li> </ul>
			<ul> <li>Trucks departing the Prescribed Premises will cover loads of dusty materials.</li> </ul>
			<ul> <li>Prescribed Premises speed limits to minimise wheel generated dust will be enforced.</li> </ul>
			<ul> <li>Water will be applied to unsealed laydown areas and haul roads as required to minimise wheel generated dust.</li> </ul>
			Existing controls / conditions:
			Licence conditions 17 and 26 to 32.
Potentially contaminated water (leachate) / sediment emissions	Storage of potentially contaminated excavated material (soil)	Overland flow and infiltration	<ul> <li>Soil sampling to occur in the excavation to identify the presence of potential contaminants.</li> </ul>
			<ul> <li>Soils identified as potentially contaminated will be stored on the existing lined contaminated soil handling area.</li> </ul>
			<ul> <li>Contaminated soil handling area drainage directed to the lined turkey's nest and/or trucked offsite for disposal.</li> </ul>
			Existing controls / conditions:
			Licence Condition 18 and Table 14
Sediment emissions	Storage of uncontaminated	Overland flow	<ul> <li>Drainage from soil stockpiles will be directed to sumps using bunding.</li> </ul>
	excavated material		<ul> <li>Stockpiles will be located outside flood prone areas of onsite drainage lines.</li> </ul>
Potentially contaminated water	Piping water between the abstraction / reinjection wells and the lined turkey's nest,	Overland flow and infiltration	<ul> <li>Pipelines equipped with sensors for automatic leak detection, with response required as soon as practicable upon notification.</li> </ul>
	handling area		The pipe network will be inspected daily.
	5		Leaks will be isolated and repaired.
			Existing controls / conditions:
			Licence Condition 18 and 1 able 14.
Potentially contaminated	Storage of water in the lined turkey's nest	Overtopping of the turkey's nest	The turkey's nest will be managed in accordance with the existing Licence conditions.

Emission	Sources	Potential pathways	Proposed controls
Construction			
water			This includes maintaining a 500 mm freeboard and daily freeboard inspections. <u>Existing controls / conditions:</u> Licence Condition 18 and Table 14
Potentially contaminated water	Disposal of water into Lagoon 1	Direct discharge to the licensed L7 discharge point that drains to Lagoon 1	<ul> <li>Routine water quality monitoring as per the lined turkey's nest prior to discharge.</li> <li>Discharge to the L7 discharge point providing water quality parameters are below the Threshold Levels outlined in Licence Condition 35, Table 6.</li> <li>If practicable, direct contaminated water to the secondary cell of the lined turkey's nest for reinjection and/or treatment.</li> <li>Increase reinjection of turkey's nest water if above Threshold Limits.</li> <li>Commission and operate a water treatment plant(s) if required to comply with the Threshold Limits for discharge at the L7 discharge point.</li> <li>Routine water quality monitoring of the receiving environment (Lagoon 1 and 2), being L6, L8 and L9 locations, in accordance with Licence Condition 35, Table 6.</li> <li><u>Existing controls / conditions:</u> Licence Condition 35, Table 6.</li> </ul>
Potentially contaminated water	Disposal of water to ground through reinjection wells	Reinjection wells surrounding the CD6 excavation	Routine monitoring of water quality and water levels will occur during the dewatering program.
Dust	General activities, including (but not limited to) operation of concrete batching plant, storage of aggregate, dewatering,	Air/windborne pathway	<ul> <li>Construction and stockpiled material will be sprayed with water as required.</li> <li>Dust will be managed in accordance with existing Licence conditions 17 and 26 to 32.</li> </ul>
Sediment laden wastewater	drilling and piling of secant wall, rock breaking, machinery, vehicle use and excavation.	Overland flow and infiltration	<ul> <li>The location of the concrete batching plant will be managed to divert stormwater away from the area.</li> <li>All stormwater and wastewater will be diverted to drainage containment systems or sediment basins. The design will include washout area/s for cleaning concrete trucks and mixers.</li> </ul>
Noise		Air/windborne pathway	Diesel generators powering the pumps will be silenced to 85 dB(A) or less.

