Government of Western Australia
Department of Water and Environmental Regulation

Decision Report

Application for Works Approval

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

Works Approval Number	W2916/2025/1
Applicant	Pilbara Iron Pty Ltd
ACN	107 216 535
File number	APP-0027080
Premises	Integrated Rail Network Grade Separation LX426km LHML Concrete Batching Plant. Part of Lot 302 Deposited Plan 50856 and Lot 303 Deposited Plan 50856 NEWMAN WA 6753 As defined by the premises maps attached to the issued works approval
Date of report	23 April 2025 **(FINAL)**
Decision	Works approval granted

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1. Decision summary

This decision report documents the assessment of potential risks to the environment and public health from emissions and discharges during the construction and operation of the premises. As a result of this assessment, works approval W2916/2025/1 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 19 December 2024, the applicant submitted an application 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 relating to the installation and operation of a temporary mobile concrete batching plant located within the Hope Downs Rail Corridor and adjacent to the 426 km Lang Hancock Mainline (LHML) rail level crossing. The Premises is approximately 60 km north-west of Newman.

The Premises relates to the category and assessed design capacity under Schedule 1 of the *Environmental Protection Regulations 1987* (EP Regulations) which are defined in works approval W2916/2025/1. 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 works approval W2916/2025/1.

The mobile concrete batching plant will be used for 2 years and will be operated seven days per week. The concrete batching activities will support the construction of the new Grade Separation (bridge), the proposed Hope Downs 2 mine access road and the Great Northern Highway diversion to make way for the development of the new Hope Downs 2 mine site.

In general, the process includes:

1) A 50 tonne (t) capacity (total site may be up to 500 t) horizontal cement silo(s) fitted with horizontal and incline screw conveyors to move the cement from the silo to the cement weigh hopper. After weighing, augers are used to feed the cement into the batching plant.
2) Aggregate and sand are tipped into material specific weigh hoppers, where after weighing an enclosed batch conveyor transfers the sand and aggregate to the batching plant.
3) Cement, sand, aggregate and water are then mixed within the batching plant and discharged into the cement truck.
4) Any enclosed hopper, chute and transfer point will be fitted with either windshields, water sprays or dust extraction systems to prevent visible dust escaping.
5) All in-situ concrete shall be batched in plant with quality endorsement to ISO9001 for concrete supply systems relevant to the work.
6) Cement is stored in the sealed silo system attached to the batching plant and fitted with overflow protection and reverse pulse filters to vent the silo, as specified in the *Environmental Protection (Concrete Batching and Cement Product Manufacturing)*

Regulations 1998 (Concrete Batching Regulations).

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 and 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
Construction			
Dust	Installation of mobile concrete batching plant Construction of stormwater channels and stormwater sump	Air / windborne pathway	Speed limits will be enforced at the Premises. Regular watering down during vegetation clearing and establishment of tracks within the Premises.
Noise			Application of Section 6 of the *Australian Standard 2436-1981 "Guide to Noise Control on Construction, Maintenance and Demolition Sites"*.
Operation			
Dust	Operation of concrete batching plant and ancillary infrastructure Stockpiles of aggregate and sand Vehicle movements	Air / windborne pathway	Concrete batching plant designed with appropriate dust emission controls including: 1) The cement silo being a sealed compartment fitted with a reverse jet pulse filter, pressure release safety valves with an overfill protection system with audible and visual alarms. 2) Inspection, testing, maintenance and operation of the silo and its air cleaning system will be undertaken. 3) If visible dust is observed during filling, unloading is to stop until appropriate measures have been taken to prevent the escape of dust. 4) Hoppers fitted with wind shields and water sprays. All hoppers, conveyors, chutes, bucket elevators or transfer points, or areas used to load concrete agitator

