

# **Amendment Report**

# **Application for Licence Amendment**

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

Licence Number L9153/2018/1

Licence Holder APA Power Holdings Pty Limited

**ACN** 149 762 121

**File Number** DER2018/000999-1

Premises Gruyere Power Station

Part Mining Lease M38/1267 COSMO NEWBERY WA 6440

As defined by the coordinates in Schedule 2, attached to the

issued licence

**Date of Report** 24/09/2021

**Decision** Revised licence granted

**Chris Malley Manager, Process Industries** 

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

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## 1. Decision summary

Licence L9153/2018/1 is held by APA Power Holdings Pty Limited (the Licence Holder) for the Gruyere Power Station (the Premises), located within mining tenement M38/1267. The Premises is situated within the Gruyere Gold Project, located approximately 150 kilometres northwest of the town of Laverton.

This Amendment Report documents the assessment of potential risks to the environment and public health from proposed changes to the emissions and discharges during the operation of the Premises. As a result of this assessment, Revised Licence L9153/2018/1 has been granted. The Revised Licence issued as a result of this amendment consolidates and supersedes the existing Licence previously granted in relation to the Premises.

# 2. Scope of assessment

### 2.1 Regulatory framework

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

### 2.2 Amendment summary

On 7 July 2021, the Licence Holder submitted an application to the department to amend Licence L9153/2018/1 under section 59 and 59B of the *Environmental Protection Act 1986* (EP Act). The amendments being sought comprise the inclusion of an additional 'Jenbacher J624' gas powered generator within the Premises, along with an associated bunded area which meets the requirements of Australian Standards AS 1940, AS 2067 and AS / NZS 3007.

The establishment of the above infrastructure at the Premises was assessed and authorised through Works Approval W6415/2020/1. The inclusion of the additional 'Jenbacher J624' generator at the Premises will increase the number of these generators to 12 in total. The proposed changes have not altered the spatial extent of the Premises, with the new genset situated within the Premises boundary detailed in L9153/2018/1. The installation of the generator and its associated bund was completed in June 2021.

The Licence Holder advises that only one of the two 'Jenbacher J624' generators approved for construction under Works Approval W6415/2020/1 was necessary to meet current power requirements at the Gruyere Gold Project. If necessary, the other can be installed at the Premises prior to the works approval expiry on 6 September 2023.

The application submitted by the Licence Holder included an Environmental Compliance Report (ECR), as required by conditions 2 and 3 of Works Approval W6415/2020/1. The ECR documented the compliance of the installed gas-powered generator and associated infrastructure with the requirements contained in condition 1 of Works Approval W6415/2020/1. The ECR was reviewed during the assessment documented in this Amendment Report. No deviations from the requirements of condition 1 of Works Approval W6415/2020/1 were identified during the review of the ECR.

#### 2.3 Part IV of the EP Act

Gold Road Resources Ltd referred a proposal to the Environmental Protection Authority (EPA) on 2 March 2016 to develop the Gruyere Gold Project (which included the Gruyere Power Station). On 15 June 2016, the EPA set the level of assessment at Assessment on Proponent Information – Category A. The Report and Recommendations of the EPA (Report Number 1587) were released to the Minister for Environment on 16 November 2016. Ministerial Statement

(MS) 1048 granting approval for the project to be implemented was signed by the Minister for Environment on 29 December 2016. Additional changes to MS 1048 have since been sought and approved under Section 45C of the EP Act to account for minor project changes.

No conditions within MS 1048 are directly related to the construction or operation of the Gruyere Power Station.

### 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 operation which have been considered in this Amendment Report are detailed in Table 1 below. Table 1 also details the control measures the Licence Holder has proposed to assist in controlling these emissions, where necessary.

**Table 1: Licence Holder controls** 

Emission	Sources	Potential pathways	Installed controls
Emissions of Oxides of Nitrogen (NOx), Oxides of Sulfur (SOx), Carbon Monoxide (CO), Particulate Matter (PM) and volatile organic compounds (VOCs).	Combustion of natural gas to power the gas-powered generator.	Air / windborne pathway	The additional gas-powered generator has been fitted with a stack with a height of 12.5 metres above ground level.
Noise	Operation of the gas- powered generator.		The additional gas-powered generator incorporates an exhaust muffler and other sound attenuating measures, consistent with the other generators installed at the Premises.
			The additional gas-powered generator will be operated and serviced in accordance with the manufacturer's specifications.
Spills of chemicals and hydrocarbons	Operation and maintenance of the gas-powered	Seepage into the underlying soil profile and	The gas-powered generator has been located in a bunded area which meets the requirements of AS 1940, AS 2067 and AS / NZS 3007.
	generator.	groundwater resources.	The Premises has an oil-water separator system to treat contaminated water discharged into sumps and drains. The additional generator's bund has been connected to this oil-water separator system.
			Contaminated water from the power station will pass through the oil-water separator system, where it will be treated to achieve a total recoverable hydrocarbon content of less than 5 mg/L. The treated water will then be pumped to the Gruyere Gold Mine oil-water separator located at the mine site bulk diesel storage facility for further treatment prior to re-use or lawful disposal.

