



Application for Licence Amendment

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

Licence Number	L8937/2015/1
Licence Holder	Pilbara Ports Authority
ACN	94 987 448 870
File Number	DER2015/002837-2~9
Premises	Utah Point multi-user bulk handling facility Portion of Lot 600 on Deposited Plan 407880 PORT HEDLAND, WA 6721 Certificate of Title Volume LR3173 Folio 502 As defined by the Premises maps attached to the Revised Licence
Date of Report	13 September 2023
Decision	Revised licence granted

Fiona Roser

A/MANAGER, PROCESS INDUSTRIES (MAJOR PROJECTS)
REGULATORY SERVICES

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

Table of Contents

1. Decision summary	1
2. Scope of assessment	1
2.1 Regulatory framework	1
2.2 Application summary	1
2.2.1 Additional hoppers	1
3. Risk assessment	3
3.1 Source-pathways and receptors	3
3.1.1 Emissions and controls	3
3.1.2 Receptors	4
3.2 Risk ratings	5
4. Consultation	8
5. Conclusion	8
5.1 Summary of amendments	8
References	9
Appendix 1: Summary of Licence Holder’s comments on draft amendment	10
Table 1: Proposed applicant controls	3
Table 2: Sensitive human and environmental receptors and distance from prescribed activity	4
Table 3: Risk assessment of potential emissions and discharges from the premises during installation and operation	6
Table 4: Summary of licence amendments	8
Figure 1: Indicative FEL load paths with the additional fixed hopper location	2
Figure 2: Load path efficiencies with the additional fixed hopper location	2

1. Decision summary

The Delegated Officer has determined to make amendments to Licence L8937/2015/1. This Amendment Report documents the amendments made pursuant to section 59 and 59(B) of the *Environmental Protection Act 1986* (EP Act).

The decision report for the Existing licence will remain on the department's website for future reference and will act as a record of the department's decision making.

2. Scope of assessment

2.1 Regulatory framework

In amending the licence, the department has considered and given due regard to its Regulatory Framework and relevant policy documents which are available at <https://dwer.wa.gov.au/regulatory-documents>.

2.2 Application summary

L8937/2015/1 is held by Pilbara Ports Authority (Licence Holder) for the Utah Point Multi-User Bulk Handling Facility (the Premises), located at Finucane Island, Port Hedland.

The Premises relates to the categories and the assessed production capacity under Schedule 1 of the *Environmental Protection Regulations 1987* (EP Regulations) which are defined in existing Licence L8937/2015/1.

On 6 June 2023, the Licence Holder submitted an application to the department to amend Licence L8937/2015/1 under section 59B of the *Environmental Protection Act 1986* (EP Act). No increase in throughput is requested and the amendment is limited to the addition of two fixed position hoppers to be installed, including associated dust suppression systems.

Administrative changes include Landgate having issued a new Certificate of Title (Portion of Lot 600 on Plan 407880, Certificate of Title Volume LR3173 Folio 502) however there are no requested changes to the premises boundary.

2.2.1 Additional hoppers

The Licence Holder proposes to install two new fixed position hoppers along Conveyor 3 (CV03) that are intended to service Stockpiles 2, 3, 10 and 11 in Stockyard 1 (SY1). The two new hoppers are assessed in this application as new emission points however the Licence Holder expects to reduce overall dust emissions from the premises as:

- The additional hoppers are expected reduce tramming distance for Front-End Loaders (FELs) during out loading activities from adjacent stockpiles, which in turn reduces dust emissions from FEL wheel movements on the stockyard floors;
- Due the location of the proposed fixed hoppers there will be a reduction the number of transfer points within the outload circuit; and
- The additional hoppers include additional dust suppression controls.

The Licence Holder provided an analysis of tramming efficiency of the proposed changes against existing operations (proposed loading paths and tramming distances) to indicate that the new fixed hoppers would reduce tramming distance for FELs loadout activities (Figure 1).