Emission	Sources	Potential pathways	Proposed controls
			trucks either enclosed or fitted with dust prevention measures to prevent escape of visible dust. 5) Inspection of water spray and dust suppression systems daily, with blocked or damaged equipment repaired. 6) All spilt material during concrete batching will be immediately cleaned up. Dust suppression for stockpile areas: 1) Sprinklers located around stockpiles for dust suppression to minimise dust emissions. If capacity is reached, then the material must be stored under a cover or bin. 2) Trafficable areas will be managed via water spray truck or dust suppression treatments. General: 1) Washing of vehicles to remove excess dust or concrete prior to leaving the premises. 2) No concrete batching will occur within 50 m of a creekline or riparian vegetation area. 3) Aggregate storage spray system and dampened prior to delivery, water applied as necessary. 4) Compliance with the Concrete Batching Regulations.
Noise	Concrete batching operation Vehicle movements		Operations will follow the *Australian Standard 2436-1981 "Guide to Noise Control on Construction, Maintenance and Demolition Sites"*.
Sediment laden stormwater	Operation of concrete batching plant and associated infrastructure	Overland runoff Discharges to land	All activities such as truck loading, truck washdown, agitator washout, and slump testing will be undertaken over an earthen bunded all weather concrete pad. The concrete pad will incorporate washout pit(s), and a wedge pit/settlement pond. Batching plant will be located on a compacted earthen pad. Based on a water balance the wash pits will be at adequate capacity to contain expected wastewater and stormwater volumes. Washout pit(s) and wedge pit/settlement pond will allow for the removal of concrete waste. All contaminated water will be diverted to a wedge

Emission	Sources	Potential pathways	Proposed controls
			pit/settlement pond for evaporation and possibly reuse (via washout pit) after solids have been removed. Clean surface water runoff will be directed to various clean water sumps located within the batching plant and ancillary footprint for collection and evaporation. Batching plant and ancillary infrastructure footprint will be located at least 50 m from any drainage line and riparian vegetation. Compliance with the Concrete Batching Regulations.
Contaminated wastewater		Discharges to land	All activities such as truck loading, truck washdown, agitator washout, and slump testing will be undertaken over an earthen bunded all weather concrete pad. No planned discharge of wastewater from site.
Hydrocarbon spills	Storage and handling of hydrocarbons	Direct discharge to land	Hydrocarbon above ground storage tanks, will be located within the earthen bunded area of the batching plant and ancillary infrastructure footprint. Refuelling/fuel transfer trucks expected to be fitted with dry brake coupler (won't allow fuel flow until it's locked in place), pressure valve regulators, over fill protection. Provision for spill response equipment during any refuelling of mobile plant and equipment on site. Self-bunded 70-110 kL above ground fuel tanks. Tanks are self-bunded double wall designed, with venting, overfill protection with mechanical shut-off alarm, antisyphon valve in the event of a fuel loss or possible pipe or hose failure.

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**
Vehicles passing highway	Within Premises boundary, 615 m from concrete batching plant.
Environmental receptors	**Distance from prescribed activity**
Significant flora and fauna (occurring within 5 km)	- *Aristida lazaridis* (Priority3) - *Hibiscus sp.* Gurinbiddy Range (M.E. Trudgen MET 15708) (Priority 2) - *Isotropis forrestii* (Priority 1) - *Rhagodia sp.* Hamersley (M. Trudgen 17794) (Priority 3) - *Themeda sp*. Hamersley Station (M.E. Trudgen 11431) (Priority 3) - *Triodia sp*. Mt Ella (M.E. Trudgen 12739) (Priority 3)
Threatened fauna (occurring within 5 km)	*Macroderma gigas*/Ghost Bat (Vulnerable)
Priority fauna	*Elanus scriptus,* Letter-winged Kite (Priority 4) *Ngadji Pseudomys chapmani,* Western Pebble-mound Mouse (Priority 4)
Water courses	Unnamed non-perennial watercourse intercepts the Premises, feeding into another non-perennial watercourse approximately 50 m south (at its closest point). Another unnamed non-perennial watercourse is located approximately 550 m west. Proposed plant will be approximately 12 0m from non-perennial watercourse.
Groundwater	The Lang Hancock Rail Project bores reported groundwater depths ranging between 28.02 m below ground level (mbgl) and >50 mbgl.

