



Application for Works Approval Amendment

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

Works Approval Number	W6515/2021/1
Works Approval Holder	MEPAU Perth Basin Pty Ltd (MEPAU)
ACN	009 204 031
File Number	DER2021-000104 APP-0029503
Premises	Waitsia Gas Project Stage 2 Pye Rd YARDARINO WA 6525
	Legal description – As shown in the Map in Schedule 1 of Works Approval W6515/2021/1 and defined by the coordinates in Schedule 2
Date of Report	28 October 2025
Decision	Revised works approval granted

MANAGER, HEAVY INDUSTRIES

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

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1. Decision summary

Works Approval W6515/2021/1 is held by MEPAU Perth Basin Pty Ltd (Works Approval Holder) for the Waitsia Gas Project Stage 1 (the Premises), located on Pye Rd, Yardarino, about 16km southeast of Dongara.

The Works Approval Holder has applied to amend the works approval under section 59 and 59B of the *Environmental Protection Act 1986* (EP Act) as outlined in section 2.2. This Amendment Report documents the assessment of potential risks to the environment and public health from proposed changes to the emissions and discharges. As a result of this assessment, Revised Works Approval W6515/2021/1 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 <https://dwer.wa.gov.au/regulatory-documents>.

2.2 Application summary

On 3 August 2021 Works Approval W6515/2021/1 was granted to the Works Approval Holder authorising the construction and time limited operation of the Waitsia Gas Project Stage 2. The project aims to further develop the Waitsia gas field by drilling and connecting additional wells to a new gas processing plant (Waitsia Gas Plant) designed to produce 91.5 Petajoules per day (PJ/day).

On 16 June 2025, the Works Approval Holder submitted an application to the department to amend Works Approval W6515/2021/1 under section 59 and 59B of the EP Act. Amendments being sought are outlined in the sections below.

2.2.1 Alter the design of the inlet compressor gas system

Inlet compressors are required after initial production of gas to facilitate gas processing as reservoir pressure declines. The initial design of the inlet gas compression system included four 1,860 kilowatt (kW) gas engine driven compressors operating on a n + a basis (i.e. only three operational with one on stand-by). The design of the project has been updated and the inlet gas compressor system is proposed to consist of a single gas turbine of about 14.7 megawatt (MW) capacity.

2.2.2 Enable phased construction and operation

Noting that the inlet gas compression system is not immediately required, the Works Approval Holder has requested that conditions are amended to allow phased construction and time limited operations. The staged approach will support construction and time limited operation of the broader gas processing plant first, and allow construction and time limited operation of the inlet gas compressor at a later date as this infrastructure is required.

2.2.3 Extend the duration

The Works Approval Holder notes that project delays have occurred which has throughout construction and pre-commissioning which has impacted the ability of the project to meet initial timeframe estimates. An extension to the works approval is requested to allow additional time to complete commissioning (which commenced in May 2025) and time limited operation. The extended duration will also facilitate the above staged approach that requires construction and

commissioning of the inlet gas compression system at a later stage.

2.2.4 Alter the prescribed premises boundary

The Works Approval Holder has requested that the prescribed premises boundary specified in the works approval be amended to align with the development envelope approved through Ministerial Statement 1164 (MS 1164).

2.2.5 Increase the production capacity

The Works Approval Holder proposes to increase the design capacity of the plant through a debottlenecking project. The proposal will increase the production capacity of the plant from 91.5 PJ/year to 100.375 PJ/year and is associated with internal modifications to the existing equipment including the feed knock-out drum and export gas compressor. No new equipment is proposed as part of the debottlenecking proposal.

2.2.6 Produced formation water (PFW)

PFW generated from the gas processing plant is reinjected back into the reservoir via a dedicated reinjection system, comprising of two existing production wells that have been repurposed for PFW injection. Where reinjection is not possible (i.e. wells are offline) water is directed to lined evaporation ponds located on the premises.

Two lined evaporation ponds were authorised for the disposal of PFW under Works Approval W6515/2021/1. To date, only one pond has been constructed. The second pond was incorporated into the plant design as a contingency measure, intended for future use should operational demand require it.

The reinjection system was established under Works Approval W6647/2022/1 and is currently designed to handle up to 2,400 barrels per day (bbl/day). The Works Approval Holder has advised that proposed upgrades to the premises may lead to temporary exceedances of this reinjection capacity. These exceedances are expected to be manageable using existing infrastructure through:

- partially diverting PFW to existing storage ponds for evaporation; and/or
- cycling production wells to prioritise those with lower water output, thereby reducing overall water generation.

