



Application for Licence Amendment

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

Licence Number	L8569/2011/2
Licence Holder	Northern Star (Carosue Dam) Pty Ltd
ACN	116 649 122
File Number	INS-0001736 (APP-0029753)
Premises	Porphyry Gold Mine Legal description – Part of mining tenements M31/4, M31/4, M31/5, M31/6, M31/30, M31/76, M31/380, M31/381, L31/44, L31/59, L31/62, L31/63, L31/45 and M31/172 MENZIES WA 6436 As defined by the premises maps in Schedule 1
Date of Report	29 October 2025
Decision	Revised licence granted

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1. Decision summary

Licence L8569/2011/2 is held by Northern Star (Carosue Dam) Pty Ltd (the licence holder) for Porphyry Gold Mine (the premises), located the Shire of Menzies, Western Australia.

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 L8569/2011/2 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 July 2025, the licence holder submitted an application to the department to amend licence L8569/2011/2 under section 59 and 59B of the *Environmental Protection Act 1986* (EP Act). The application is in relation to the operation of mobile crushing and screening plant(s) at four different locations within the Porphyry Gold Mine. The following amendments are being sought:

- Operation of crushing and screening plant(s) and associated infrastructure to process waste rock (Category 12), primarily for sheeting roads; and
- Operation of crushing and screening plant(s) and associated infrastructure to process stockpiles of ore (Category 5) to meet the mill's throughput.

The infrastructure, equipment and associated activities proposed were previously assessed under works approval W6961/2024/1, granted on 27 November 2024. Time limited operations for infrastructure and equipment under the works approval are due to end on 12 November 2025.

This amendment is limited only to the addition of Category 5 and 12 activities to the licence. No changes to the aspects of the existing licence relating to Category 6, 63, 64 and 73 have been requested by the licence holder. Table 1 below outlines the proposed changes to the existing licence.

Table 1: Proposed throughput capacity changes

Category	Current throughput capacity	Proposed throughput capacity	Description of proposed amendment
Category 5: Processing or beneficiation of metallic or non-metallic ore: premises on which — (a) metallic or non-metallic ore is crushed, ground, milled or otherwise processed; or (b) tailings from metallic or non-metallic ore are reprocessed; or (c) tailings or residue from metallic or non-metallic ore are discharged into a	N/A	600 000 tonnes per annum (tpa)	Add Category 5 to the licence

containment cell or dam			
Category 12: Screening etc. of material: premises (other than premises within category 5 or 8) on which material extracted from the ground is screened, washed, crushed, ground, milled, sized or separated	N/A	300 000 tpa	Add Category 12 to the licence

2.2.1 Infrastructure and operations

The licence holder is proposing to contract mobile crushing and screening plant(s) on at least two campaigns per annual period to treat waste rock and gold-bearing ore hosted in porphyritic rock. Waste rock will be used primarily for sheeting roads, and ore will be used to increase throughput in the Carosue Dam Operations (CDO) process plant when required.

The plant(s) will be assembled off-site and come to site ready to operate, therefore no equipment or infrastructure under Category 5 and 12 will be constructed on the prescribed premises. The licence holder cannot confirm that the plants will be identical given different contracting companies are likely to be utilised. The general arrangement of the plants will be similar, comprising of at least a jaw crusher, cone crusher with pre-screen and an additional twin deck incline screen or similar (DWER, 2024).

Waste rock will be sourced from the adjacent waste rock landforms while ore will be collected from Run-of-Mine (ROM) stockpiles located in the vicinity of the open pit. Materials will be loaded into the plant via a loader or excavator. The same plant(s) will process both the Category 5 ore and Category 12 waste rock. The crushing and screening activities will be undertaken on designated areas approved under works approval W6961/2024/1. These areas are limited to the Million Dollar ROM pad, Porphyry ROM pad, Enterprise ROM pad and Wallbrook ROM pad (as depicted in Figure 1).

