Amendment Report

Application for Licence Amendment

Part V Division 3 of the Environmental Protection Act 1986

Licence Number L8777/2013/1

Licence Holder Buru Energy Limited

ACN 130 651 437

File Number DER2014/000609-2~1

Premises Ungani Production Facility

Petroleum Exploration Permit EP 391

GEEGULLY CREEK WA 6728

As defined by the coordinates in Schedule 1 of the revised

licence

Date of Report 19 December 2022

Proposed Decision Revised licence granted

1. Decision summary

This amendment is made pursuant to section 59 of the *Environmental Protection Act 1986* (EP Act) to amend the existing licence issued under the EP Act for a prescribed premises as set out below. This notice of amendment is hereby given under section 59B(9) of the EP Act.

2. Scope of assessment

2.1 Regulatory framework

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

2.2 Application summary and overview of premises

Licence L8777/2013/1 is held by Buru Energy Limited (the licence holder) for the Ungani Production Facility (the premises) to process crude oil abstracted from a series of oil production wells on site. The premises is located on Petroleum Production Licences L20 and L21, approximately 100 kilometres (km) east of Broome and 85km south-west of Derby on Yakka Munga Pastoral Station.

Processing of oil at the premises involves physical separation of oil, gas and water from oil production wells using a three-phase production separator. Following separation, the oil flows to stock tanks, while produced formation water (PFW) flows to a segregation tank for secondary separation and then into water storage tanks. From the water storage tanks, PFW is either re-injected back into the Ungani Dolomite formation via injection wells or is stored for evaporation in the Ungani 3 Turkeys Nest Dam.

On 10 September 2021, the licence holder submitted an application to the department to amend licence L8777/2013/1 under section 59B of the *Environmental Protection Act 1986* (EP Act) to specify which wells are configured for the reinjection of PFW via reinjection wells. At the time of application this included the Ungani West 1 and Ungani 3 wells but has since been expanded to also include the Ungani 4 well. The amendment is limited to:

- the inclusion of specified reinjection wells for the disposal of produced formation water (PFW) via injection wells as emission points; and
- administrative updates.

3. Legislative context

3.1 Department of Mines, Industry Regulation and Safety

In Western Australia, all onshore petroleum exploration and developments are subject to approval by the Department of Mines, Industry Regulation and Safety (DMIRS) under the following legislation:

- Petroleum and Geothermal Energy Resource Act 1967;
- Petroleum and Geothermal Energy Resources (Environment) Regulations 2012 (PGERE Regulations)
- Petroleum Pipelines Act 1969 (PP Act); and
- Petroleum Pipelines (Environment) Regulations 2012.

DMIRS 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.

The relevant Environment Plan approved by DMIRS under the PGER Act and regulations for the construction and operation of the specified reinjection wells (Ungani West 1, Ungani 3, and Ungani 4) and associated flowlines is *Ungani Production Facility Commissioning and Operations Environment Plan (HSE-PLN-037, Rev 18A).*

All Environment Plans are assessed by DMIRS against the requirements of the PGER Regulations and Pipeline Regulations as applicable prior to approval.

DMIRS advised that it considers the environmental risks of the proposal, i.e. the construction, commissioning and operation of the flowlines and injection wells, would be appropriately assessed and managed under DMIRS administered legislation and assessment processes.

4. Consultation

The licence holder was provided with the draft amendment report on 3 November 2022. Comments received from the licence holder on 25 November 2022 and 7 December 2022 have been considered by the delegated officer as detailed in Appendix 1.

5. Decision

The delegated officer has considered the legislative context in section 3.1 and determined that the environmental risks associated with the construction and operation of the proposed reinjection wells and PFW flowlines are adequately regulated through DMIRS administered legislation. As such, the delegated officer has determined to:

- remove the PFW flowlines from Condition 5, Table 3: Infrastructure and equipment controls table.
 - **Grounds**: The delegated officer considers that the operation of PFW flowlines is adequately regulated under the PP Act administered by DMIRS (refer to section 3.1) and as such considers it appropriate to remove conditions regulating flowlines from the licence to avoid regulatory duplication;
- add Condition 8 specifying the authorised discharge points for PFW reinjection. Grounds: The delegated officer considers that the reinjection of PFW is adequately regulated under the PGER Act administered by DMIRS (refer to section 3.1). However, in order to provide a defence under the EP Act for discharges to the environment via the reinjection wells, each well has been noted as an authorised emission point with no further regulatory controls applied.