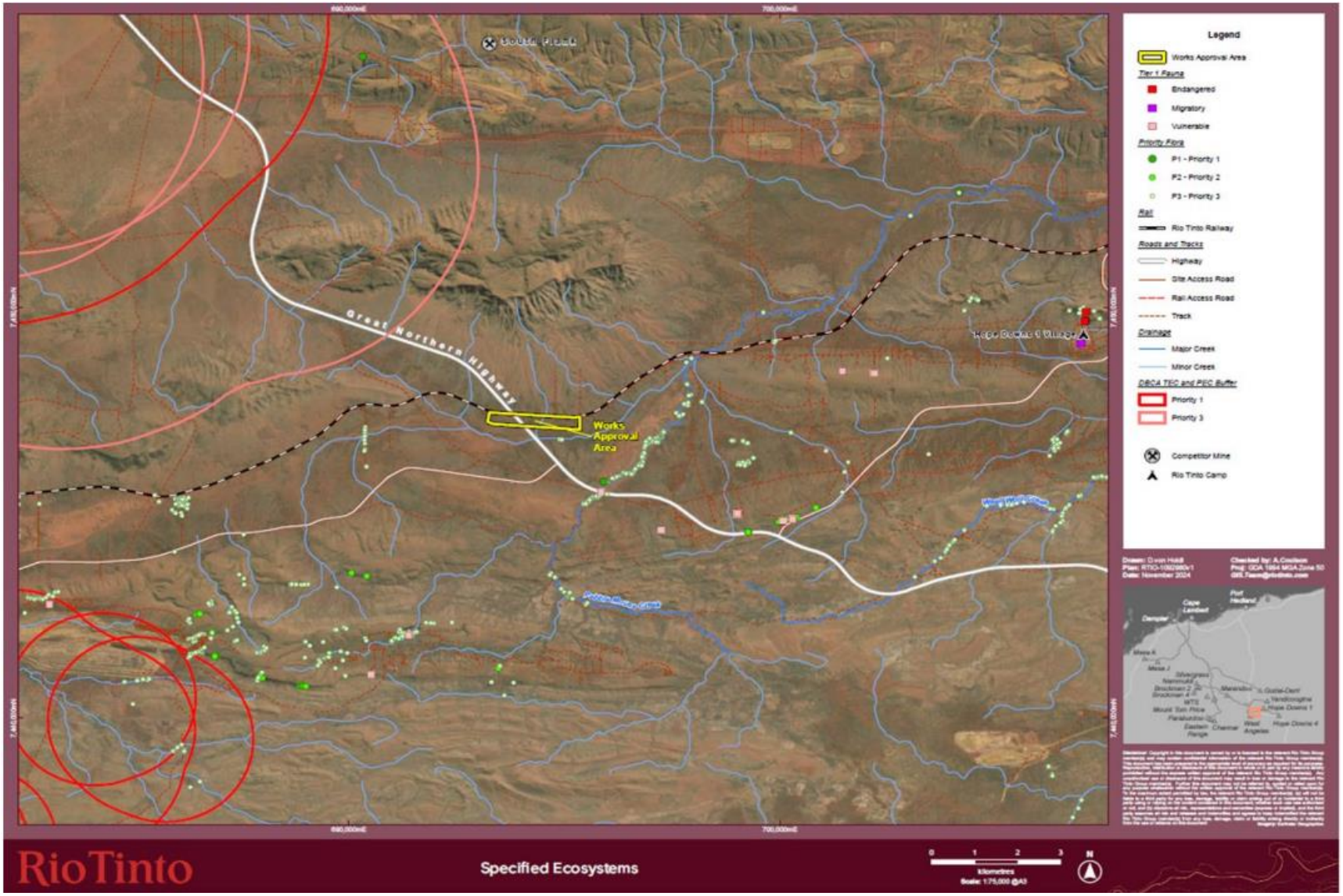

Figure 1: Sensitive receptors

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 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 W2916/2025/1 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).

The applicant will be able to apply for a registration once construction has been completed and the relevant compliance reports submitted. Ongoing operations at the Premises will be subject to the Concrete Batching Regulations.

