Decision Report

Application for Works Approval

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

Works Approval Number	W6516/2021/1
Applicant	Pilbara Energy (Generation) Pty Ltd
ACN	631 303 305
File Number	DER2020/000219
Premises	PEG Power Station Legal description Part of Lease L47/901 as granted under the *Mining Act 1978* Shire of Ashburton
Date of Report	26 March 2021
Decision	Works approval granted

Caron Goodbourn

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Date: 2021.03.25 15:56:13 +08'00'

Caron Goodbourn
Manager Process Industries

INDUSTRY REGULATION

An officer delegated by the CEO under section 20 of the EP Act

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1. Definitions of terms and acronyms

In this Decision Report, the terms in Table 1 have the meanings defined.

Table 1: Definitions

Term	Definition
ACN	Australian Company Number
AS 1940	means Australian Standard *AS 1940: The storage and handling of flammable and combustible liquids*
AS 4323	means Australian Standard *AS 4323: Stationary source emissions - selection of sampling positions*
Category/ Categories/ Cat.	Categories of Prescribed Premises as set out in Schedule 1 of the EP Regulations
Decision Report	refers to this document.
Delegated Officer	an officer under section 20 of the EP Act.
Department	means the department established under section 35 of the *Public Sector Management Act 1994* and designated as responsible for the administration of Part V, Division 3 of the EP Act.
EPA	Environmental Protection Authority
EP Act	*Environmental Protection Act 1986* (WA)
EP Regulations	*Environmental Protection Regulations 1987* (WA)
EPBC Act	*Environment Protection and Biodiversity Conservation Act 1999* (Cth)
mbgl	metres below ground level
Minister	the Minister responsible for the EP Act and associated regulations
MS	Ministerial Statement
MWe	Megawatts of generated electrical power
NEPM	National Environmental Protection Measure
PM	Particulate Matter
PM_{10}	used to describe particulate matter that is smaller than 10 microns (µm) in diameter
Premises	refers to the premises to which this Decision Report applies, as specified at the front of this Decision Report
Risk Event	As described in *Guidance Statement: Risk Assessment*

2. Purpose and scope of assessment

Pilbara Energy (Generation) Pty Ltd (the Applicant) is a wholly owned subsidiary of Fortescue Metals Group (FMG). The Applicant submitted a works approval application on 15 January 2021 to construct a new power station located within existing Mining Tenement L47/901 (the Premises**Error! Reference source not found.**). The Premises will have a maximum production capacity of 165 MWe, with typical production and supply being 150 MWe, as one of the engines will be on standby.

Table 2 lists the prescribed premises category that has been applied for in accordance with Schedule 1 of the *Environmental Protection Regulations 1987* (EP Regulations).

Table 2: Prescribed Premises Categories

Classification of Premises	Description	Assessed Premises production capacity
Category 52	Electric power generation	165 MWe

In completing the assessment documented in this Decision Report, the Delegated Officer has considered and given due regard to Department of Water and Environmental Regulation's (department) Regulatory Framework and relevant policy documents which are available at https://www.dwer.wa.gov.au.

Table 3 lists the documents submitted during the assessment process.

Table 3: Documents and information submitted during the assessment process

Document/information description	Date received
Application for a works approval (HPRM record numbers DWERDT402628 and DWERDT402629)	15 January 2021
Email from FMG regarding clarification of Premises boundary (HPRM record number A1986904)	3 March 2021
Email dated 9 March 2021 from FMG, with attached letter dated 8 March 2021, signed by Rob Watson, Director Health & Safety regarding management of OSH matters within Solomon Mine, Solomon Power Station and the Premises (HPRM record number A1986900)	9 March 2021

The department's *Guidance Statement: Risk Assessments* (DER 2017) states (under point 11) that the Delegated Officer excludes as 'potential receptors' the employees, visitors or contractors of the Works Approval Holder.