The delegated officer notes that Works Approval W6647/2022/1 limits annual reinjection volumes to 140,160 m³ (approximately 2,400 bbl/day). Additional regulatory controls under W6515/2021/1 govern the discharge of PFW to evaporation ponds, including measures to mitigate overflow risks.

The delegated officer considers that any increase in PFW volumes resulting from debottlenecking activities can be effectively managed under the existing regulatory framework provided by W6515/2021/1, W6647/2022/1, and relevant legislation administered by the Department of Mines, Petroleum and Exploration (refer to section 2.3.3). On this basis, risks associated with PFW have not been reassessed.

2.3 Legislative context.

2.3.1 Part IV of the EP Act

The Waitisia Gas Project Stage 2 was referred to the EPA in August 2019 under section 38 of the EP Act. In October 2019, the level of assessment was set at Referral Information and a two-week public review period applied.

The EPA released its final report on the assessment (EPA Report 1687) in September 2020 and MS 1164 was approved on 1 February 2021. The approved proposal is to construct and

operate a 250 terajoule (TJ) per day conventional gas production facility and related infrastructure including up to eight production wells.

In its assessment, the EPA considered the following environmental factors:

- Flora and vegetation;
- Air quality;
- Greenhouse gas emissions;
- Inland waters; and
- Social surroundings.

A summary of conditions relevant to the works approval is included in Table 1.

Table 1: Summarised conditions of MS 1164 relevant to assessment of the category 10 proposal under Part IV of the EP Act.

Environmental Factor	Condition	Condition summary
Flora and Vegetation Management Plan	6	Implementation of the <i>Waitsia Gas Project Stage 2: Flora and Vegetation Management Plan</i> to ensure no direct or adverse indirect impact to flora and vegetation within the Yandanogo Nature Reserve
Water Management Plan	7	Implementation of the <i>Waitsia Gas Project Stage 2: Water Management Plan</i> to ensure no adverse impact to Ejarno Spring or groundwater levels/quality.
Greenhouse Gas Management Plan	8	Implementing management measures to reduce carbon emissions from the proposal including the implementation of the <i>Waitsia Gas Project Stage 2: Greenhouse Gas Management Plan</i>
Heritage Management	10	Measures for avoiding and minimising impacts to Aboriginal heritages sites.

MS 1164 was amended on 21 January 2025 authorising the increased production capacity and modifications to the approved development envelope. In making its decision, the Environmental Protection Authority (EPA) noted that the amendments did not constitute a significant amendment.

Internal advice sought from EPA Services within the department confirmed that the proposal, including the proposed modifications to the inlet gas compression system, align with the proposal approved under MS 1164.

It was noted that, while the changes to the inlet compression system are not consistent with the existing approved Greenhouse Gas Management Plan (GHGMP), MS 1164 is undergoing review as requested by the Minister for Environment to change the implementation conditions relating to greenhouse gas emissions. It is expected that at the conclusion of this review, conditions requiring the implementation of a GHGMP are likely to be deleted and replaced with a requirement to comply with the *Commonwealth National Greenhouse and Energy Reporting Act 2007* and associated *National Greenhouse and Energy Reporting (Safeguard Mechanism) Rule 2015* (Safeguard Mechanism).

Based on this advice, the delegated officer considers that greenhouse gas emissions from the premises can be managed through Part IV of the EP Act and/or the Commonwealth Safeguard Mechanism. As such, greenhouse gas emissions have not been considered further in this assessment.

2.3.2 Appeals under Part V of the EP Act

Works approval W6515/2021/1 was initially issued for the construction, commissioning and time limited operation of the premises on 3 August 2021. An appeal was subsequently lodged against the conditions of the works approval (Appeal 032 of 2021).

In July 2023, the Minister for Environment allowed the appeal to the extent that the works approval conditions are amended to address several matters. The Minister determined that while the requirements of the works approval were generally appropriate, the following changes were required:

- in-stack monitoring of air emissions during environmental commissioning;
- records be kept of all flaring and start-up events during environmental commissioning;
- submission of groundwater bore logs, detailing the installation of each new monitoring bore;
- monitoring of the newly installed groundwater bores, once produced water (PW) is discharged into the PW evaporation pond;
- the PW line within the premises be regularly visually inspected during time limited operations, and records be kept of the flowmeter when the PW line is in use; and
- the lighting design for the gas plant and other premises' lighting infrastructure be reviewed against best practice lighting design guidelines noting in particular the potential impacts to fauna, such as the rakali or migratory bird species, that may be present within Ejarno Spring.