#### 3.1.2 Receptors

In accordance with the *Guideline: Risk assessments* (DWER 2020), the Delegated Officer has excluded employees, visitors and contractors of the Licence Holder's from its assessment. Protection of these parties often involves different exposure risks and prevention strategies and is provided for under other state legislation.

Table 2 provides a summary of potential human and environmental receptors that may be impacted because of activities upon or emission and discharges from the prescribed premises (Guideline: Environmental siting (DWER 2020)).

Table 2: Sensitive receptors and their distance from the prescribed activity

Human receptors	Distance from the prescribed activity	
Cosmo Newbery Mission Aboriginal Community	Approximately 90 kilometres northwest of the Premises.	
White Cliffs Homestead	Approximately 116 kilometres southwest of the Premises.	
Environmental receptors	Distance from the prescribed activity	
Conservation reserves	Yeo Lake Nature Reserve is located approximately 17 kilometres east of the Premises.	
Surface water features	A minor 'non-perennial' watercourse is situated approximately 2.1 kilometres east northeast of the Premises.	
Groundwater resources	The Premises is situated within the Goldfields Groundwater Area, proclaimed under the <i>Rights in Water and Irrigation Act 1914</i> .	
	Local groundwater resources can be situated at a depth of up to 65 metres below ground level. Standing water levels measured in exploration boreholes ranged between 30 metres to 40 metres in depth. Recharge of local groundwater resources occurs via infiltration and through localised drainage systems during large rainfall events.	
	A review of available databases determined that groundwater in this area has a total dissolved solids content between 1,000 and 3,000 mg/L.	

# 3.2 Risk ratings

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

Where the Licence Holder has proposed mitigation measures/controls (as detailed in Section 3.1), these have been considered when determining the final risk rating. Where the Delegated Officer considers the Licence Holder's proposed controls to be critical to maintaining an acceptable level of risk, these will be incorporated into the licence as regulatory controls.

Additional regulatory controls may be imposed where the Licence Holder's controls are not deemed sufficient. Where this is the case the need for additional controls will be documented and justified in Table 3.

The Revised Licence L9153/2018/1 that accompanies this Amendment Report authorises emissions associated with the operation of the Premises. The conditions in the Revised Licence 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 operation

Risk Event					Risk rating <sup>1</sup>	Licence			
Source/Activities	Potential emission	Potential pathways and impact	Receptors	Licence Holder's controls	C = consequence L = likelihood	Holder's controls sufficient?	Conditions <sup>2</sup> of licence	Reasoning	
Operation	peration								
		n al	nd kilometres of the Premises		N/A – no pathway to sensitive receptors	Y		The Licence Holder operates an existing 12 generators with emissions to air. Up to two additional generators were previously assessed under works approval. This amendment is for the addition of one of those generators. The Delegated Officer considers that while there will be an increase to cumulative air emissions from the Premises, the increase will be marginal. The premises are remotely located to the extent that cumulative emissions to air are not expected to be detected at the nearest receptor (90km northwest).	
Operation of 12 gas powered generators to provide power to the Gruyere Gold							Conditions 1-2; and Conditions 6-9.  Conditions 1-5; and	The Delegated Officer does not expect any changes to the air emissions risk profile for the premises. The previously considered applicant controls are considered reasonable for managing the risk of air emissions. The licence will authorise air emissions from the new generator via the 12.5m stack. Delegated Officer considers the air emission controls in the existing licence sufficiently mitigate the risk associated with air emissions from the Premises. These controls have been maintained in the conditions of the amended licence.	
Project.	Noise	Noise						The premises is remotely located and the addition of one generator to the existing generators is not expected to cumulatively alter the noise risk profile for the premises.	
								The Licence Holder is required to comply with the requirements of the Environmental Protection (Noise) Regulations 1997.	
	Breaches of chemical and hydrocarbon containment infrastructure. Spills of chemicals and hydrocarbons within the Premises.	drocarbon containment rastructure. Spills of emicals and drocarbons within the Gold area the Irrig	Goldfields groundwater area, proclaimed under the Rights in Water and Irrigation Act 1914.		C = Moderate			Previously assessed for the works approval.  The Delegated Officer considers the controls in the existing licence	
				L = Unlikely  Medium Risk		Conditions 6-9.	sufficiently mitigate the risks associated with chemical and hydrocarbon storage and the management of chemical and hydrocarbon contaminated water at the Premises. These controls have been maintained in the conditions of the amended licence.		