The licence holder has proposed to increase the production throughput on the licence than what was assessed under W6961/2024/1. The assessed works approval throughputs were 350,000 tpa and 50,000 tpa for Categories 5 and 12, respectively. However, the licence holder identified an underestimation of crushing and screening requirements with these throughputs. The CDO process plant is liable to issues and cannot run for a substantial period of time. Due to this, there is a large ore stockpile buildup, therefore the licence holder proposes to seasonally bring in mobile crushing and screening plant(s) which requires the throughput to be larger to meet operational requirements and meet the CDO mills 24-hour operations.

2.3 Administrative amendments

As part of this licence amendment, the department has undertaken additional licence amendments to update the licence format.

These amendments include the removal of redundant and completed conditions (such as infrastructure conditions that have already been constructed), restructuring of the licence layout, updating figures, and introducing subsections where appropriate to improve clarity and useability. Further details of these amendments can be found in Table 6.

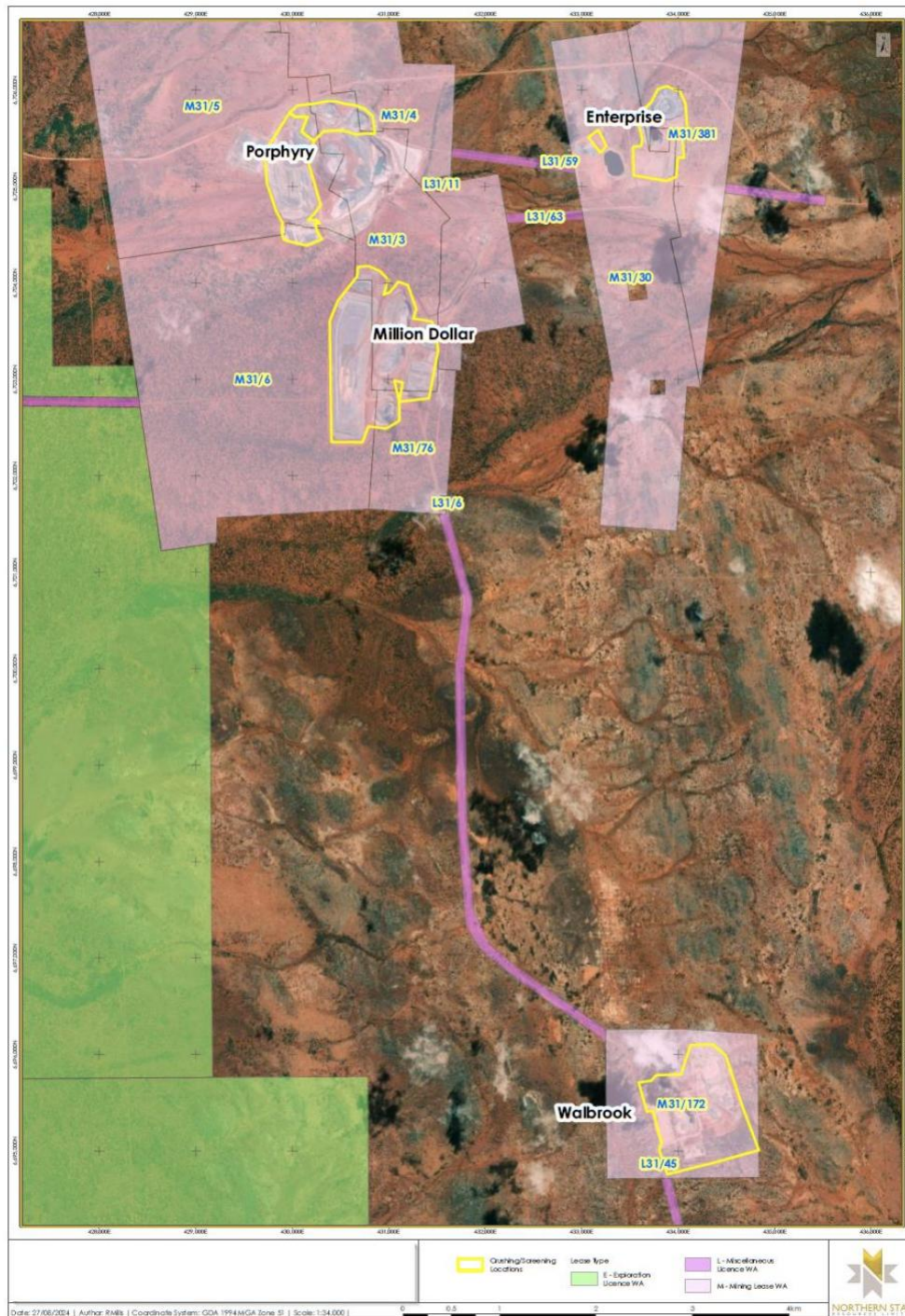


Figure 1: Approved locations for crushing and screening activities.

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 2020a).

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 licence holder has proposed to assist in controlling these emissions, where necessary.

Table 2: Licence holder controls

Emission	Sources	Potential pathways	Proposed controls
Dust	Unloading, loading and stockpiling of material Crushing and screening operations Movement of vehicles/equipment/machinery on unsealed surfaces	Air/windborne	Water cart scheduling; Roads are speed limited; Review weather conditions prior to crushing; Dust suppression sprays are to be used at high dust emission points, particularly conveyor transfers and plant feed areas; All material stockpiles shall be watered using the water cart before being loaded into the crusher; and Water will be applied to roads and trafficked surfaces.
Contaminated/ sediment laden stormwater	Stockpiling of material Crushing and screening operational areas	Overland and stockpile runoff during high rainfall events	All crushing and screening activity locations are surrounded by bunding; and The ROM hardstands where the crushing and screening activities will take place have a low and high point and the stormwater flow will report into the low side and evaporate.