The works approval was amended to give effect to the Minister's decision on 30 August 2023.

Appellants raised concerns regarding the impact of noise emissions on fauna within Ejarno Spring. In its report, the Appeals Convenor noted that, in the absence of fauna specific emissions standards for noise, the assigned noise levels specified in the *Environmental Protection (Noise) Regulations 1997* (Noise Regulations) would apply. It was determined that the land on which Ejarno Spring exists is likely to be classed as a noise sensitive premises (other than a highly sensitive premises) per the Noise Regulations, and associated assigned levels would apply.

2.3.3 Department of Mines, Petroleum and Exploration

In Western Australia, all onshore petroleum exploration and developments are subject to approval by the Department of Mines, Petroleum and Exploration (DMPE) under the following legislation:

- *Petroleum and Geothermal Energy Resources Act 1967* (PGER Act);
- *Petroleum and Geothermal Energy Resources (Environment) Regulations 2012* (PGER Regulations);
- *Petroleum Pipelines Act 1969*; and
- *Petroleum Pipelines (Environment) Regulation 1969* (Pipeline Regulations).

DMPE regulate the transport and disposal of PFW via the flowlines and reinjection wells at the Premises through approved Environment Plans in accordance with the PGER Regulations and Pipeline Regulations. The PGER Regulations require the Environment Plan implementation strategy to specifically consider the injection of PFW into wells, including specification of the maximum permissible concentration of petroleum in the PFW, and details regarding any chemicals or other substances that may be used in treatment fluids or introduced to the subsurface environment.

Relevant Environment Plans approved by DMPE under the PGER Act and regulations include:

- *Perth Basin Facilities Environment Plan* (PB-HSE-PLN-00004, Revision 4B) covering the operational activities associated with the Hovea-13ST1 and the Eremia-04 water disposal wells;
- *Waitsia Gas Project Stage 2: Flowline and Hubs Construction Environment Plan* (WGP-HSE-PLN-00002, Revision 6A) covering the construction of the water reinjection flowline; and

Previous advice received from DMPE confirmed that environmental risks associated with the construction, commissioning and operation of the flowlines and injection wells, can be assessed and managed under DMPE administered legislation and assessment processes.

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 *Guidance Statement: Risk Assessments* (DER 2017).

To establish a Risk Event there must be an emission, a receptor which may be exposed to that emission through an identified actual or likely pathway, and a potential adverse effect to the receptor from exposure to that emission.

3.1 Source-pathways and receptors

3.1.1 Emissions and controls

The key emissions and associated actual or likely pathway during premises operation which have been considered in this Amendment Report are detailed in Table 2 below. Table 2 also details the proposed control measures the Works Approval Holder has proposed to assist in controlling these emissions, where necessary.

Table 2: Works Approval Holder controls

Emission	Sources	Potential pathways	Proposed controls
Air emission	Increased production capacity and altered inlet compression design	Air/windborne pathway	No change to the pollution controls for air emissions associated with the broader gas processing plant. Commissioning activities undertaken in accordance with the commissioning plan which sets emission trigger values and includes commitments for stack testing to verify emissions. A revised commissioning plan will be submitted prior to commissioning of the inlet gas compressors incorporating commissioning activities associated with this equipment. Inlet gas compressor fitted with SoLoNox dry low NOx burners. Regular maintenance of engines to ensure equipment efficiency is maintained.
Noise			No change to noise pollution controls on existing infrastructure such as acoustic enclosures as outlined in section 3.3.

Emission	Sources	Potential pathways	Proposed controls
			Inlet compressor package to also have acoustic enclosure.
Lighting			Lighting on inlet gas compressor implemented in accordance with <i>National Light Pollution Guidelines for Wildlife</i> (DCCEEW 2023)
Hydrocarbons and environmentally hazardous materials	Spills and leaks from the inlet compressor unit and contaminated stormwater	Overland flow and seepage to soils and groundwater	All equipment that contains liquids will be provided with a bunded areas to capture spills. Potentially contaminated surface water will be contained in bunded areas and direction via an interceptor to the existing contaminated water run-off system. Contaminated water is collected within the existing lined contaminated water pond. Uncontaminated runoff in the areas will be directed to the existing uncontaminated stormwater settlement pond. Spill response equipment is maintained on the premises.

3.1.2 Receptors

In accordance with the *Guidance Statement: Risk Assessment* (DER 2017), the Delegated Officer has excluded employees, visitors and contractors of the Works Approval 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 3 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 (*Guidance Statement: Environmental Siting* (DER 2016)).