Fortescue Metals Group Limited (FMG) is the mother company of the Applicant and the licence holders of Solomon Mine and Solomon Power Station. FMG acknowledged, in writing dated 8 March 2021, that they are responsible for the management of OSH-related impacts from the Premises' air emissions on workers at the adjacent Solomon Power Station and within the broader Solomon Mine site. The Delegated Officer has therefore decided to extent the exclusion (as mentioned in *Guidance Statement: Risk Assessments*) of receptors to employees, visitors or contractors of FMG within the boundary of the premises as per the licences L8464/2010/2 and L8858/2014/1.

As such the risk assessment only assesses the potential negative environmental impact on receptors outside the combined premises of licences L8464/2010/2, L8858/2014/1 and this Premises.

3. Overview of the Premises

3.1 Proposed Premises boundary

The proposed PEG power station is to be located within Mining Tenement L47/901, adjacent to the existing Solomon Power Station (L8858/2014/1)**Error! Reference source not found.**. The PEG power station will be accessed via existing access roads that are part of Solomon Mine. The Premises are currently located within the boundary of the Solomon Mine, which is operated by FMG Solomon Pty Ltd and holds licence L8464/2010/2. Mining tenement M47/1431 is included wholly as part of the Solomon Mine premises. Mining Tenement L47/901 lies wholly within Mining Tenement L47/901. As such, the mining tenements overlap each other. This is due to the different kinds of mining tenements. The tenement for the Solomon Mine is a mining lease, whereas the power stations' mining tenement is a miscellaneous licence, as per section 42B of the *Mining Regulations 1981*. Although the Applicant is a different legal entity than the occupier of the Solomon Mine, the fact that the miscellaneous licence was granted after the mining lease, infers that the Applicant is in control of the land on which the Premises is to be located.

The boundary of the Premises is show in Figure 1 of Schedule 1 of the Works Approval.

It is noted by the Delegated Officer that the premises boundaries for licences L8464/2010/2 and L8858/2014/1 may need to be amended to ensure there is no overlap occurring with this Premises or between those other premises. As these are amendments of an administrative nature and all occupiers are part of FMG, the Delegated Officer has decided that this works approval can be granted prior to these amendments being issued.

3.2 Operational aspects

The Applicant proposes to install and operate 14 gas-fired reciprocating engines (Bergen B35:45VA gas generator sets) with a combined maximum production capacity of 165 MWe. The annual average throughput of the Premises is expected to be approximately 150 MWe, as one engine is for standby. The air emissions modelling, that the Applicant has provided to support the proposed amendment (SLR 2020), has considered a worst-case scenario where the Premises is operated at the maximum production capacity of 165 MWe.

The Applicant expects the construction of the power station to take approximately 12 months. Following completion of the construction, technical commissioning will occur. The Applicant has indicated that during commissioning, emissions will be similar to normal operation (except for short periods of time when tuning of the engines is required), so there is no need for environmental commissioning conditions to be included in the works approval. Upon technical completion of the works (after Phase 5 of the Commissioning Plan), the Applicant can submit a completion certificate, start time limited operation for the infrastructure and apply for a licence for the Premises.

3.3 Infrastructure

The power station's infrastructure, as it relates to Category 52 activities, is detailed in Table 4 with reference to the site plan shown in Figure 2 of Schedule 1 of the Works Approval.

Table 4: PEG Power Station's Category 52 infrastructure

	Infrastructure	Construction and installation specifications	Site Plan Reference
1	14 x gas fired reciprocating engines (*Bergen B35:45VA gas*	Maximum electricity production capacity of 165 MWe Waste gases from each engine to be emitted to	In engine hall A1 to A14 on Figure 2 in Schedule 1 of