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

Note 2: Proposed Licence Holder's controls are depicted by standard text. **Bold and underline text** depicts additional regulatory controls imposed by department.

### 4. Consultation

Table 4 provides a summary of the consultation undertaken by the department.

**Table 4: Consultation** 

Consultation method	Comments received	Department response	
Local Government Authority advised of proposal on 9 August 2021.	No feedback on the licence amendment application was received from the Local Government Authority.		
Licence Holder was provided with draft amendment.	Conditions 4 and 5 - The requirement to monitor the oil water separator output should be removed because the output is directed to wastewater treatment at Gruyere mine site and discharged in accordance with L9000/2016/1	The Delegated Officer agreed the monitoring is unnecessary as the discharge is regulated via another licence. The requirement was removed.  The Delegated Officer also determined that the TRH limit was redundant. The treated water is directed to the mine site where it is further treated prior to discharge subject to the conditions of that licence. There will also be no monitoring which is necessary to demonstrate compliance with a limit.	

#### 5. Decision

Based on the assessment in this Amendment Report, the Delegated Officer has determined that a Revised Licence will be granted, subject to conditions commensurate with the determined controls and necessary for administration and reporting requirements. The Delegated Officer determined to grant the amendment to include an additional generator at the Premises as it is not expected to change the risk profile of the Premises and existing conditions are considered sufficient to maintain an acceptable level of risk.

The Delegated Officer included air emissions from the gas and diesel powered generators in the amended licence as authorised emissions, to bring the licence into alignment with current licensing practices. The Delegated Officer also imposed an additional condition requiring records of oil water separator system monitoring results to be maintained, in accordance with current licensing practices.

In amending the licence, the Delegated Officer has also:

- updated the format and appearance of the licence;
- · revised condition numbers,
- removed any redundant conditions and realigned condition numbers for numerical consistency; and
- corrected clerical mistakes and unintentional errors.

# 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 Licence as part of the amendment process.

#### **Table 5: Summary of licence amendments**

Existing condition	Condition summary	Revised licence condition	Amendment summary
N/A	Cover Page		Updated in accordance with the current licence template.
Table 1	Definitions	Table 6	Moved to the back of the licence document in accordance with the current licence template. The definitions have also been updated in accordance with the current licence template.
Condition 1 and Table 2	Infrastructure and equipment operating requirements	Condition 1 and Table 1	Updated in accordance with the current wording for this condition. Table 1 updated to refer to 12 Jenbacher J624 generators and to assign physical locations to the infrastructure documented in Table 1. Table 1 has also been updated to incorporate the discharge requirements for the oily water separator system.
Condition 2 and Table 3	Specified emissions and general emissions	N/A	Redundant condition and table. Deleted from the licence.
Condition 3 and Table 4	Authorised discharge points	Condition 2 and Table 2	Tables updated to refer to the new Premises infrastructure layout map which has been
Condition 4 and Table 5	Discharge limits	Condition 3 and Table 3	incorporated into the licence.
Condition 5 and Table 6	Emissions monitoring	Condition 4 and Table 4	
N/A	Records of emission monitoring activity.	Condition 5	New condition added to require the Licence Holder to record the results of all monitoring activity required by Condition 4, in accordance with current licencing practices.
Condition 6	Maintenance of books and other records	Conditions 8 and 9	Revised and reordered in accordance with the current licence template.
Condition 7	Maintenance of complaint records	Condition 6	
Condition 8	Annual Audit Compliance Report	Condition 7	
Condition 9	Compliance with a Department Request	N/A	Redundant condition. Deleted from licence.
Schedule 1, Figure 1	Premises layout map	Prescribed Premises boundary map	Figure updated.
Schedule 1, Figure 2	Infrastructure layout map	)	Figure updated to depict new infrastructure at the premises.
Schedule 1, Figure 3	Premises boundary map	N/A	Redundant map. Deleted from the licence.
Schedule 1, Premises Boundary	Premises boundary table	Э	Updated to refer to prescribed premises boundary corners using compass directions. Now located in Schedule 2 of the licence document.
Schedule 2, Premises Activity	Prescribed Premises category table	N/A	Redundant table as the new licence template includes this information on the cover page. Deleted from 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) 2020, *Guideline: Environmental Siting*, Perth, Western Australia.
- 3. DWER 2020, Guideline: Risk Assessments, Perth, Western Australia.
- Martinick Bosch Sell Pty Ltd (MBS) Environmental 2021, Construction compliance report: Gruyere Power Station and Licence amendment application form (DWERDT475191), Perth, Western Australia.