Future Loading Paths

FELs loading into CV02 and CV03

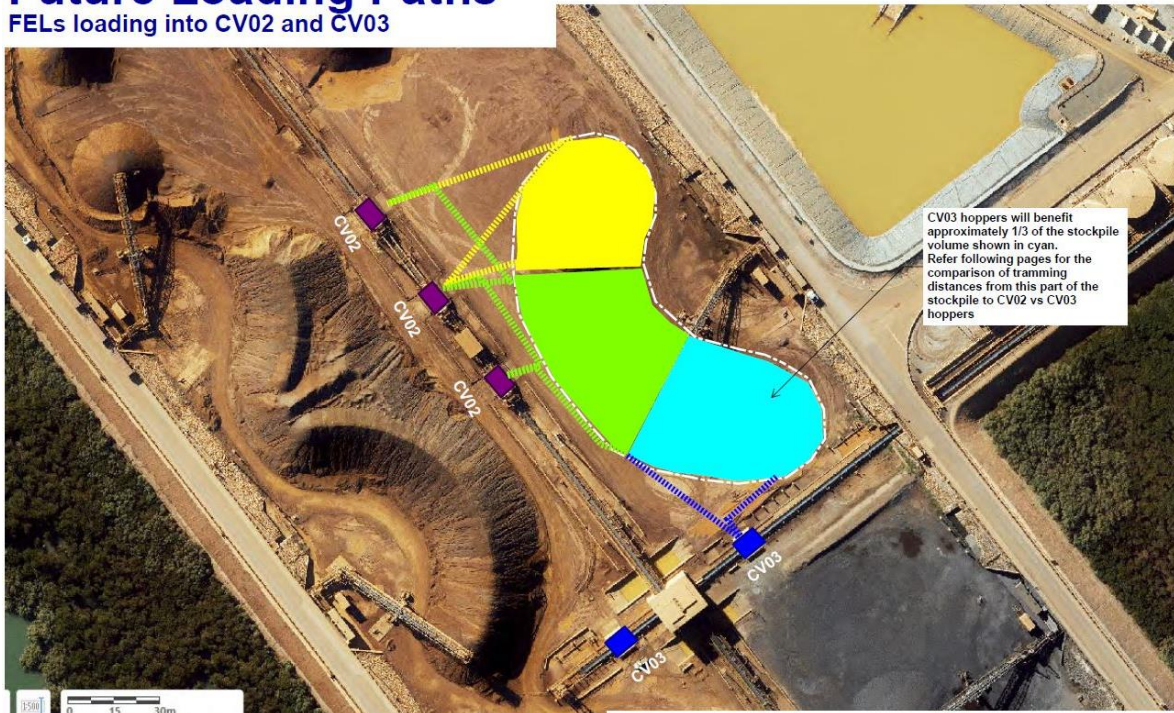


Figure 1: Indicative FEL load paths with the additional fixed hopper location

A review of loading path comparisons provided by the Licence Holder indicate that for one third of the stockpiles (stockpiles 2, 3, 10 and 11) located closest to the proposed fixed feed hopper, traming distance is significantly reduced (Figure 2).