	Infrastructure	Construction and installation specifications	Site Plan Reference
	generator sets)	the atmosphere via an exhaust stack which is to be at least 26 m above finished floor level Each stack to be fitted with emission sampling ports in accordance with AS 4323.1	the Works Approval
2	Emergency diesel generator set	Maximum design capacity of 2,500 KVA Associated diesel storage tanks to have a 1,000L capacity and be self bunded in accordance with AS 1940	
3	Engine oil storage tank	Engine oil storage tank to be self bunded in accordance with AS 1940	
4	Waste oil storage tank	Waste oil storage tank to be self bunded in accordance with AS 1940	
5	Oily Water Separator (OWS)	All sumps that collect oily water from the engine hall to drain to the OWS. No wastewater, treated or untreated, from the engine hall is to be discharged into the environment.	
6	Oily water separator, oil collection tank	Oil collection tank to have a capacity of 780L and be self bunded in accordance with AS 1940.	
7	Oily water separator grey water tank	Grey water tank to be self bunded in accordance with AS 1940.	
8	2 x Engine Hall oily water collection sumps	Sumps to be impermeable, with a capacity of 140L and all waste water to drain to the OWS pump pit.	
9	Engine Hall oily water pump pit	Pump pit to be impermeable and all wastewater to drain to the OWS.	
10	Wastewater treatment infrastructure	Two separate systems for the treatment of wastewater, one system for wastewater from the engine hall and another for potentially contaminated wastewater from other areas. Both systems treat the water for reuse and leftover wastewater (hydrocarbons and detergents) is stored in either an IBC or within the treatment system itself prior to removal off site.	No discharge to the environment.
11	2 x tanker load/unload pad oily water collection sumps	Sumps to be impermeable and all wastewater to drain to the COWS.	

4. Legislative context

Table 5 summarises some approvals relevant to the assessment.

Table 5: Relevant approvals and tenure

Legislation	Number	Subsidiary
Mining Act 1978	Tenement number L47/901	Pilbara Energy (Generation) Pty Ltd

4.1 Part IV of the EP Act

4.1.1 Level of assessment

On the 19 June 2020, the Environmental Protection Authority (EPA) determined that the PEG Power Station warranted formal assessment in accordance with Section 38 of the EP Act. The EPA issued its assessment report and recommendations to the Environment Minister (WA) (Report 1686) on 14 August 2020. EPA has concluded that the proposal may be implemented, provided the implementation of the proposal is carried out in accordance with its recommended conditions and procedures, which include a Greenhouse Gas Management condition to minimise greenhouse gas emissions.

Ministerial Statement 1161 (MS 1161) was granted 1 February 2021. MS 1161 approved the implementation of the proposal subject to the conditions. MS 1161 regulates the greenhouse gas emissions including limiting the greenhouse gas emissions coming from the premises, stipulating greenhouse gas emissions reporting requirements and the development of a greenhouse gas management plan.

4.2 Part V of the EP Act

4.2.1 Applicable regulations, standards and guidelines

The overarching legislative framework of this assessment is the EP Act, EP Regulations and other subsidiary regulations (e.g. *Environmental Protection (Unauthorised Discharges) Regulations 2004* and *Environmental Protection (Controlled Waste) Regulations 2004*).

The guidance statements which inform this assessment are:

- *Guidance Statement: Regulatory Principles (July 2015)*
- *Guidance Statement: Setting Conditions (October 2015)*
- *Guidance Statement: Decision Making (February 2017)*
- *Guidance Statement: Risk Assessments (February 2017)*

5. Air emissions modelling

The Applicant undertook predictive air emissions modelling to determine the impacts to quality during the operation of the Premises (SLR 2020). Due to the close proximity of Station (SPS), another source of combustion emissions, emissions from the SPS were the predictive emissions modelling submitted (as a cumulative scenario). Worst case results modelling (any of the 7 modelled scenarios) are shown in

Table 6 for the nearest sensitive receptor (Karijini National Park, 8.3 km south of the Premises).