# **Appendix 1: Application validation summary**

SECTION 1: APPLICATION SUMMARY						
Application type						
Works approval						
		Relevant works approval number:		None		
		Has the works approval been complied with?		Yes □	No □	
Licence		Has time limited operations under the works approval demonstrated acceptable operations?		Yes 🗆	No □ N/A	
		Environmental Com submitted?	pliance Report	Yes □	No □	
		Date Report receive	ed:			
Renewal		Current licence number:				
Amendment to works approval		Current works approval number:				
A		Current licence number:	L9153/2018/1			
Amendment to licence		Relevant works approval number:	W6415/2020/1	N/A		
Registration		Current works approval number:		None		
Date application received	ı	7 July 2021				
Applicant and Premises details						
Applicant name/s (full legal name/s)		APA Power Holding	s Pty Limited (ACN:14	9 762 12	21)	
Premises name		Gruyere Power Station				
Premises location		M38/1267				
Local Government Authority		Shire of Laverton				
Application documents						
HPCM file reference number:	DWERDT475191					
Key application documents (additional to application form):		2021 Gruyere Power Station Expansion Construction Compliance Report.				
Scope of application/assessment						
Summary of proposed activities or char to existing operations.	Operation of one additional Jenbacher J624 genset at the Gruyere Power Station. Licence L9153/2018/1 will be amended to incorporate this genset.					

## Category number/s (activities that cause the Premises to become a prescribed Premises)

Described Describes estates and estates and estates and estates Described De					
Prescribed Premises category and description	production or design capacity	Proposed changes to the production or design capacity (amendments only)			
Category 52: Electric power generation: Premises (other than Premises within category 53 or an emergency or standby power generating plant) on which electrical power is generated using a fuel.	<ul> <li>6. The installation of up to two additional Jenbacher J624 gensets at the Gruyere power station. This would increase the power station output up to 58.4 MW.</li> <li>7. (As assessed through Works Approval W6415/2020/1).</li> </ul>	The installation of one Jenbacher J624 at the Gruyere power station. The Works Approval holder determined that only gen set would be required at this time. This will increase the number of gensets at the Premises to 12 in total, up from 11.			
egislative context and other approv	rals				
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 ⊠	N/A			
Does the applicant hold any existing Part IV Ministerial Statements relevant to the application?	Yes ⊠ No □	Ministerial statement 1048 – granted on 29 December 2016 for the Gruyere Gold Project.			
Has the proposal been referred and/or assessed under the EPBC Act?	Yes □ No ⊠	N/A			
Has the applicant demonstrated occupancy (proof of occupier status)?	Yes □ No □	Letter from Gold Fields Pty Ltd acknowledges their ownership of M38/1267, but gives authorisation to APA to access part of L9000/2016/1 for the purpose of establishing the power station. It is unclear from this letter if M38/1267 and L9000/2016/1 are the same area since the licence also includes other tenure. However, the Works Approval was given on the premise the applicant had access to M38/1267.			
Has the applicant obtained all relevant planning approvals?	Yes □ No □ N/A ⊠	If N/A explain why: Approval for the construction of the power station obtained through a MP issued by DMIRS.			
Has the applicant applied for, or have an existing EP Act clearing permit in relation to this proposal?  Has the applicant applied for, or have an existing CAWS Act clearing	Yes □ No ⊠	N/A			

Has the applicant applied for, or have an existing RIWI Act licence or permit in relation to this proposal?						
Does the proposal involve a discharge of waste into a designated area (as defined in section 57 of the EP Act)?						
Is the Premises situated in a Public Drinking Water Source Area (PDWSA)?						
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)						
Is the Premises within an Environmental Protection Policy (EPP) Area?						
Is the Premises subject to any EPP requirements?						
Is the Premises a known or suspected contaminated site under the Contaminated Sites Act 2003?						
Direct interest stakeholders	Direct interest stakeholders					
Shire of Laverton		Letter to be sent	Yes ⊠	No □		

SECTION 2: RECEPTORS				
The nearest town of Laverton	Is approximately 162 km south west of the Premises.			
Human receptors	Distance from activity / prescribed Premises			
Cosmo Newbery Mission Aboriginal Community	Approximately 90 km north-west of the Premises.			
White Cliffs Homestead	Approximately 116 km southwest of the Premises.			
Environmental receptors	Distance from activity / prescribed Premises			
DBCA Managed Lands and Waters	Yeo Lake Nature Reserve boundary is located about 17 kilometres east of the Premises.			