#### 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 7 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 7: Sensitive	human and environm	nental receptors and	d distance from	prescribed
activity				

Human receptors	Distance from prescribed premises
Town of Port Hedland	Located directly north of the prescribed premises and proposed activities.
	Closest residences are approximately 200 m north of the premises boundary. The CD6 construction site is 500 m from the premises boundary adding additional separation distance from the residences.
Environmental receptors	Distance from prescribed premises
Environmentally sensitive area 7934 (DWER 2023)	Approximately 1 km north of the premises boundary. Distance of proposed activities to this environmentally sensitive area is sufficient to inform that the project activity impacts are not foreseeable and therefore is not considered further in the risk assessment.
Groundwater	Groundwater levels dependent on cyclonic events;
	<ul> <li>pH generally neutral to slightly alkaline;</li> <li>low dissolved oxygen (DO) and oxidation reduction potential (ORP); and</li> </ul>
	<ul> <li>Electrical conductivity (EC) ranged widely from 1731 μS/cm (brackish) to 35,100 μS/cm (saline).</li> </ul>
Surface water Tidal estuarine lagoons flowing into the Indian ocean	Within prescribed premises boundary.
Acid sulfate soils	Located within prescribed premises – "ASS are unlikely to be disturbed". Limited testing (ERM, 2023) indicated that soil to the depths of planned remediation works should be fill material that is unaffected by acid sulfate soils.
	The Licence Holder has advised that the testing will be undertaken in accordance with "Identification and investigation of acid sulfate soils and acidic landscapes (DWER, 2015)".
Threatened and/or priority flora	Within prescribed premises:
	<ul> <li>Gomphrena pusillia (P2);</li> </ul>
	Gymanthera cunninghamii (P3);
	Vegetation surrounding proposed remediation area are:
	<ul> <li>Samphile B. Scattered Avicennia marina strubs over a low open Tecticorniahalocnemoides subsp. Tenuis, Tecticornia halocnemoides and Trianthema turgidifolia shrubland; and</li> </ul>
	<ul> <li>Mangroves. A high closed Rhizophora stylosa and Avicennia marina shrubland.</li> </ul>
Threatened and/or priority fauna	Conservation significance recorded in / close to Lagoon 1:
	<ul> <li>Caspian Tern (Sterna caspia) – Migratory;</li> </ul>
	<ul> <li>Eastern Osprey (Pandion haliaetus) – Migratory;</li> </ul>
	Grey-tailed Tattler (Tringa brevipes) – P4; and
	vvood Sandpiper (Tringa glareola) – Migratory.
Aboriginal heritage sites Registered Aboriginal site (Place ID 11943)	Works are located within the DPLH boundary for Place ID 11943 – actual site is located > 400 m to the north.
this site is the 'dithered' boundary for the Nelson Point Protected Area (Place ID 1008)	The Licence Holder has advised that they have conducted consultation with the Kariyarra Traditional Owners through the Kariyarra Aboriginal Corporation PBC prior to the

	beginning of the works under the scope of this licence amendment.
PDWSA Priority 1 Yule River Water Reserve	Approximately 35 km to the southwest of the prescribed premises.
	Distance of proposed activities to PDWSA is sufficient to inform that project activity impacts are not foreseeable.
	The PDWSA is not considered to be impacted during operations and therefore is not considered in the risk assessment.

# 3.2 Risk ratings

Risk ratings have been assessed in accordance with the *Guideline: Risk Assessments* (DWER 2020) for those emission sources which are proposed to change and takes into account potential source-pathway and receptor linkages as identified in Section 3.1. Where linkages are incomplete they have not been considered further in the risk assessment.

Where the Licence Holder has proposed mitigation measures/controls (as detailed in Section 0), these have been considered when determining the final risk rating. Where the Delegated Officer considers the Licence Holder'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 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 8.

The Revised Licence L4513/1969/18 that accompanies this Amendment Report authorises emissions associated with the operation of the Premises i.e. water treatment and soil handling.

The conditions in the Revised Licence have been determined in accordance with *Guidance Statement: Setting Conditions* (DER 2015).