Table 6: Air emissions modelling results

Pollutant and average time period	Ambient Guideline Value (AGV) in µg/m^3	Highest modelled ground level concentration (GLC) in µg/m^3	Highest modelled GLC as % of AGV
1-hour NO_2	226	168	74.34%
Annual NO_2	56	4.1	7.32%
1-hour SO_2	524	13.5	2.58%
24-hour SO_2	210	2.5	1.19%
Annual SO_2	52	<0.1	<0.19%
24-hour PM_{10}	46	1.9	4.13%
Annual PM_{10}	23	<0.1	<0.43%
24-hour $PM_{2.5}$	23	1.9	8.26%
Annual $PM_{2.5}$	7	<0.1	<1.43%
1-hour CO	30,000	81.1	0.27%
8-hour CO	10,000	29.9	0.30%
1-hour formaldehyde	20	3.7	18.50%
1-hour benzene	29	0.7	2.41%
Annual benzene	9.6	<0.1	<1.04%
24-hour toluene	3,770	0.1	0.00%
Annual toluene	377	<0.1	<0.03%
1-hour ethylbenzene	8,000	0.2	0.00%
Annual ethylbenzene	270	<0.1	<0.04%
24-hour xylene	1,080	<0.1	<0.01%
Annual xylene	870	<0.1	<0.01%

The Delegated Officer notes that the modelled results at the nearest sensitive receptor are below the AGVs for all the modelled pollutants. As NO_2 is the pollutant with the highest modelled impact and is above 50% of the AGV, the Delegated Officer has decided that only NO_x emissions will be risk assessed. The other pollutants are predicted to be not causing a possible negative impact at the sensitive receptors and thus not further considered in this report.

6. Risk assessment

The Delegated Officer 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.

6.1 Source-pathways and receptors

6.1.1 Emissions and controls

The key emissions and associated actual or likely pathways during premises construction, commissioning and operation which have been considered in this Decision Report are detailed in

Table 7.
Table 7 also details the proposed control measures the Applicant has proposed to assist in controlling these emissions, where necessary.

Table 7: Emission, sources, pathways and proposed Applicant controls

Emission	Sources	Potential pathways	Proposed controls
Construction			
Dust	Earthworks and placement of generators and associated infrastructure	Air/windborne pathway	Siting of the power station more than 8 km from the nearest receptor. FMG's existing ambient PM_{10} monitoring program and meteorological monitoring station will continue to provide ongoing information on key parameters relevant to the local air environment.
Noise			
Operation (including time limited operation)			
Emissions to air	Operation of gas generators	Air/windborne pathway	Selection of modern contemporary generators with high efficiency and low emissions/noise profile. Siting of the power station more than 8 km from the nearest receptor. During the time limited operation period the Applicant stated they will conduct stack testing to confirm the predicted emissions from each air emission point. The annual stack testing program currently implemented for the Solomon Power Station will be expanded to include emissions testing of representative PEG Power Station units. FMG's existing meteorological monitoring station will continue to provide ongoing information on key parameters relevant to the local air environment.
Noise			

Emission	Sources	Potential pathways	Proposed controls
Emissions to land (Breach of bulk storage of hydrocarbons or other chemicals)	Stored hydrocarbons (oil and diesel) and other chemicals	Direct discharge into soil	Spills are captured in oily water collection sumps and treatment units. Emergency diesel generators will be self bunded. Waste oil storage tanks will be self bunded. Automatic engine oil replenishing system will be self bunded. Transformers will be self bunded. Implementation of the Fortescue: *Chemical and Hydrocarbon Management Plan (100-PL-EN-0011)*, *Standard Engineering Specification Diesel Storage and Handling (100-SP-ME-0044)*, *Surface Water Management Plan (100-PL-EN-1015)*, *Standard Engineering Specification for Drainage and Flood Protection (100-SP-CI-0004)*.

6.1.2 Receptors

In line with the scope as stated in this Decision Report, the Delegated Officer has excluded employees, visitors and contractors of FMG (within area covered by licences L8464/2010/2, L8858/2014/1 and this Premises) from its assessment. Protection of these parties often involves different exposure risks and prevention strategies, and is provided for under other state legislation.