Table 3: Sensitive human and environmental receptors and distance from prescribed activity

Human receptors	Distance from prescribed activity
Residents	The premises is located within a mostly cleared agricultural paddock. There are 3 farmhouses on rural properties within a 5 km radius of the site, with the closest being about 2.5 km west-southwest (Receptor B).
Industrial premises	Mondarra Gas Storage facility located 2.4km east of the premises boundary.
Environmental receptors	Distance from prescribed activity
Ejarno Spring	Groundwater dependent ecosystem located 500m east of the premises, providing potential habitat for priority fauna species including <i>Hydromys chrysogaster</i> (rakali, Priority 4) and <i>Phasmodes jeeba</i> (springtime corroborree stick katydid [Eneabba], Priority 3)
Groundwater	The premises is located within the northern Perth Basin. On a regional scale,

	the groundwater system comprises the predominantly unconfined Superficial formations, which include alluvium, Tamala Limestone, Bassendean Sand, lateritic weathering residues and colluvium, overlying the Yarragadee aquifer. These may be in direct hydraulic connection with the Yarragadee aquifer however some perched layers are known to exist in the area. Standing water levels vary from 0 to 100 m below ground surface. The Yarragadee aquifer is typically fresh to marginal near the surface and increases in salinity with depth. Groundwater flow directions are generally towards the ocean, in a west-southwest direction. Groundwater recharge into the Yarragadee aquifer occurs by direct rainfall and downward leakage from overlying aquifers in the Superficial formations. Localised siltstone and shale beds may support perched water table conditions in some areas, with low permeability lacustrine sediments present in topographic depressions and result in the ponding of water features such as the Ejarno Spring. The standing water level at the Waitsia-02 well site, located adjacent to the WGP site, is about 9 m below ground level.
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3.2 Air quality modelling

Updated air quality modelling (MRP 2025) was submitted which considers the potential air quality impacts of emissions from the premises. The modelling compared predicted ground level concentrations (GLCs) with relevant ambient air quality criteria and considered six operating scenarios:

1. Background Only – Includes existing and future regional sources (e.g. Xyris, Hovea, Mondarra, Lockyer, and West Erregulla facilities) and non-industrial background concentrations, excluding emissions from the premises.
2. Normal Operations (Isolated) – Emissions from the premises only, without background sources.
3. Normal Operations + Background – Combined emissions from the premises and background sources.
4. Startup Operations + Background – Emissions during startup conditions, including background sources.
5. Normal Operations + Background (Incinerator Offline) – Emissions with the incinerator offline and acid gas recovery unit (AGRU) emissions redirected to the flare.
6. Normal Operations + Background (Peak Flaring) – Emissions during peak flaring events.

Consistent with previous assessments, the modelling shows that predicted cumulative GLCs for most pollutants (i.e. carbon monoxide, sulphur dioxide, BTEX (benzene, toluene, ethylbenzene, xylene), mercury, and hydrogen sulfide) remain well below ambient air quality criteria at sensitive receptor locations.

Nitrogen oxides (NO_x) continue to be the primary pollutant of concern, with maximum cumulative GLCs reaching approximately 61% of the National Environmental Protection (Air Quality) Measure (NEPM) criteria at sensitive receptor locations. Compared to previous modelling, which predicted a maximum 1-hour NO_x concentration of approximately 122 µg/m³ at sensitive receptors, the current modelling shows a reduced maximum 1-hour concentration of around 80 µg/m³.

The highest NO_x concentrations were associated with Scenario 4 (Startup Operations), while levels during normal operations were typically lower (less than 50% of the guideline). The delegated officer notes that startup conditions were modelled as continuous emissions to

assess worst-case meteorological impacts. This is considered to be a conservative modelling approach given that startup events are infrequent and therefore unlikely to coincide with worst-case weather conditions.

A technical review of the modelling confirmed general compliance with the *Air Quality Modelling Guidance Notes* (DoE 2006). While some limitations were noted, they were not considered to affect the overall conclusions of the assessment.

3.3 Noise modelling

The Works Approval Holder engaged Abbott Risk Consulting Limited (ARC) to prepare a Noise Study Report (ARC 2024) to support the assessment of noise impacts associated with the proposed changes to the premises.

The following noise controls were considered in the assessment:

- Acoustic enclosures for the export gas compressor package, gas engine generator, diesel generator and diesel generator exhaust, designed to reduce limit external to 85 dB;
- The inlet compression facilities will also be provided in acoustic enclosures to reduce external noise levels to 85dB at 1m; and
- Flare system fitted with a sub-sonic tip to reduce the noise levels as far as practicable.