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#### Table 8: Risk assessment of potential emissions and discharges from the Premises during construction

Risk Event					Risk rating <sup>1</sup>	Licence		
Source/Activities	Potential emission	Potential pathways and impact	Receptors	Licence Holder's controls	C = consequence L = likelihood	C = consequence L = likelihood Holder's controls sufficient?		Justification for additional regulatory controls
Movement and storage of excavated material	Dust (PM <sub>10</sub> and total suspended particulate (TSP)) emissions	<u>Pathway</u> : Air/windborne pathway <u>Impact</u> : Health and amenity	Town of Port Hedland	Refer to section 3.1.1	C = Minor L = Unlikely Medium Risk	Y	Condition 17: ceasing all earth moving and construction activities Condition 26: Dust monitoring Conditions 27- 32: Dust triggers and management actions	The delegated officer considers that dust emissions during construction will not be significant and that the Licence Holder's proposed controls are sufficient.
Storage of potentially contaminated excavated material (soil)	Potentially contaminated water (leachate) / sediment emissions	Pathway:         Overland flow and         infiltration         Impact:         Contamination of         surface water and/or         groundwater systems,         and adverse impacts to         surrounding flora and         fauna values	Migratory and priority birdlife. Priority flora and vegetation including mangroves Nearby surface water receptors and groundwater	Refer to section 3.1.1	C = Minor L = Unlikely Medium Risk	Y	Condition 18	The delegated officer considers that the leachate and sediment emissions during construction will not be significant and that the Licence Holder's proposed controls are sufficient. The increase in the quantity of soil handled from 42,000 tonnes per annual year to 90,000 tonnes per annual year will utilise existing infrastructure and controls, and therefore no additional controls are considered necessary.
Storage of uncontaminated excavated material	Sediment laden stormwater	Pathway: Overland flow Impact: Sedimentation of areas containing flora and vegetation. Increase in surface water sediment loads	Priority flora and vegetation including mangroves Nearby surface water receptors	Refer to section 3.1.1	C = Minor L = Possible Medium Risk	Y	N/A	The delegated officer considers that sediment laden stormwater emissions during construction will not be significant and that the Licence Holder's proposed controls are sufficient.

Risk Event					Risk rating <sup>1</sup>	Licence		
Source/Activities	Potential emission	Potential pathways and impact	Receptors	Licence Holder's controls	C = consequence L = likelihood	Holder's controls sufficient?	Conditions <sup>2</sup> of licence	Justification for additional regulatory controls
Piping water between the abstraction / reinjection wells and the lined turkey's nest, and contaminated soil handling area	Potentially contaminated water	Pathway: Overland flow and infiltration Impact: Contamination of surface water and/or groundwater systems, and adverse impacts to surrounding flora and fauna values	Migratory and priority birdlife. Priority flora and vegetation including mangroves Nearby surface water receptors and groundwater	Refer to section 3.1.1	C = Slight L = Possible Low Risk	Y	N/A	The delegated officer considers that leaks from pipework during construction will not be significant and that the Licence Holder's proposed controls are sufficient.
Storage of water in the lined turkey's nest	Potentially contaminated water	Pathway: Overtopping of the turkey's nest Impact: Contamination of surface water and/or groundwater systems, and adverse impacts to surrounding flora and fauna values	Migratory and priority birdlife. Priority flora and vegetation including mangroves Nearby surface water receptors and groundwater	Refer to section 3.1.1	C = Minor L = Unlikely Medium Risk	Y	Condition 18 [Table 14]	The delegated officer considers that the level of contamination within abstracted water during construction will unlikely be significant due to the pre-construction remediation works conducted at the premises. In the event that residual groundwater contaminants or surrounding plumes enters the dewatering system, the Delegated Officer considers that the Licence Holder's proposed management controls and water quality monitoring will be sufficient to manage this risk. The Delegated Officer also notes that existing and ongoing requirements under the <i>Contaminated Sites Act 2003</i> , as they relate to remediation activities are informing the management approach and construction activities.
Disposal of water to ground through reinjection wells	Potentially contaminated water	Pathway: Re-injection wells surrounding the CD6 excavation Impact: Change in groundwater levels and quality	Source aquifers	Refer to section 3.1.1	C = Minor L = Possible <b>Medium Risk</b>	Ν	Condition 35 [Table 6] water discharge monitoring <u>Condition 35</u> [Table 7 <u>Groundwater</u> <u>monitoring</u> ]	The predominant disposal method for abstracted water is recharge to the aquifer of origin in the immediate vicinity of CD6. The Delegated Officer considers that the proposed reinjection rates and monitoring parameters are generally acceptable, however considers that, based on technical review, there is the potential for dissolution of heavy metals associated with the dewatering and reinjection process.