Table 8 provides a summary of potential human and environmental receptors that may be impacted because of activities upon or emissions and discharges from the Premises *(Guidance Statement: Environmental Siting* (DER 2016)).

Table 8: Receptors and distance from Premises

Sensitive land uses	Distance from Premises
Human receptors	
Hamersley Station	32 km south-west
Mt Florance Pastoral Station	41 km north-west
Hamersley Gorge[1]	12 km south-east
Environmental receptors	
Karijini National Park[1]	8 km south
Conservation Significant Fauna Species	2 km south-west
Priority 1 Ecological Community: Brockman Iron cracking clay communities of the Hamersley Range	12 km south-west

Note 1: Includes tourists within the Karijini National Park

The distances to groundwater and water sources are shown in Table 9. It is also noted that the Premises are within the *Rights in Water and Irrigation Act 1914* (RIWI Act) proclaimed Pilbara surface water and groundwater areas.

Table 9: Groundwater and water sources

Groundwater and water sources	Distance from Premises	Environmental value
Public drinking water source areas: Millstream Water Reserve	14 km west	Priority 2 Drinking Water Source area.
Surface Waterbodies: Fortescue River South Mungthannannie Pool and Fortescue Marsh	9 km south-east 19 km north-east	Drainage is mostly via major river catchments of the De Grey, Turner and Yule rivers in the north. These rivers drain towards the ocean.
Groundwater	Groundwater flows south to north, with the water table an average of more than 50 m below the surface. Groundwater quality is fresh to marginal, with total dissolved solids ranging from 200 mg/L to 1,000 mg/L. No bores located within 1km of Premises (based on available GIS dataset –WIN Groundwater Sites).	Groundwater flows south to north, potentially impacting groundwater quality for sensitive receptors north of the Power Station.

6.2 Risk ratings

Risk ratings have been assessed in accordance with the *Guidance Statement: Risk Assessments* (DER 2017) for each identified emission source and considers potential source-pathway and receptor linkages as identified in Section 6.1. Where linkages are incomplete they have not been considered further in the risk assessment.

Where the Applicant has proposed mitigation measures/controls (as detailed in Section 6.1), 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 10.

Works Approval W6516/2021/1 that accompanies this Decision Report authorises construction and time-limited operations (includes the period what Applicant calls commissioning). The conditions in the issued works approval, as outlined in Table 10 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 i.e. electrical power generation activities. A risk assessment for the operational phase has been included in this Decision Report, however licence conditions will not be finalised until the department assesses the licence application.

Table 10: Risk assessment of potential emissions and discharges from the Premises during construction and operation

Risk Event					Risk rating[1] C = consequence L = likelihood	Applicant controls sufficient?	Conditions of works approval	Justification for additional regulatory controls
Source/Activities	**Potential emission**	**Potential pathways and impact**	**Receptors**	**Applicant controls**				
Construction								
Construction works of the Premises	Dust Noise	Air/windborne pathway causing negative impacts to health and amenity	Receptors too far to be reasonably impacted	-	-	-	-	-
Operation (including time limited operations)								
Operation of gas engines	Emissions to air (NOx)	Air/windborne pathway causing negative impacts to health and amenity	Karijini National Park (Hamersley Gorge 12km south east	Refer to Section 6.1.1	C = Minor L = Unlikely **Medium Risk**	Y	**1, 6, 7, 8, 9, 11, 12 and 13**	Refer to section 6.3.
Storage of hydrocarbons (oil and diesel) and other chemicals	Wastes to land or water (Breach of storage of hydrocarbons)	Direct discharge to ground causing contaminated soil and impacting groundwater quality	Priority 2 Drinking Water Source area14km to the west Soil directly underneath Groundwater (10-30mbgl)	Refer to Section 6.1.1	C = Minor L = Possible **Medium Risk**	Y	**1**	-

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

6.3 Detailed risk assessment for emissions to air

6.3.1 Definition of Risk Event 1

Risk Event 1 is defined as followed: “the cumulative NOx emissions from the Premises and the Solomon Power Station, can be transported through air to sensitive receptors in the Karijini National Park, causing adverse effects to health and amenity”.