Loading Paths Comparisons

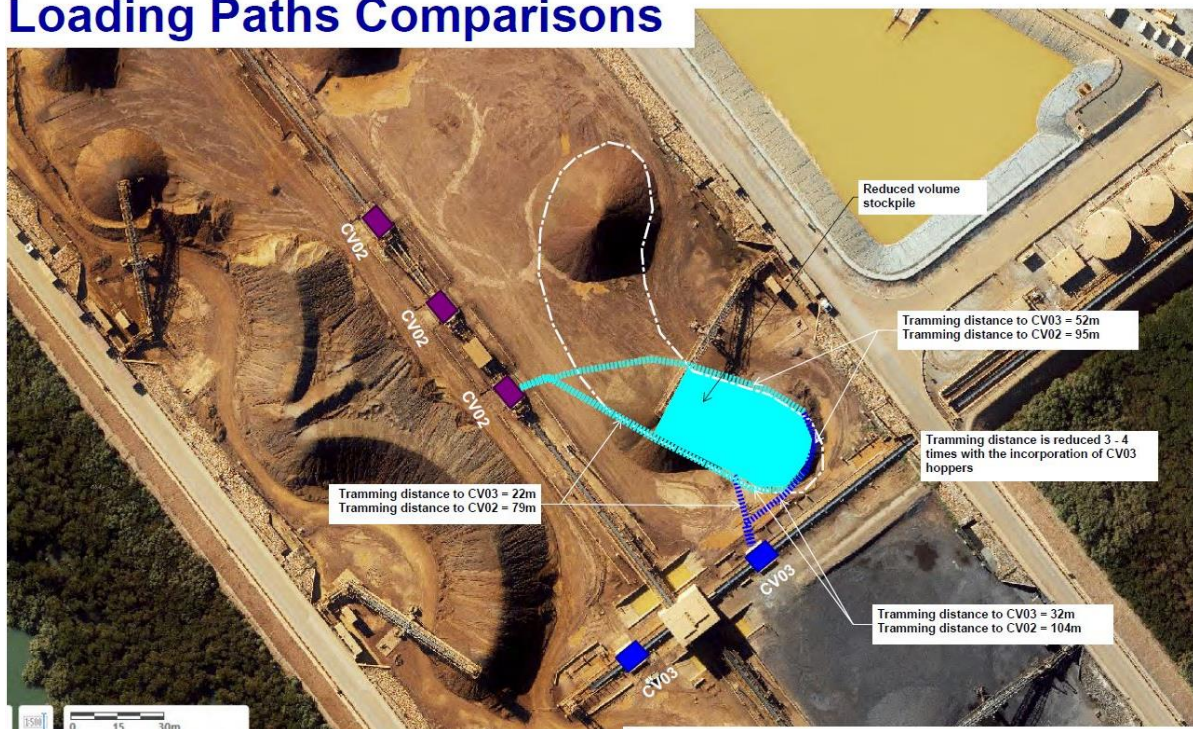


Figure 2: Load path efficiencies with the additional fixed hopper location

The Licence Holder has also proposed a combination of high-pressure spray systems for use within the fixed hoppers as well as additional traming dust suppression in the approach area of the hopper.

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 / 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	Installation and operation of fixed hoppers including FEL movements.	Air / windborne pathway	<ul style="list-style-type: none"> • Fixed hopper dust suppression system to be one of the following: <ol style="list-style-type: none"> 1. High pressure misting spray bars, located on either side of each hopper and will combine horizontal sheet sprayers and vertical sprayers; or 2. A high-pressure lance mister mounted outside the hopper with the capability to spray into the hopper. • Misters/sprayers located at the base of hoppers, fitted with motion detection and timed to activate on dumping and tramming. Misters will be directed towards the front-end loader's (FEL) tyres during tipping. • Existing dust controls are detailed in previous Amendment Report (DWER 2022)
Noise	Installation and operation of fixed hoppers including FEL movements.	Air / windborne pathway	<p>Location of the two new hoppers in a central area within the premises boundary away from the nearest sensitive receptor.</p> <p>Reduced tramming distance of FELs.</p> <p>Existing noise controls are detailed in previous Decision Report (DWER 2016)</p>
Hydrocarbon spills/leaks	Installation and operation of fixed hoppers including FEL movements.	Seepage of hydrocarbon contaminated water impacting groundwater quality	Existing controls are detailed in previous Decision Report (DWER 2016)

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 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
Pier Hotel – located east of Utah Point (zoned town centre – retail/commercial Town of Port Hedland Planning Scheme No.5)	670 m to the east
Port Hedland Visitors Centre – located east of Utah Point (zoned town centre – retail/commercial Town of Port Hedland Planning Scheme No.5)	800 m to the east
Closest residential zoned premises (zoned residential Town of Port Hedland Planning Scheme No.5)	1,200 m to the north-east
Taplin Street (zoned residential Town of Port Hedland Planning Scheme No.5)	3,340 m to the east
Environmental receptors	Distance from prescribed activity
Port Hedland harbour – marine ecosystem	Within and directly adjacent to the premises boundary. Moderate level of ecosystem protection*
Groundwater (considered brackish)	Depth to groundwater encountered at approximately 0.7m – 2.5 m. Variation driven by tidal variation. No bores located within 1km of premises (based on available GIS dataset – WIN Groundwater Sites). Water is not used for potable or industrial use. Groundwater system linked to marine ecosystem with Mangrove community located on the boundary of the premises boundary.
Mangrove community (high value ecosystem)	Located on the southern and eastern boundary of the prescribed premises

* Department of Environment, Pilbara Coastal Water Quality Consultation Outcomes: Environmental Values and Environmental Quality Objectives, March 2006 (DoE 2006).