Risk Event				Risk rating <sup>1</sup>	Licence			
Source/Activities	Potential emission	Potential pathways and impact	Receptors	Licence Holder's controls	C = consequence L = likelihood Holder's controls sufficient?		Conditions <sup>2</sup> of licence	Justification for additional regulatory controls
								Therefore, the Delegated Officer considers it necessary that groundwater monitoring requirements, consistent with that proposed by the Licence Holder (from the <i>Port</i> <i>Debottlenecking Project 2 (PDP2) Car Dumper 6</i> <i>(CD6) and Conveyor Tunnel, Dewatering</i> <i>Management Plan) are</i> conditioned within the Licence to ensure that any potential changes to groundwater quality are identified (Table 7).
								To further aid in the ongoing monitoring of dewatering activities associated with the construction works, the Licence Holder's proposed monitoring program at the turkeys nest outlet (to re-injection) (as per the <i>Port</i> <i>Debottlenecking Project 2 (PDP2) Car Dumper 6</i> <i>(CD6) and Conveyor Tunnel, Dewatering</i> <i>Management Plan)</i> is also included within Table 6. Monitoring for these parameters will assist in the identification of contaminants and assist with analysing trends in groundwater quality throughout the proposed dewatering process.
Disposal of water into Lagoon 1	Potentially contaminated water	Pathway: Direct discharge to the licensed L7 discharge point that drains to Lagoon 1 Impact: Contamination of surface water and/or groundwater systems, and adverse impacts to surrounding flora and fauna values	Migratory and priority birdlife. Priority flora and vegetation including mangroves Nearby surface water receptors and groundwater	Refer to section 3.1.1	C = Moderate L = Unlikely <b>Medium Risk</b>	Ν	Condition 35 [Table 6] water discharge monitoring (additional monitoring parameters)	The Delegated Officer considers that the contamination levels during construction are unlikely to be significant due to the pre-construction remediation works conducted. The Delegated Officer considers that controls proposed by the Licence Holder for monitoring and laboratory analysis are generally sufficient and that the proposed trigger actions will be sufficient to act as an early warning system. Due to the potential dissolution of heavy metals (as discussed in section 2.6), particularly concerning the release of Mercury and Lead (due to their toxicity, and associated impacts to nearby receptors), and potential extraction via dewatering activities, the Delegated Officer considers that Mercury and Lead be included within the monitoring requirements for discharges to L7 (Table 6) to ensure that

Risk Event					Risk rating <sup>1</sup>	Licence			
Source/Activities	Potential emission	Potential pathways and impact	Receptors	Licence Holder's controls	C = consequence L = likelihood		Conditions <sup>2</sup> of licence	Justification for additional regulatory controls	
								discharges via this pathway are appropriately monitored and managed.	
								Relevant limits, based upon criteria from the Australian and New Zealand Guidelines for Fresh and Marine Water Quality (ANZG, 2020) are included within the table to ensure that discharges to this discharge location do not pose an unacceptable risk.	
								The Delegated Officer has determined that the proposed trigger values and actions will not be conditioned in the licence, however the threshold limits and requirements to stop discharge will adequately meet the intent of the control and manage risks to the environment.	
General construction activities, including (but not limited to) operation of concrete batching plant, storage of	Dust (PM <sub>10</sub> and TSP) emissions	<u>Pathway:</u> Air/wind dispersion <u>Impact:</u> Health and amenity	Surrounding residents of Port Hedland about 200 m north of the premises, but 500 m from the CD6 construction site	Refer to section	C = Minor L = Unlikely <b>Medium Risk</b>	Y	Condition 17: ceasing all earth moving and construction activities Condition 26: Dust monitoring Conditions 27- 32: Dust triggers and management	The Delegate Officer has determined that existing dust controls and the Environmental Protection (Concrete Batching and Cement Product Manufacturing) Regulations 1998 are sufficient to manage dust emissions.	
dewatering, drilling and piling of			3.1.1	3.1.1			actions		
secant wall, rock breaking, machinery, vehicle use and excavation	Noise	<u>Pathway:</u> Air/wind dispersion <u>Impact:</u> Amenity	Surrounding residents of Port Hedland about 200m north of the premises, but 500m from the CD6 construction site	-	C = Slight L = Unlikely Low Risk	Y	N/A	The Delegated Officer considers that noise emissions during construction will not be significant and that the Licence Holder's proposed controls are sufficient. The Delegated Officer notes that the <i>Environmental Protection (Noise) Regulations</i> 1997 are sufficient to manage noise emissions.	