Results of modelling indicate that, under normal operating conditions, noise from the premises including the proposed debottlenecking (i.e. at a throughput of 100.375 PJ/year) is predicted to comply with the nighttime assigned noise level of 35dB(A) at all neighbouring residences. The highest predicted level at nearby residences was predicted to be 32.7 dB(A) at Residence B, located 2.5km southwest of the premises (Figure 1).

Notwithstanding this assessment, further consideration of cumulative noise emissions is necessary to confirm compliance with the Noise Regulations. As per the Noise Regulations, a noise emission must not cause, or significantly contribute to a level of noise which exceeds the assigned level at the nearest receptor. A noise emission is considered to significantly contribute to a level of noise if it exceeds a level 5 dB below the assigned level (i.e. 30dB(A) in this case).

As the predicted noise level is below 35 dB(A) but within 5 dB(A) of the prescribed standard, it is necessary to consider contributions from other noise sources to determine compliance. If ambient noise at the receptor identifies contributions from other industrial sources, the applicable nighttime assigned level is reduced to 30 dB(A), requiring further noise mitigation to achieve compliance. While the noise modelling considers emissions from both Stage 1 and Stage 2 premises, it does not consider noise emissions from other industrial noise sources.

ARC recommended conducting noise monitoring to determine the influence of existing industrial sources to establish the appropriate assigned noise level that needs to be achieved at the sensitive receptor. The delegated officer considers however, that such monitoring may not provide sufficient certainty in determining cumulative noise risk. Given that the Stage 1 premises is already operational and Stage 2 is entering commissioning, these premises may already be influencing ambient noise levels and, as such, identifying additional noise sources through ambient monitoring may not be possible.

A review of potentially contributing premises indicated that the nearest industrial noise sources are:

- the Mondarra Gas Storage facility, approximately 5km northeast of Receptor B (2.4km east of the premises); and
- the Jingemia Production Facility, approximately 7km southwest of the receptor.

No other industrial sources were found within 5km of the receptor.

The delegated officer acknowledges the potential for cumulative noise impacts but notes a degree of uncertainty regarding the contribution of external industrial sources and the relevant assigned noise levels. Given that ambient noise monitoring is unlikely to reliably capture the influence of nearby industrial premises, a precautionary approach has been applied requiring the premises to meet a noise level of 30 dB(A) at sensitive receptors.