Hydrocarbon leaks/spills	Storage and use of hydrocarbons/fuels within the crushing and screening plant operational areas	Direct discharge to land Surface water runoff	Storing hydrocarbons within self-bunded fuel storage tanks; All refueling and vehicle maintenance will occur within a bunded area; and Spill kits will be placed in the refueling area and in-service vehicles and staff will be trained in the proper use of the kits

3.1.2 Receptors

In accordance with the *Guideline: Risk assessments* (DWER 2020a), the Delegated Officer has excluded employees, visitors and contractors of the licence holders 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 environmental receptors that may be impacted as a result of activities upon or emission and discharges from the prescribed premises (*Guideline: Environmental siting* (DWER 2020b)).

Table 3: Sensitive environmental receptors and distance from prescribed activity

Environmental receptors	Distance from prescribed activity
Surface water lines – Several ephemeral surface water lines run in a south-westerly direction into Lake Rebecca	Surface water lines run directly through the Porphyry and Enterprise pit areas. Enterprise Creek and the adjoining drainage line crosses the Enterprise pit area in a north to south direction and joins the major drainage line south of the Yarry Road proceeding in a westerly direction. A major drainage line occurs approximately 900 m south and 820 metres north of the Million Dollar pit. Several ephemeral surface water lines run in a southwesterly direction into Lake Rebecca which occurs 10 km west of the nearest crushing and screening activity (Million Dollar Pit) A significant drainage line occurs 250 m west and 800 m east of the Walbrook pit area.
Native vegetation	Remnant native vegetation occurs adjacent to all four crushing and screening pit areas.
Cultural receptors	Distance from prescribed activity
Aboriginal cultural heritage site – Artefacts/scatter ID: 2323	Within tenement M31/4 Approximately 300 m north of Porphyry ROM

3.2 Risk ratings

Risk ratings have been assessed in accordance with the *Guideline: Risk Assessments* (DWER 2020a) 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 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 4.

The revised licence L8569/2011/2 that accompanies this amendment report authorises

emissions associated with the operation of the premises i.e. Category 5: Processing or beneficiation of metallic or non-metallic ore and Category 12: Screening etc. of material.

The conditions in the revised licence have been determined in accordance with *Guidance Statement: Setting Conditions* (DER 2015).