Risk Event				Risk rating <sup>1</sup>	Licence			
Source/Activities	Potential emission	Potential pathways and impact	Receptors	Licence Holder's controls	C = consequence L = likelihood	Holder's controls sufficient?	Conditions <sup>2</sup> of licence	Justification for additional regulatory controls
	Sediment laden wastewater	Pathway: Overland flow and infiltration <u>Impact:</u> Contamination of surface water and/or groundwater systems, and adverse impacts to surrounding flora and fauna values	Migratory and priority birdlife. Priority flora and vegetation including mangroves. Nearby surface water receptors and groundwater		C = Minor L = Unlikely <b>Medium Risk</b>	Y		The Delegated Officer considers that sediment laden wastewater emissions during construction will not be significant and that the Licence Holder's proposed controls are sufficient. It is noted that the <i>Environmental Protection</i> ( <i>Concrete Batching and Cement Product</i> <i>Manufacturing</i> ) <i>Regulations 1998</i> also apply. The Licence Holder has indicated that the concrete batching plant will be operated in accordance with these regulations.

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 9 provides a summary of the consultation undertaken by the department.

#### Table 9: Consultation

Consultation method	Comments received	Department response		
Local Government Authority (Town of Port Hedland) advised of proposal 27 March 2025.	No comment received.	N/A		
Licence Holder was provided with draft amendment on 5 June 2025	The Licence Holder provided comments on 11 July 2025 Refer to Appendix 1.	Refer to Appendix 1 for response to comments.		

# 5. 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.

The Delegated Officer has updated conditions in the Licence were necessary to authorise and manage the construction works associated with CD6. The requested changes to Category 62 and Category 73 are also accepted noting that these amendments are considered minor, along with minor administrative updates in the licence to improve clarity and intent.

# 5.1 Summary of amendments

Table 10 provides a summary of the proposed amendments and will act as a record of implemented changes. All proposed changes have been incorporated into the Licence as part of the amendment process.

Condition no. or relevant section	Proposed amendments
Table 1: Definitions	Updated 'Dust Control Equipment Inventory' to reference the correct table.
1	Amend Table 2 (Authorised Emissions Table), from 'Treated Wastewater Discharges' to 'Treated and Untreated Wastewater Discharges' to include CD6 construction works aquifer reinjection and surface water discharge to the L7 discharge point. These authorised emissions may not be 'treated' prior to discharge.
Existing conditions 12- 14	Remove conditions 12, 13 and 14 as the construction and installation of infrastructure specified in Table 10 has been completed in accordance with regulatory requirements. Update to numbering of conditions resulting from these deletions.
Existing condition 27 (Table 5) (now condition 24 (Table 5))	Note 1 amended as the department has taken over control of the Port Hedland ambient air quality monitoring network.

Table 10: Summary of licence amendments

Condition no. or relevant section	Proposed amendments				
Existing	Amend Table 6 (Wastewater and washwater discharge monitoring), as follows:				
condition 35 (now condition 32)	<ul> <li>Amend Note 1 for the L7 discharge point to read 'Required only during operation of the water treatment plant or while discharging from the turkey's nest dam (as specified in Table 14).</li> </ul>				
	<ul> <li>Amend Table 6 for the L7 discharge point to allow the frequency to be reduced from weekly to fortnightly following a BHP notification to DWER, after it has been established that water quality analyte levels are below the trigger levels for management action.</li> </ul>				
	<ul> <li>Amend Table 6 for the L6, L8 and L9 locations to allow the frequency to be reduced from fortnightly to monthly following a BHP notification to DWER, after it has been established that water quality analyte levels are below the trigger levels for management action.</li> </ul>				
	<ul> <li>Amend Note 2 for L6, L8 and L9 locations to read 'Monitoring at these locations required to be undertaken at least one month prior to the operation of the water treatment plant (as specified in Table 14) and while discharging from the turkey's nest dam (as specified in Table 14) to the L7 discharge point.</li> </ul>				
	<ul> <li>Amend Table 6 to include a requirement to monitor the rate and volume of water being discharged to the reinjection wells.</li> </ul>				
	• Amend Table 6 to include a requirement to monitor for heavy metals for discharges to L7.				
	• Amend Table 6 to include the requirements for monitoring re-injection activities.				
Existing condition 35	<ul> <li>Inclusion of groundwater monitoring requirements associated with dewatering and reinjection activities (new Table 7).</li> </ul>				
(now condition 32)	<ul> <li>Inclusion of Note 1 for Table 7 that states "Final groundwater monitoring well locations may be subject to change due to factors such as drill rig access and the presence of underground services. The Licence Holder must submit the final monitoring well locations to the CEO within four weeks of commencing monitoring."</li> </ul>				
Existing condition 38(h) (now condition 35(h))	Update to reference correct condition.				
Existing condition 38(j) (now condition 35(j))	Update to include reference to all monitoring conditions (23, 24 and 32).				
Existing condition 38(c) (now condition 35(c))	The condition text has been updated to require that Books are retained for the duration of the licence, in line with the department's current licence template conditions.				
Existing condition 40(c)(i) (now condition 37(c)(i))	Update to reference correct condition.				
Figures	Inclusion of new figures associated with proposed dewatering re-injection activities.				
Schedule 2	Amend Schedule 2 (Schedule of works) to:				
	<ul> <li>Correct typographical errors in Table 9 (Authorised works) to correct infrastructure referencing and remove duplication.</li> </ul>				
	Remove Table 10.				