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 3.1.1), 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 L8937/2015/1 that accompanies this decision report authorises emissions associated with the operation of the premises i.e. bulk loading activities.

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 installation and operation

Risk events					Risk rating ¹ C = consequence L = likelihood	Applicant controls sufficient?	Justification for additional regulatory controls
Sources / activities	Potential emission	Potential pathways and impact	Receptors	Applicant controls			
Installation							
Installation of fixed hoppers and associated dust suppression equipment including vehicle movements (reversing beepers)	Dust	Air / windborne pathway causing impacts to health and amenity	Pier Hotel 670m to the east Port Hedland Visitors Centre 800m to the east Residences 1,200m to the north-east Taplin Street dust monitor 3,340m to the east	No additional controls proposed.	C = Slight L = Possible Low Risk	Y	The Delegated officer considers that existing controls are sufficient to manage dust generated during installation. Works are expected to be of short duration and will not significantly differ from dust levels resulting from current operation of the Premises.
	Noise		Port Hedland harbour – marine ecosystem within and directly adjacent to the premises Mangrove community (high value ecosystem) at the southern and eastern boundary premises	No additional controls proposed.	C = Slight L = Possible Low Risk	Y	The Delegated officer considers that existing controls are sufficient to manage noise generated during installation. Works are expected to be of short duration and will not significantly differ from noise levels resulting from current operation of the Premises.
	Hydrocarbon spills/leaks	Seepage of hydrocarbon contaminated water impacting groundwater quality	Groundwater (brackish) depth 0.7m – 2.5m Mangrove community (high value ecosystem) at the southern and eastern boundary premises	No additional controls proposed.	C = Slight L = Possible Low Risk	Y	The Delegated officer considers that existing controls are sufficient to manage risk.
Operation							
Front end loader movements and transfer into hoppers	Dust	Air / windborne pathway causing impacts to health and amenity	Pier Hotel 670 m to the east Port Hedland Visitors Centre 800 m to the east Residences 1,200 m to the north-east Taplin Street dust monitor 3,340 m to the east Port Hedland harbour – marine ecosystem within and directly adjacent to the premises	Refer to Section 3.1.1	C = Moderate L = Unlikely Medium Risk	Y	No increase in throughput is proposed with this amendment and no increase in the maximum number of FELs being operated at the site is being proposed. The installation of the fixed hoppers is likely to reduce tramping movements with Stockyard 1 within the vicinity of stockpiles 2, 3, 10 and 11, and as such, the Delegated Officer considers that dust emissions associated with the proposal are not likely to increase.

Risk events					Risk rating ¹ C = consequence L = likelihood	Applicant controls sufficient?	Justification for additional regulatory controls
Sources / activities	Potential emission	Potential pathways and impact	Receptors	Applicant controls			
	Noise		Mangrove community (high value ecosystem) at the southern and eastern boundary premises	Refer to Section 3.1.1	C = Moderate L = Unlikely Medium Risk	Y	No increase in throughput is proposed with this amendment and no increase in the maximum number of FELs being operated at the site is being proposed and as such, the Delegated Officer considers that noise emissions are not likely to increase.
	Hydrocarbon spills/leaks	Seepage of hydrocarbon contaminated water impacting groundwater quality	Groundwater (brackish) depth 0.7m – 2.5m Mangrove community (high value ecosystem) at the southern and eastern boundary premises	No additional controls proposed.	C = Minor L = Unlikely Medium Risk	Y	No increase in the maximum number of FELs being operated or total FEL movements at the site is being proposed and as such, the Delegated Officer considers that existing controls are sufficient to manage risk.