Table 4: Risk assessment of potential emissions and discharges from the premises during operation

Risk Event					Risk rating ¹ C = consequence L = likelihood	Licence holder's controls sufficient?	Conditions ² of licence	Justification for additional regulatory controls
Source/Activities	Potential emission	Potential pathways and impact	Receptors	Licence holder's controls				
Operation – Category 5: Processing or beneficiation of metallic or nonmetallic ore and Category 12: Screening etc. of material.								
Stockpiling of material	Contaminated/ sediment laden stormwater	Surface water runoff and infiltration	Surface water lines (closest 250 west) Native vegetation adjacent to activity area	Refer to section 3.1	C = Moderate L = Unlikely Medium Risk	Y	Condition 4 (Table 2): Infrastructure operational requirements Condition 27 (Table 14): Monitoring of ambient groundwater specifications	Bunding has already been constructed around crushing and screening activated under conditions in W6961/2024/1. Groundwater monitoring has already been assessed in licence L8569/2011/2, no other monitoring proposed.
	Dust	Air/windborne causing impacts and ecosystem disturbance to adjacence vegetation and an Aboriginal Heritage site through dust deposition and smothering	Aboriginal Cultural Heritage site (closest 300 m north) Native vegetation adjacent to activity areas.	Refer to section 3.1	C = Minor L = Rare Low Risk	Y	Condition 4 (Table 2): Infrastructure operational requirements Condition 20: Prevention of dust emissions from the premises Condition 28: Records and reports of complaints	N/A
Operation of crushing and screening plant	Dust		Artefacts/scatter Surface water Native vegetation	Refer to section 3.1	C = Minor L = Possible Medium Risk	Y	Condition 4 (Table 2): Infrastructure operational requirements Condition 20: Prevention of dust emissions from the premises Condition 28: Records and reports of complaints	N/A

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Risk Event					Risk rating ¹ C = consequence L = likelihood	Licence holder's controls sufficient?	Conditions ² of licence	Justification for additional regulatory controls
Source/Activities	Potential emission	Potential pathways and impact	Receptors	Licence holder's controls				
Movement of vehicles, machinery and infrastructure	Dust		Artefacts/scatter Surface water Native vegetation	Refer to section 3.1	C = Minor L = Unlikely Medium Risk	Y	Condition 4 (Table 2): Infrastructure operational requirements Condition 20: Prevention of dust emissions from the premises Condition 28: Records and reports of complaints	N/A
Hydrocarbon spills or leaks from vehicle and equipment use, refueling or maintenance activities. Spillage, leakage and seepage of hydrocarbons and chemicals used and stored on the crushing and screening activity locations.	Hydrocarbons	Overland runoff during high rainfall events and leaching through soil profile to groundwater causing impacts to health of surrounding vegetation.	Surface water Native vegetation	Refer to section 3.1	C = Moderate L = Unlikely Medium Risk	Y	Condition 4 (Table 2): Infrastructure operational requirements	All crushing and screening areas have existing compacted hardstands. <i>Unauthorised Discharge Regulations 2004</i> apply.

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

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 5 provides a summary of the consultation undertaken by the department.

Table 5: Consultation

Consultation method	Comments received	Department response
The licence holder was provided with draft amendment on 16 October 2025	See Appendix 1	See Appendix 1

5. Conclusion

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.

5.1 Summary of amendments

Table 6 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 6: Summary of licence amendments

Existing condition	Condition summary	Revised licence condition	Conversion notes/amendments
Cover page	Registered business address	N/A	Updated to align with the new registered business address of Northern Star (Carosue Dam) Pty Ltd.
Cover page	Premises description	N/A	Added local government authority to premises description.
Cover page	Prescribed premises category table	N/A	Updated to include Category 5 and Category 12 with their assessed production capacities.
Condition 19	Infrastructure construction	Condition 1	Revised to align with new licensing format.
Table 5	Infrastructure and equipment design and construction requirements	Table 1	Revised to align with new licensing format. Removed infrastructure where an ECR has already been submitted and assessed, including; - Dewatering pipeline network from Margarets to Enterprise pits - Mine dewatering turkeys nest dam 4 (Walbrook) - Dewatering pipeline between Eleven Bells, Redbrook and Red Flag pits and turkeys nest dam 5.