Condition no. or relevant section	Proposed amendments		
Schedule 3	<ul> <li>Amend category 62 – Solid Waste depot from 42,000 to 90,000 tonnes per annual period to facilitate the storage and disposal of solid waste arising from excavation.</li> </ul>		
	<ul> <li>Amend Category 73 in Table 11 (Premises production design capacity) from "63,336 cubic metres in aggregate" to "63,336 cubic metres in aggregate of stored chemicals".</li> </ul>		
Schedule 4	Amend Table 14 (Other Infrastructure Controls) as follows:		
	Amend header 'Treated Water Management' to 'Wastewater Management',		
	<ul> <li>Adding: The volume of stored fuel at satellite fuel storage facilities located within the Prescribed Premises (Port Licence Boundary in Figure 1), combined with the volume of stored fuel at the Nelson Point Main Fuel Farm, shall not exceed 63,336 cubic metres in aggregate.</li> </ul>		
	<ul> <li>Amend item 8 from 'Water treatment pipelines' to 'Wastewater pipelines' and allow daily pipeline inspections as an alternative to installing pressure sensors for leak detection.</li> </ul>		
	<ul> <li>Amend item 9 to allow turkey's nest dam water to be re-injected without treatment or discharge to the L7 discharge point providing water quality Threshold Limits are met.</li> </ul>		
	<ul> <li>Amend item 12 to allow water from the Contaminated Soil Handling Area to be directed to the turkey's nest dam for management in accordance with (No. 9), as amended, or disposed of offsite.</li> </ul>		
	Amend item 12 to include potentially contaminated 'slurry' being stored within the contaminated soil handling area prior to testing.		

# 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. Fluor Australia Pty Ltd (Fluor) 2024, *Groundwater model and Dewatering Design Report*, Perth, Western Australia.
- 5. Fluor Australia Pty Ltd (Fluor) 2024, *Port Debottlenecking Project 2 (PDP2) Car Dumper* 6 (*CD6*) and Conveyor Tunnel, Dewatering Management Plan, Perth Western Australia.