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

Risk events					Risk rating [1] C = consequence L = likelihood	Applicant controls sufficient?	Conditions [2] of works approval	Justification for additional regulatory controls
Sources / activities	**Potential emission**	**Potential pathways and impact**	**Receptors**	**Applicant controls**				
Construction								
Installation of mobile concrete batching plant Construction of stormwater channels and stormwater sump	Dust	**Pathway:** Air/windborne pathway **Impact:** Dust covering vegetation, reducing their photosynthetic potential Changes to surface water characteristics	Native vegetation Creeklines Drainage lines Vehicles	Refer to Section 3.1	C = Slight L = Possible **Low Risk**	Y	N/A	N/A
	Noise	**Pathway:** Air/windborne pathway **Impact:** Disruption to native fauna feeding and predatory interactions	Priority fauna	Refer to Section 3.1	C = Slight L = Unlikely **Low Risk**	Y	N/A	N/A
Operation (including time-limited-operations operations)								
Operation of concrete batching plant and ancillary infrastructure Stockpiles of aggregate and sand Vehicle movements	Dust	**Pathway:** Air/windborne pathway **Impact:** Dust covering vegetation, reducing their photosynthetic potential. Changes to surface water characteristics	Native vegetation Creeklines Drainage lines Vehicles	Refer to Section 3.1	C = Slight L = Possible **Low Risk**	Y	Condition 1	The applicant has proposed that the design and operation of the mobile concrete batching plant will comply with the requirements of the Concrete Batching Regulations. Condition 1 of the works approval imposes construction requirements for the mobile concrete batching plant and ancillary infrastructure. This is in line with the applicant's proposed controls.
Cement batching operation	Noise	**Pathway:** Air/windborne pathway **Impact: Di**sruption to native	Priority fauna	Refer to Section 3.1	C = Slight L = Unlikely	Y	N/A	N/A

Risk events					Risk rating [1] C = consequence L = likelihood	Applicant controls sufficient?	Conditions [2] of works approval	Justification for additional regulatory controls
Sources / activities	**Potential emission**	**Potential pathways and impact**	**Receptors**	**Applicant controls**				
Vehicle movements		fauna feeding and predatory interactions			**Low Risk**			
Operation of concrete batching plant and associated infrastructure	Sediment laden stormwater	**Pathway:** Overland runoff and discharges to land **Impact:** Change of soil and surface water quality	Soil Surface water	Refer to Section 3.1	C = Minor L = Possible **Medium Risk**	Y	Condition 1	The applicant has proposed that the design and operation of the mobile concrete batching plant will comply with the requirements of the Concrete Batching Regulations. Condition 1 of the works approval imposes construction requirements for the mobile concrete batching plant and ancillary infrastructure. This is in line with the applicant's proposed controls.
	Contaminated wastewater	**Pathway:** Discharges to land **Impact:** Change of soil and surface water quality	Soil Surface water	Refer to Section 3.1	C = Minor L = Possible **Medium Risk**	Y	Condition 1	
Storage and handling of waste and hydrocarbons	Hydrocarbon spills	**Pathway: D**ischarges to land **Impact:** Change of soil and surface water quality	Soil Surface water	Refer to Section 3.1	C = Minor L = Possible **Medium Risk**	Y	General provisions of the EP Act apply *Environmental Protection (Unauthorised Discharges) Regulations 2004*	N/A

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
Application advertised on the department's website and on the on The West Australian newspaper on 3 March 2025	No comments received	N/A
The Shire of East Pilbara advised of proposal on 4 March 2025	No comments received	N/A
Applicant was provided with draft documents on 28 March 2025	The applicant provided comments on 22 April 2025 Refer to Appendix 1	Refer to Appendix 1

5. Conclusion

Based on the assessment in this decision report, the delegated officer has determined that a works approval will be granted, subject to conditions commensurate with the determined controls and necessary for administration and reporting requirements.

Subject to submitting relevant works approval compliance reports, the applicant is able to apply for a registration in respect of the operational phase of the Premises. Operational activities are regulated by the Concrete Batching Regulations.

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.

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

Condition	Summary of applicant's comment	Department's response
1, Table 1, item 2	The applicant requests that the option of using water carts to apply water to stockpiles for dust suppression be considered for inclusion. Proposed wording (with inclusion in red text): Sprinklers located around stockpiles and/or water cart application for dust suppression.	The department has made the requested change.
5(b)	The applicant has queried if the condition should read 5(a) rather than 0(a) in the below: (b) until such time as a registration for that item of infrastructure is granted in accordance with Part V of the *Environmental Protection Act 1986*, if one is granted before the end of the period specified in condition 0(a)	The department confirms that reference should be to condition 5(a). The condition has been updated accordingly.