6.3.2 Consequence of Risk Event 1

The Delegated Officer has considered the consequence of Risk Event 1 for NOx to be ***Minor***.

This is based upon the modelling result showing that the predicted maximum GLC for expected to meet the Specific Consequence Criteria (74.34% of the AGV for NOx, see

Table 6) at the nearest sensitive receptor.

6.3.3 Likelihood of Risk Event 1

The Delegated Officer has determined that the likelihood of an adverse effect of NOx emissions from the Premises on human receptors at Karijini National Park is **Unlikely**.

Reason for this view is that the modelling of air emissions for NOx predicted results below the relevant AGVs and that the modelling was done conservatively and therefore Risk Event 1 will probably not occur in most circumstances.

6.3.4 Overall risk rating

The overall risk rating of cumulative emissions to air from the operation of PEG Power Station is **Medium** and acceptable subject to regulatory controls. As a result, corresponding conditions relating to discharge points, limits, monitoring and reporting, have been included in works approval W6516/2021/1, see Table 10 for the relevant condition numbers.

7. Consultation

Table 11 provides a summary of the consultation undertaken by the department.

Table 11: Consultation

Consultation method	Comments received	Delegated Officer's response
Application advertised on the department's website (25 February 2021)	Comments received on 19 March 2021 from the Environmental Defenders Office on behalf of Conservation Council of WA Inc. A summary of the comments can be found below. - The Works Approval should be granted to the correct occupier. - The Works Approval should regulate greenhouse gas emissions. - The Works Approval should not be issued but should await the outcome of a review of the Part IV approvals of FMG's operations in the Pilbara. Or if a Works Approval is granted then a licence should not be granted prior to result of this review.	The Delegated Officer has considered the occupier of the Premises and is satisfied that the Applicant is the correct occupier for this Premises. Potential environmental impacts associated with greenhouse gas emissions have been assessed under Part IV of the EP Act (Assessment number 2250, Report the EPA 1686) and are subject to the requirements of condition 6-1 to 6-8 of Ministerial Statement (MS) 1161. The Delegated Officer has therefore determined not to duplicate this assessment and regulatory controls in accordance with the *Guidance Statement: Setting Conditions.* The Delegated Officer has considered that EPA may conduct a review of FMG's operations in the Pilbara. Such a review has no legal bases that prevents the Delegated Officer from making a decision on this application. As such the Delegated Officer has to make a decision on the Works Approval application. If in the future the review results in amendments to Ministerial Statements that may impact the Works Approval or a future Licence for this Premises then the Delegated Officer will at that time take appropriate action.
Local Government Authority – Shire of Ashburton, advised of proposal (26 February 2021)	None received	N/A
Applicant was provided with draft documents on 22 March 2021.	Applicant provided a response on the draft documents on 23 March 2021 with the summarised comments below and waived the remainder of the comment period.	
	Updated descriptions of infrastructure in Table 4 of Decision Report and Table 1 of Works Approval	Updated the descriptions.
	Requested removal of emergency diesel generator sets from the list of authorised discharge points of Condition 6, Table 2.	The list of authorised discharge points gives a defence for the Applicant to have emissions from these points. There are no limits or stack testing requirements proposed for these emergency diesel generator sets. As such the Delegated Officer decided to leave them in this table.