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

4. Consultation

The Licence Holder was provided with the draft Amendment Report on 14 August 2023. Comments received from the Licence Holder on 4 September 2023 have been considered by the Delegated Officer as detailed in Appendix 1.

5. Conclusion

Based on the assessment in this Amendment Report, the Delegated Officer has determined that an amended licence will be granted, subject to conditions commensurate with the determined controls and necessary for administration and reporting requirements.

The Delegated Officer considers that the proposal to install additional fixed hoppers with Stockyard 1 will reduce FEL tramping movements and considers that the proposed dust management controls associated with management of dust for hoppers operating along conveyor CV03 are sufficient.

5.1 Summary of amendments

Table 4 below provides a summary of the proposed amendments and will act as a record of implemented changes. All proposed changes have been incorporated into the Revised licence as part of the amendment process.

Table 4: Summary of licence amendments

Condition no.	Proposed amendments
Cover page	Premises details updated consistent with new certificate of title issued by Landgate.
History	Updated to include current amendment.
Condition 5, Table 1: Authorised works	Additional row added to include proposed infrastructure.
Conditions 26 and 27	Removed as the review of boundary monitoring data report has been submitted and is no longer required on the licence.
Table 6: Definitions	Addition of 'Annual Audit Compliance Report (AACR)' and 'Management Trigger' definition to the table.
Premises maps	Updated to current versions provided by the applicant.
Schedule 2: Primary Activities, Table 8 Infrastructure and equipment	Updated to include proposed infrastructure.
Schedule 3: Infrastructure and equipment, Table 10 Infrastructure and equipment controls	Updated to include proposed infrastructure.
Schedule 5: Boundary monitoring report review	Removed as the review of boundary monitoring data report has been submitted and is no longer required on the licence.

References

1. Department of Environment Regulation (DER) 2015, *Guidance Statement: Setting Conditions*, Perth, Western Australia.
2. Department of Water and Environmental Regulation (DWER) 2016, *Decision Report for Utah Point Multi-User Bulk Handling Facility*, Perth, Western Australia. (DWER Document: A1150819)
3. Department of Environment (DoE) 2006, *Pilbara Coastal Water Quality Consultation Outcomes: Environmental Values and Environmental Quality Objectives*, Perth, Western Australia
4. DWER 2020, *Guideline: Environmental Siting*, Perth, Western Australia
5. DWER 2020, *Guideline: Risk Assessments*, Perth, Western Australia.
6. DWER 2022, *Amendment Report for Utah Point Multi-User Bulk Handling Facility*, Perth, Western Australia. (DWER Document: A2108230)

Appendix 1: Summary of Licence Holder's comments on draft amendment

Condition	Summary of Licence Holder's comment	Department's response
Authorised works table	The applicant has requested that both dust suppression control options remain in the licence.	The Delegated Officer notes and accepts the changes to enable flexibility for the applicant to instal the most suitable dust suppression equipment.
Environmental Compliance Report condition	The applicant has requested that Rows pertaining to Stockyard 2 Optimisation, Stockyard 1 Mobile Feed Hopper Train dust suppression and Installation of 2 Fixed Hoppers on Conveyor 3 in Stockyard 1 be separated out so that audit and reporting requirements for each work package are to be submitted separately.	The Delegated Officer notes and accepts the changes as the intent of the condition remains the same.
Air quality monitoring - review of boundary monitoring data	The applicant has requested that both conditions relating to the review of boundary monitoring data be removed as this report was submitted to the department on 1 September 2022 and is no longer required on the licence.	The Delegated Officer notes and accepts the removal of the conditions noting that the required report has been submitted.
Monitoring and management response condition	The applicant has advised that there is an error in this condition.	The Delegated Officer notes this and has amended the condition.
Schedule 5 – Boundary monitoring report review	The applicant has requested that Schedule 5 which is relating to the review of boundary monitoring data be removed as this report was submitted to the department on 1 September 2022 and is no longer required on the licence.	The Delegated Officer notes and accepts the removal of the conditions.