# Appendix 1: Summary of Licence Holder's comments on the draft licence amendment and draft amendment report

Relevant section or condition number	Summary of Licence Holder's comment	Department's response			
Draft licence amendment					
Page 39 Figure 125: Indicative location of untreated water pipelines	Typographical error, update label from Figure 125 to Figure 15.	Figure numbering has been updated accordingly.			
Table 7: Groundwater Monitoring. Column 1 Row 1	<ul> <li>Figure 13 is an indicative figure. The final monitoring well locations are subject to change for reasons including, but not limited to, drill rig access and presence of underground services.</li> <li>Proposed replacement wording in Table 7, Column 1, Row 1 "A total of 13 monitoring wells in the upper aquifer and 9 monitoring wells in the lower aquifer in and adjacent to the reinjection area outlined in Figure 12". Remove Figure 13 and any in-text reference to the figure.</li> <li>If necessary, the Licence could include a requirement for BHP to notify DWER of the final monitoring well locations once monitoring commences (nominally within four weeks).</li> </ul>	<ul> <li>The department notes BHP's proposed update and has determined that Figure 13 will be retained within the licence. The department has actioned the following updates to the licence text to account for any changes to the groundwater monitoring well locations:</li> <li>Figure 13 title updated to 'Indicative groundwater monitoring well locations'; and</li> <li>Inclusion of Note 1 for Table 7 that states "Final groundwater monitoring well locations as drill rig access and the presence of underground services. The Licence Holder must submit the final monitoring well locations to the CEO within four weeks of commencing monitoring."</li> </ul>			
Figure 13: Groundwater monitoring well locations	As above, BHP requests that this figure is removed from the Licence.	As per above.			
Table 11: Wastewater management Row 8 item a)	Propose amended wording from "Pipelines equipped with pressure sensors for automatic leak detection" to "Pipelines equipped with sensors for automatic leak detection", as pressure sensors may not be able to be implemented due to the changing pressures in the pipelines.	The department accepts the proposed update, and the text has been amended accordingly.			
Figure 11: Proposed site remediation infrastructure	As discussed on 09 July 2025, propose amending the name of the Figure 11 from "Proposed site remediation infrastructure" to "Nelson Point	The department accepts the proposed update, and the text has been amended accordingly.			

Relevant section or condition number	Summary of Licence Holder's comment	Department's response
	Primary Activity Infrastructure and Equipment for Potentially Contaminated Material". This aligns with the description in Table 9.	
Figure 12: Proposed CD6 Excavation and Re-injection Infrastructure	Updated studies have shown a slightly larger area for the reinjection zone, see Attachment 1 to this letter. The area was updated to accommodate existing rail infrastructure. The area covers the same aquifers and does not change the assessed risks. It is proposed that Attachment 1 replace Figure 12 in the Licence.	The department accepts the proposed update, and the figure has been replaced.
Table 11: Other Infrastructure Controls Row 12 item a)	As discussed on 09 July 2025, propose amended wording "Potentially contaminated soil <b>and slurry</b> must be only stored in the contaminated soil handling area outlined in Figure 11 prior to testing".	The department accepts the proposed update, and the text has been amended accordingly.
Table 10: Construction and installation requirements for dust and noise control infrastructure	Row 25 states that the Spaghetti Junction transfer stations controls "Must be installed within 5 years from the date of amendment, as specified at the front of this Licence". Suggest that this be amended to read "Must be installed by 06 September 2026, being 5 years from the date of the applicable licence amendment (06 September 2021)".	The department accepts the proposed update, and the text has been amended accordingly.
Draft amendment report		
Section 2.2 Application summary. Figure 1: Disposal of dewatering water	BHP requests that Figure 1 be substituted and updated with the proposed figure in Attachment 2 to this letter to align with Table 11 Row 9 in the draft Licence.	The department accepts the proposed update, and the text has been amended accordingly.
Section 2.2 Application summary Figure 2: Location of proposed infrastructure for CD6 excavation and ground water abstraction and re- injection	Updated studies have shown a slightly larger area for the reinjection zone, see Attachment 1 to this letter. The area was updated to accommodate existing rail infrastructure. It covers the same aquifers and does not change the assessed risks. BHP request that the Attachment 1 figure be substituted in the draft Amendment Report.	The department accepts the proposed update, and the figure has been replaced.
Section 2.5.4 Groundwater handling	The last paragraph of this section contains dot points for water disposal and indicates that water going to the groundwater reinjection wells will be managed subject to meeting water quality criteria. For clarity, BHP requests that the drafting be separated from two dot points into three being; "water will be pumped to the:	The department accepts the proposed update, and the text has been amended accordingly.

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Relevant section or condition number	Summary of Licence Holder's comment	Department's response
	Groundwater reinjection wells.	
	<ul> <li>L7 discharge point, subject to meeting water quality criteria (Table 3 and Table 5).</li> </ul>	
	<ul> <li>A small amount of Turkey's nest water will be used as construction water as required."</li> </ul>	
Page 25, Schedule 4 "pressure sensors"	BHP requests amended wording from "Pipelines equipped with pressure sensors for automatic leak detection" to "Pipelines equipped with sensors for automatic leak detection", as pressure sensors may not be able to be implemented due to the changing pressures in the pipelines.	The department accepts the proposed update, and the text has been amended accordingly.
Section 2.2 Application summary	Bullet c) – Typographical error turkeys nest is misspelt, request correction.	The department accepts the proposed update, and the text has been amended accordingly.