Consultation method	Comments received	Delegated Officer's response
	Requested amendments to the stack testing: - Removal of SO_2 stack testing as this is being measured at the point of supply - Change of stack testing method for PM to ISO 9096 - Removal of speciated VOCs as these are not typical for gas engine combustion - Change oxygen reference from 15% to 5%	The Delegated Officer believes it is necessary to model for all pollutants that were mentioned in the air emissions modelling to verify that the real emissions are below the modelled emission rates. As such a one-off emission test during time-limited operation for all pollutants would be required. Potential stack testing under the licence has not been finalised but is expected to be focused on NOx and CO only. Stack testing method ISO 9096 seems to be suitable for PM emissions between 20 mg/m^3 and 1,000 mg/m^3. As worst case emissions were predicted to be around 11 mg/m^3 the Delegated Officer does not feel confident that this is the correct method to be used and therefore USEPA Method 5 or 17 will be prescribed. As the European Union's Industrial Emissions Directive and the NSW's Protection of the Environment Operations (Clean Air) Regulations 2010 both use 15% O2 as a reference for gas engines, the Delegated Officer has decided to keep this for now. If the Applicant want to change the stack sampling conditions prior to time limited operation than the Applicant can apply for an amendment (with sufficient information and justification for the changes).
	Removal of wastewater discharge, as all treated wastewater is either recycled or taken off site.	The Delegated Officer has decided to remove all wastewater discharge conditions in the works approval and thus no authorisation for any discharge of oily water to land is given through this works approval.

8. Decision

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.

The works approval will include time limited operations but not an environmental commissioning period as the Applicant did not request higher than normal emissions or discharges than during operation of the Premises. Therefore, this is not deemed environmental commissioning but part of time limited operation.

Time limited operations will start upon technical completion of the works. The Delegated Officer has decided to include an emission limit for NOx only (as other pollutants were modelled to have a low impact) and has set this at the modelled emission rate of 3.8 g/s during stack testing.

To confirm that the engines will have emission rates of all the modelled pollutants below the figures stated in the modelling report, which formed the bases of the risk assessment, the Delegated Officer believes it necessary to conduct a one off stack test on all engines for all the

modelled pollutants (where PM includes PM_{10} and $PM_{2.5}$). This stack test is to occur during time limited operation, after the initial tuning and technical commissioning of the engines. The stack testing results are to be submitted with the application for a licence.

References

1. Works Approval Application – Pilbara Energy (Generation) Pty Ltd – Solomon Iron Ore Mine – Application and supporting documentation DWERDT402628, January 2021
2. Works Approval Application – Pilbara Energy (Generation) Pty Ltd – Solomon Iron Ore Mine – Attachment 3B Appendix 2 DWERDT402629, January 2021
3. Department of Environment Regulation (DER) 2016, *Guidance Statement: Environmental Siting*, Perth, Western Australia.
4. DER 2017, *Guidance Statement: Risk Assessments*, Perth, Western Australia.
5. DER 2015, *Guidance Statement: Setting Conditions*, Perth, Western Australia.
6. WQPN 68, DoW 2013, *Water quality protection note 68, Mechanical equipment wash down*, Perth, Western Australia.
7. NEPC 2016, National Environment Protection Council, *National Environment Protection (Ambient Air Quality) Measure*, February 2016.
8. NEPC 2019, National Environment Protection Council, *Draft Variation to the National Environment Protection (Ambient Air Quality) Measure for sulfur dioxide, nitrogen dioxide and ozone*, May 2019.
9. SLR 2020, Fortescue Metals Group, PEG Power Project, Air Quality Impact Assessment, SLR Ref No: 675.11539-R03-v1.0.docx, December 2020.
10. SLR 2012, Fortescue Metals Group Ltd, Solomon Project Power Station, Air Quality Assessment, Report Number 675.10244 Revision 2, August 2012.