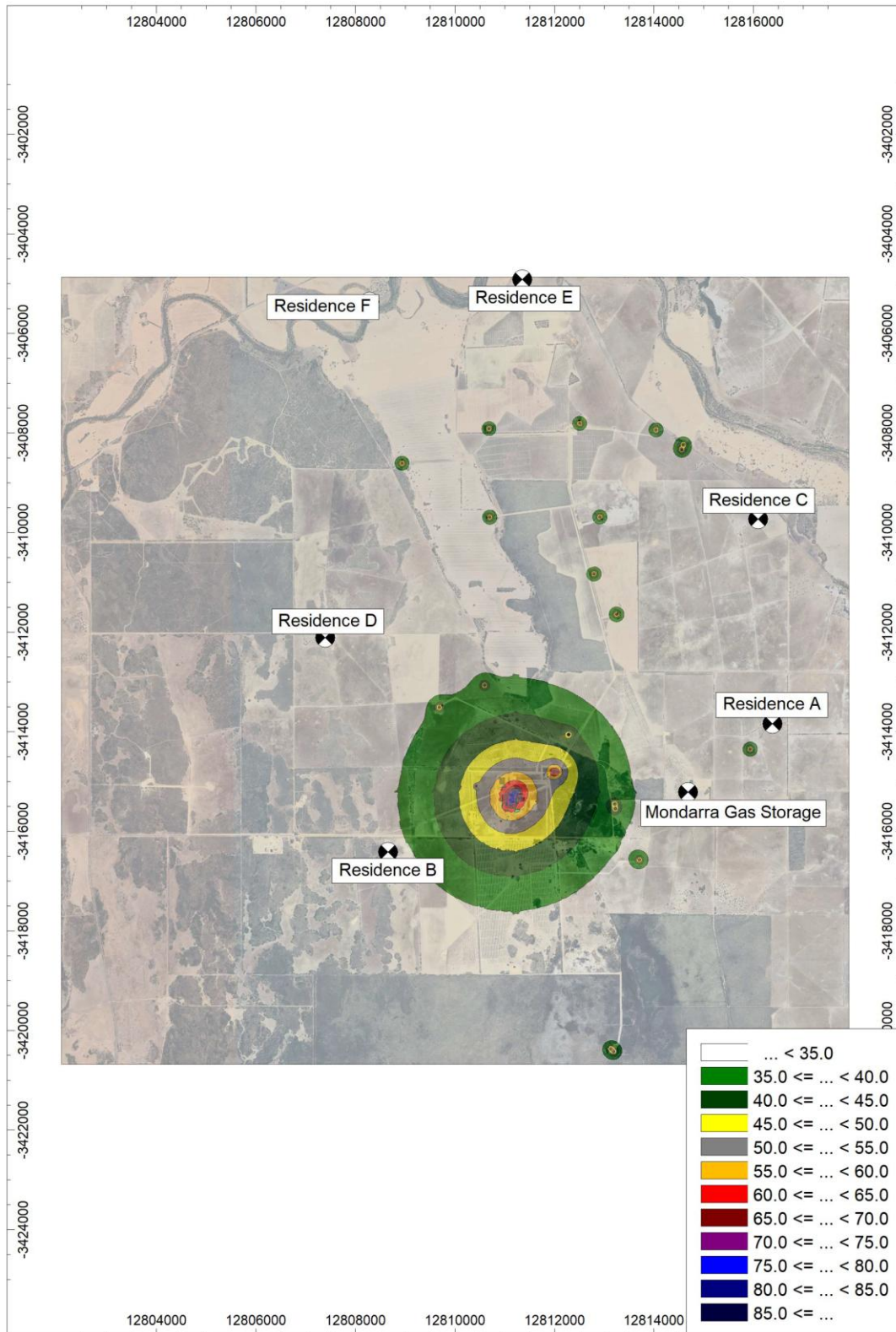


Figure 1: Predicted nighttime noise levels showing the location of modelled receptors (Source: ARC 2024).

3.4 Risk ratings

Risk ratings have been assessed in accordance with the *Guidance Statement: Risk Assessments* (DER 2017) 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 in-complete they have not been considered further in the risk assessment.

Where the Works Approval Holder 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 Works Approval Holder'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 Works Approval Holder's controls are not deemed sufficient. Where this is the case the need for additional controls will be documented and justified in Table 4.

The Revised Works Approval W6515/2021/1 that accompanies this Amendment Report authorises construction and time-limited operations. The conditions in the Revised Works Approval have been determined in accordance with *Guidance Statement: Setting Conditions* (DER 2015).

A licence is required following the time-limited operational phase authorised under the works approval to authorise emissions associated with the ongoing operation of the Premises. A risk assessment for the operational phase has been included in this Amendment Report, however licence conditions will not be finalised until the department assesses the licence application.

Table 4. Risk assessment of potential emissions and discharges from the Premises during commissioning and operation

Risk Event					Risk rating ¹ C = consequence L = likelihood	Works Approval Holder's controls sufficient?	Reasoning
Source/Activities	Potential emission	Potential pathways and impact	Receptors	Works Approval Holder's controls			
Increased production capacity and revised resign of the inlet gas compression system	Air emissions	Air/windborne pathway causing impacts to health and amenity	Rural residences – Nearest residence 2.5km west-southwest	Refer to Section 3.1.1	C = Minor L = Unlikely Medium Risk	Y	Air quality modelling results do not indicate a significant increase in predicted ambient concentrations of pollutants associated with the premise. Noting that predicted cumulative GLCs are similar, if not lower, than previous modelling, the delegated officer determined that the risk profile of the premises has not changed. Existing regulatory controls are considered appropriate for managing air quality risks which include emissions verification through commissioning.
	Noise	Air/windborne pathway causing impacts to health	Rural residences – Nearest residence 2.5km west-southwest.	Refer to Section 3.1.1	C = Moderate L = Possible	N	As outlined in section 3.3, noise modelling indicates that the proposal will achieve the assigned noise levels as nearby receptors, however, this excludes