The delegated officer has also updated the format and appearance of the licence which includes:

- removal of redundant conditions and inclusion of additional conditions considered necessary for the effective administration of the licence (i.e. record keeping and reporting requirements);
- revision of licence condition numbers and realign condition numbers for numerical consistency; and

 transfer all relevant existing regulatory controls and conditions to the replacement licence and update the format of these conditions where necessary to reflect the current licence format and the specific operations and infrastructure on the premises.

Obligations on the licence holder have not changed as a result of the updates and changes made to the format of the licence.

5.1 Summary of amendments

Table 1 below provides a summary of the proposed amendments and will act as a record of implemented changes. All proposed changes have been incorporated into the revised licence as part of the amendment process.

Table 1: Summary of licence amendments

Original Condition no.	New Condition no.	Proposed amendments	
Front Page	Front Page	Updated to current licence format.	
Table 1: Definitions	Table 9: Definitions	Addition of AS/NZ 5667.10 definition. Table moved position in line with current licensing format.	
Interpretation	Interpretation	Interpretation section separated from Definitions and Interpretation and updated as per current licence format.	
1 & Table 2: Authorised Emissions table	Removed	Conditions relating to unauthorised emissions and works have been removed as these requirements are considered redundant as they can be managed under the general provisions of the EP Act.	
Table 3	Table 1	Removal of Ungani West 1 flowline installation condition as authorised works have been completed to specification.	
6	5	Revised to current licensing format.	
Table 4: Infrastructure and equipment controls table	Table 3: Infrastructure and equipment controls table	Reformatting of infrastructure and equipment descriptions to column 1.	
		Update to storage tank infrastructure descriptions following completion of authorised works to specification.	
		Removal of reference to flowlines and oil production wells.	
7	Included in Table 3: Infrastructure and equipment controls table	Condition 7 (Turkey's nest freeboard requirements) was moved to the operational requirements column in Table 3: Infrastructure and equipment controls table.	
8	Removed	Condition 8 (monitoring of flowlines) was removed as it relates to items not regulated under Part V.	
N/A	8 and	Addition of Condition 8 (Emissions: reinjection of produced	
	Table 5: Authorised discharge points for PFW	formation water) and associated Table 5: Authorised discharge points for PFW	

Original Condition no.	New Condition no.	Proposed amendments	
9 and	9 and	Revised to current licensing format.	
Table 5: Authorised discharge locations for treated stormwater	Table 5: Authorised discharge points for emissions to land		
10 and	10 and	Revised to current licensing format.	
Table 6: Treated stormwater emission limits	Table 6: Emission to land limits		
12	11 and 12	Revised to current licensing format.	
11 and	13 and	Updated table to clarify method (sampling and analysis) as per	
Table 7: Monitoring Requirements – emissions to land	Table 7: Monitoring Requirements – emissions to land	current licensing format.	
13 and	14 and	Updated table to clarify method (sampling and analysis) as per current licensing format.	
Table 8: Monitoring Requirements - ambient groundwater quality	Table 8: Monitoring Requirements - ambient groundwater quality		
15, 16, 17, 18 and 19	15, 16, 17, and 18	Conditions relating to records and reporting (complaints, records and annual reporting) have been updated into the current licence format.	
Schedule 1: Premises Layout Map	Schedule 1: Premises Layout Map	Updated Premises Layout Map to a current version showing all installed tanks and infrastructure.	
Schedule 2: Primary Activities	Front Page	Moved to front page as per current licence format	

Appendix 1: Summary of licence holder's comments on draft amendment

Condition	Summary of licence holder's comment	Department's response
Table 1	Request to remove flowlines from Table 1 following the completion of authorised works.	Flowlines removed from Table 1 following confirmation of completion of authorised works to licence condition specifications.
Table 1 and Table 3	Update to names of wells – administrative change.	Well names updated
Table 3	Request to update infrastructure descriptions in Table 3 following the completion of authorised works.	Additional storage tanks included in infrastructure following confirmation of completion of authorised works to licence condition specifications.