# Appendix 2: Application validation summary

SECTION 1: APPLICATION SUMMARY (as updated from validation checklist)					
Application type					
Amendment to licence	$\boxtimes$	3	Current licence number:	L4513/1969/18	
Date application received	•		10 February 2025		
Applicant and Premises details					
Applicant name/s (full legal name/s)			BHP Iron Ore Pty Ltd (008 700 981) Mount Newman Joint Venture		
Premises name			BHP Iron Ore Port Hedland Operations Nelson Point and Finucane Island (as per current licence) In the application form: BHP Port Operations, Port Hedland		
Premises location			BHP Port Operations 1 Wilson Street PORT HEDLAND WA 6721 No change from the original prescribed premises.		
Local Government Authority			Town of Port Hedland		
Application documents					
EO file reference number:			APP-0027437		
Key application documents (additional to applica	tion form):	):	Attachment 8 – supporting documentation		
Scope of application/assessment					
Summary of proposed activities or changes to ex operations.	kisting		As per section 2.2 of this Amendment Report.		
Category number/s (activities that cause the pre-	mises to b	becom	e prescribed premises)		
Table 1: Prescribed premises categories					
Prescribed premises category and description	Assess capacit <u>y</u>	ed pr y	oduction or design	Proposed changes to the production or design capacity (amendments only)	
Category 5: processing or beneficiation of metallic or non-metallic ore	Category 5: processing or beneficiation of 155 million to metallic or non-metallic ore		nnes per annual period		
Category 54: sewage facility	260.9 ci	ubic n	netres per day		
Category 58: bulk material loading or 330 million to unloading			nnes per annual period		
Category 61: liquid waste facility 8,000 tonne			per annual period		
Category 62: solid waste depot 42,000 tonne			s per annual period	90,000 tonnes per annual period	
Category 73: bulk storage of chemicals etc 63,336 cubic			metres in aggregate		
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 🗆	Assessed under Part IV ⊠	
Does the applicant hold any existing Part IV Ministerial Statements relevant to the application?			] No 🗆	Ministerial statement No: 1070 EPA Report No: 1608	

Has the proposal been referred and/or assessed under the EPBC Act?	Yes 🗆 No 🛛	
Has the applicant demonstrated occupancy (proof of occupier status)?	Yes 🛛 No 🗆	No change to prescribed premises.
Has the applicant obtained all relevant planning approvals?	Yes 🗆 No 🗆 N/A 🛛	Iron Ore (Mount Newman) Agreement Act 1964
Has the applicant applied for, or have an existing EP Act clearing permit in relation to this proposal?	Yes 🛛 No 🗆	CPS No: NVCP 7009/3 No clearing is proposed.
Has the applicant applied for, or have an existing CAWS Act clearing licence in relation to this proposal?	Yes 🗆 No 🛛	No licence required
Has the applicant applied for, or have an existing RIWI Act licence or permit in relation to this proposal?	Yes 🛛 No 🗆	Application reference No: 061395 Licenses approved 24 May 2024.
Does the proposal involve a discharge of waste into a designated area (as defined in section 57 of the EP Act)?	Yes 🛛 No 🗆	Name: Pilbara Groundwater Area/Surface Water         Area         Type: Proclaimed Groundwater Area/Surface Water         Area         Has Regulatory Services (Water) been consulted?         Yes ⊠ No □ N/A □         Regional office: North West
Is the Premises situated in a Public Drinking Water Source Area (PDWSA)?	Yes 🗆 No 🛛	Name: N/A Priority: P1 / P2 / P3 / N/A Are the proposed activities/ landuse compatible with the PDWSA (refer to <u>WQPN 25</u> )? Yes □ No □ N/A ⊠
Is the Premises subject to any other Acts or subsidiary regulations	Yes 🛛 No 🗆	Rights in Water and Irrigation Act 1914 Contaminated Sites Act 2003
Is the Premises within an Environmental Protection Policy (EPP) Area?	Yes 🗆 No 🛛	
Is the Premises subject to any EPP requirements?	Yes □ No ⊠	
Is the Premises a known or suspected contaminated site under the <i>Contaminated Sites Act 2003</i> ?	Yes 🛛 No 🗆	