Risk Event					Risk rating ¹ C = consequence L = likelihood	Works Approval Holder's controls sufficient?	Reasoning
Source/Activities	Potential emission	Potential pathways and impact	Receptors	Works Approval Holder's controls			
		and amenity of human receptors and fauna within Ejarno Spring			Medium Risk		consideration of cumulative noise from other industrial sources. The delegated officer is unable to verify the risk of cumulative impacts to the nearest residence (Receptor B) to establish the appropriate assigned noise level that applies to this receptor. As a conservative approach, the delegated officer expects the Works Approval Holder to develop the proposal to meet the 30dB(A) at receptor locations. Recognising that modelling results are predictive and subject to uncertainty, conditions have been applied on the works approval requiring noise verification monitoring during commissioning to verify model outputs. Using obtained data, the Works Approval Holder is required to submit an updated noise model assessing compliance of actual emissions against the assigned noise levels specified in the Noise Regulations and outlining measures to be implemented if compliance cannot be demonstrated. Noise risks will be reviewed through the licence assessment process taking into consideration the information provided through noise verification. As part of this review, the department will consider any complaints received and, if it is found that noise is impacting on nearby residents, further noise mitigation may be required.
			Fauna within Ejarno Spring located 500m east.		C = Slight L = Unlikely Low Risk	Y	The Noise Study indicates that assigned noise levels associated with Ejarno Spring are likely to be met and as such the delegated officer considers that further regulatory control is not required.
	Light	Air pathway impacting fauna potentially residing within Ejarno Spring.	Fauna within Ejarno Spring located 500m east.	Refer to Section 3.1.1	C = Minor L = Unlikely Medium Risk	Y	The Works Approval Holder has indicated that lighting design associated with the inlet gas compressor aligns with the principles of the National Light Pollution Guidelines for Wildlife. This requirement is included as a condition of the works approval and will need to be demonstrated through submission of the Environmental Compliance Report. The delegated officer notes that the Works Approval

Risk Event					Risk rating ¹ C = consequence L = likelihood	Works Approval Holder's controls sufficient?	Reasoning
Source/Activities	Potential emission	Potential pathways and impact	Receptors	Works Approval Holder's controls			
							Holder has submitted a report in accordance with conditions 3 and 4 of works approval W6515/2021/1 relating to lighting design for the broader project. The report is currently under review by the department and compliance with these conditions will be determined through a separate assessment process.
	Hydrocarbons leaks / contaminated stormwater	Overland runoff potentially causing ecosystem disturbance or impacting groundwater and surface water quality	Ejarno Spring located 500m east. Groundwater ~9mbgl	Refer to Section 3.1.1	C = Moderate L = Unlikely Medium Risk	Y	The delegated officer has determined that the risk of contamination from spills and leaks at the premises will remain unchanged following the design modifications to the inlet compressor. The existing works approval conditions are considered sufficient to manage these risks. Hydrocarbon spills are regulated under the <i>Environmental Protection (Unauthorised Discharges) Regulations 2004</i> , and requirements for reporting environmental incidents are outlined in section 72 of the EP Act.

Note 1: Consequence ratings, likelihood ratings and risk descriptions are detailed in the *Guidance Statement: Risk Assessments* (DER 2017).

4. Consultation

Works Approval Holder was provided with draft amendment on (30 September 2025). A summary of the Works Approval Holder's comments are outlined in Appendix 1.

5. Conclusion

Based on the assessment in this Amendment Report, the delegated officer has determined that a Revised Works Approval will be granted, subject to conditions commensurate with the determined controls and necessary for administration and reporting requirements.

The delegated officer considers that environmental risks associated with air emissions and containment of hydrocarbon spills and contaminated stormwater, remain unchanged and can be managed through existing regulatory controls.

While volumes of produced formation water may temporarily increase due to the proposed works, it is expected that this can be managed within the capacity of existing infrastructure. As such the delegated officer has determined that risks associated with storage and management of produced formation water remain unchanged and existing regulatory controls are suitable.

As discussed in section 3.3 and Table 4, the delegated officer determined that noise monitoring is required through commissioning to confirm noise emissions from the premises. Noise data will be used to develop an updated model assessing as-built noise emissions against the Noise Regulations. Where compliance cannot be demonstrated, the Works Approval Holder is required to develop a plan for implementing additional noise control measures.

The works approval has been amended to include conditions reflecting the determination regarding noise emissions and accommodate the staged construction of the inlet gas compressor package.

5.1 Summary of amendments

Table 5 provides a summary of the proposed amendments and will act as record of implemented changes. All proposed changes have been incorporated into the Revised Works Approval as part of the amendment process.