Appendix 1: Application validation summary

SECTION 1: APPLICATION SUMMARY					
Application type					
Works approval	☒				
Licence	☐	Relevant works approval number:		None	☐
		Has the works approval been complied with?		Yes ☐ No ☐	
		Has time limited operations under the works approval demonstrated acceptable operations?		Yes ☐ No ☐ N/A ☐	
		Environmental Compliance Report submitted?		Yes ☐ No ☐	
		Date Report received:			
Renewal	☐	Current licence number:			
Amendment to works approval	☐	Current works approval number:			
Amendment to licence	☐	Current licence number:			
		Relevant works approval number:		N/A	☐
Registration	☐	Current works approval number:		None	☐
Date application received		19 May 2020			
Applicant and Premises details					
Applicant name/s (full legal name/s)		Pilbara Energy (Generation) Pty Ltd			
Premises name		PEG Power Station			
Premises location		Lease L47/901 as granted under the Mining Act 1978.			
Local Government Authority		Shire of Ashburton			
Application documents					
HPCM file reference number:		DER2018/001042-3~33			
Key application documents (additional to application form):		Supporting Doc Flue Gas Data Sheet Air Quality Impact Assessment Power Station Commissioning Plan Peg Power Station Sensitive Receptors Peg Power Station Location			

	Area Layout Peg Power Station Vegetation Mapping And Significant Flora Peg Power Station Fauna Habitat And Significant Fauna
Scope of application/assessment	
Summary of proposed activities or changes to existing operations.	Construction, commissioning and time limited operation of a 165 MW gas fired power station comprising 14 high efficient gas reciprocating engines.

Category number/s (activities that cause the premises to become prescribed premises)

Table 1: Prescribed premises categories

Prescribed premises category and description	**Proposed production or design capacity**
Category *52*: E*lectric power generation*	165 MW 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 ☐	Referral decision No: 2250 Managed under Part V ☒ Assessed under Part IV ☒ Greenhouse Gas emissions only
Does the applicant hold any existing Part IV Ministerial Statements relevant to the application?	Yes ☐ No ☒	Ministerial statement No: EPA Report No:
Has the proposal been referred and/or assessed under the EPBC Act?	Yes ☐ No ☒	Reference No:
Has the applicant demonstrated occupancy (proof of occupier status)?	Yes ☒ No ☐	Certificate of title ☐ General lease ☐ Expiry: Mining lease / tenement ☒ Expiry: L47/901 expires 25/06/2040 Other evidence ☐ Expiry:
Has the applicant obtained all relevant planning approvals?	Yes ☐ No ☐ N/A ☒	Approval: Expiry date: If N/A explain why? Planning approval not required for active mine site

Has the applicant applied for, or have an existing EP Act clearing permit in relation to this proposal?	Yes ☐ No ☒	CPS No: N/A No clearing is proposed.
Has the applicant applied for, or have an existing CAWS Act clearing licence in relation to this proposal?	Yes ☐ No ☒	Application reference No: N/A Licence/permit No: N/A No clearing is proposed.
Has the applicant applied for, or have an existing RIWI Act licence or permit in relation to this proposal?	Yes ☐ No ☒	Application reference No: Licence/permit No: Licence / permit not required.
Does the proposal involve a discharge of waste into a designated area (as defined in section 57 of the EP Act)?	Yes ☐ No ☒	Name: N/A Type: Has Regulatory Services (Water) been consulted? Yes ☐ No ☐ N/A ☒ Regional office: N/A Waste oil will be removed from site by a licensed controlled waste contractor.
Is the Premises situated in a Public Drinking Water Source Area (PDWSA)?	Yes ☐ No ☒	Name: N/A Priority: N/A Are the proposed activities/ landuse compatible with the PDWSA (refer to WQPN 25)? Yes ☐ No ☐ N/A ☒
Is the Premises subject to any other Acts or subsidiary regulations (e.g. *Dangerous Goods Safety Act 2004, Environmental Protection (Controlled Waste) Regulations 2004, State Agreement Act xxxx*)	Yes ☐ No ☒	
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 *Contaminated Sites Act 2003*?	Yes ☐ No ☒	Classification: N/A Date of classification: N/A

Direct interest stakeholders

Shire of Ashburton	Letter to be sent Yes ☒ No ☐
Mt Florence Pastoral Station	Letter to be sent Yes ☒ No ☐
Yindjibarndi People	Letter to be sent Yes ☒ No ☐