Table 5: Summary of works approval amendments

Condition no.	Proposed amendments
Cover page	Works Approval duration extended from 31 October 2025 to 31 October 2028.
	Assessed design capacity increased from 91.25 PJ/year (1,873,000 tonnes) to 100,375 PJ/year (2,060,300 tonnes).
Condition 1, Table 1	Modified to identify project stages. Authorises construction of the inlet gas compressor (Stage 1) with requirements for pollution controls relating to air emissions, noise and lighting consistent with Works Approval Holder commitments.
Conditions 11 – 14	Conditions added requiring noise monitoring to verify the noise model. Updated modelling is required which assesses against the Noise Regulations and, where it cannot be demonstrated that the assigned levels are achieved, a plan detailing measures to be implemented to bring the premises into compliance must be submitted. The investigation is to occur during commissioning of Stage 1 works and the associated report(s) to be submitted with the Environmental Commissioning Report following completion of Stage 1 commissioning. It is expected that updated modelling will demonstrate that Stage 2 works (inlet compressor) will achieve the assigned noise levels.
Condition 16	Condition updated to ensure that an Environmental Commissioning Plan is submitted

(previously 10)	following each stage of works containing relevant verification data for that particular stage.
Condition 18 (previously 14)	Modified to enable staged approach for time limited operations linked to the stages identified through Condition 1.
Condition 20 (previously 16), Table 4	Table updated to align with revised design as specified in the updated air quality management plan and confirmed by the Works Approval Holder.
Premises Map (Figure 1)	Replaced to reflect changes to boundary and alignment with MS 1164 development envelope.
Map of emission points	Replaced to reflect changes in inlet compression design
Schedule 2	Coordinates updated to align with revised boundary. Map showing "Exclusion Areas" included for clarity.
General	Updates to headings and condition numbering to facilitate changes to conditions described above.

References

1. Abbott Risk Consulting Limited (ARC) 2024, *Waitsia Gas Project – Stage 2B, Noise Study Report* [Document: WAT-HSE-REP-00030, Rev 0].
2. Department of Climate Change, Energy, the Environment and Water (DCCEEW) 2023, *National Light Pollution Guidelines for Wildlife*, Canberra.
3. Department of Environment (DoE) 2006, *Air Quality Modelling Guidance Notes*, Perth Western Australia.
4. Department of Environment Regulation (DER) 2016, *Guidance Statement: Environmental Siting*, Perth, Western Australia.
5. DER 2017, *Guidance Statement: Risk Assessments*, Perth, Western Australia.
6. DER 2015, *Guidance Statement: Setting Conditions*, Perth, Western Australia.
7. MRP Technical Consulting Pty Ltd (MRP) 2025, *Waitsia Gas Project Air Quality Assessment* (Document Number: WGP-HSE-REP-00073)

Appendix 1: Summary of Works Approval Holder's comments on risk assessment and draft conditions

Condition	Summary of Works Approval Holder's comment	Department's response
Condition 1 (Table 1)	An error was noted with the specified stack height of the inlet compressor. It should be 13m above ground level (not 24.5m).	Noted and updated.
	In relation to the inlet compressor, the Works Approval Holder confirmed that the gas turbine side would be housed in an acoustic enclosure, however not the compressors side. It was noted that centrifugal compressors have lower noise levels than reciprocating compressors, and they are commonly installed without an enclosure. The Works Approval Holder stated that noise will meet the required 85dB within 1m with this arrangement, as confirmed by the supplied and requested that the condition be amended as follows: <i>The inlet compression package must be housed in an acoustic enclosure designed to achieve 85dB within 1m of equipment.</i>	The delegated officer notes that the recommended changes to not change the outcome of condition (i.e. that equipment achieves a specified noise emissions at 1m) and has amended the condition as requested.
Condition 20 (Table 4)	The Works Approval Holder requested minor updates to the minimum stack height and maximum stack diameter to align with as constructed equipment and air quality modelling and allow minor flexibility with installed equipment.	The delegated officer does not consider the proposed change to be significant and determined that they will not significantly alter the risk profile of the premises. Edits have been made accordingly.
Condition 11	The Works Approval Holder requested that the requirement for noise validation be conducted during time limited operations rather than commissioning. The current Environmental Commissioning Plan indicates that time limited operation of the premises will commence at the commencement of commercial gas flows, however, due to delays in commissioning, commissioning of three of the four export compressor turbines will not be completed by this time. Adjusting the timing of noise validation will ensure it is completed at a stage when all compressors are operational and therefore provide more accurate representation of noise emissions.	The delegated officer notes that the intent of the specified timeframe is to ensure that noise validation results are available to support an application for a licence under Part V of the EP Act. To address the matter, the Works Approval Holder has submitted an updated Environmental Commissioning Plan (submitted 22 October 2025) that redefines the schedule of commissioning to factor in the minor delays in commissioning. This ensures that the results of the noise validation work will capture representative noise during commissioning while still being available to support the assessment of the licence application.