Existing condition	Condition summary	Revised licence condition	Conversion notes/amendments
Condition 20 & 21	Environmental Compliance Report conditions	Condition 2 & 3	Moved to align with new licensing format.
N/A	Infrastructure operational requirements	Condition 4 and Table 2	Added operational requirements for new infrastructure added to the licence.
Condition 8 and Table 1	Inspection requirements	Condition 5 and Table 3	Moved condition and table to align with new licensing format.
Condition 18	Containment infrastructure	Condition 6	Moved condition to align with new licensing format.
Condition 1	Emissions	N/A	Redundant condition. Adequately covered by EP (Unauthorised Discharges) Regulations 2004. Deleted from licence.
Condition 2	Pollution control and monitoring equipment	N/A	Redundant condition. Adequately covered by EP (Unauthorised Discharges) Regulations 2004. Deleted from licence.
Condition 3	Storage of environmentally hazardous materials	N/A	Redundant condition. Adequately regulated by the Dangerous Goods Safety Act 2004. Deleted from licence.
Condition 4	Recovery and removal of spills	N/A	Redundant condition. Adequately covered by EP (Unauthorised Discharges) Regulations 2004. Deleted from licence.
Condition 5	Prevention of contamination and containment of contaminated stormwater	N/A	Redundant condition. Adequately covered by alternative existing conditions and proposed new conditions. Deleted from licence.
Premises operation	N/A	Emissions and discharges	Replaced 'Premises operation' with 'Emissions and discharges' to align with new licensing format.
Condition 6	Pipelines carrying hazardous substances construction requirements.	N/A	Removed as the requirements had already been included in construction table and construction of all pipelines has since completed.
Condition 15	Infestation controls	N/A	Redundant condition. Adequately covered by alternative existing conditions. Deleted from licence.
Information	N/A	Records and reporting	Replaced 'Information' with 'Records and reporting' to align with new licensing format.
Definitions	N/A	Revised definitions of 'ACN', 'Annual Audit Compliance Report', 'CEO', 'department', 'DWER', 'pollution',	Revised definitions to align with new licensing format.

Existing condition	Condition summary	Revised licence condition	Conversion notes/amendments
		'prescribed premises' and 'waste'	
Schedule 1: Maps	N/A	N/A	Updated Figure 2: Emission point locations to align with the current pipeline network on the premises. Added Figure 11: Locations of crushing and screening activities
General	N/A	N/A	Updated condition, table and figure numbers throughout the licence to align with the new licensing format.

References

1. Department of Environment Regulation (DER) 2015, *Guidance Statement: Setting Conditions*, Perth, Western Australia.
2. Department of Water and Environmental Regulation (DWER) 2020a, *Guideline: Risk Assessments*, Perth, Western Australia.
3. Department of Water and Environmental Regulation (DWER) 2020b, *Guideline: Environmental Siting*, Perth, Western Australia.
4. Department of Water and Environmental Regulation (DWER) 2024, *Works Approval W6961/2024/1 Decision Report*, Perth, Western Australia
5. Northern Star Resources Ltd (NSR) 2025, *Amendment Application – Porphyry Gold Mine Mobile Crushing, Screening and Associated Infrastructure*, Perth, Western Australia.

Appendix 1: Summary of licence holder's comments on risk assessment and draft conditions

Condition	Summary of licence holder's comment	Department's response
Cover page - Registered business address	Licence holder requested to change the registered business address to reflect the current registered business address for Northern Star (Carosue Dam) Pty Ltd.	Noted and updated.
Cover page - Premises details	Licence holder was to advise the department of status of mining tenements. Licence holder advised an extension of term applications have been lodged to DMPE in March 2025 and are still undergoing assessment.	Noted.
Table 1: Infrastructure and equipment	Licence holder was advised to provide a response for a separate ECR assessment to remove a redundant condition from the licence. Licence holder advised a response was sent to the department on 22 November 2025.	Noted. The ECR assessment has since been determined.
Schedule 1: Maps - Figure 2	Licence holder was to provide an updated map to clearly show the dewatering pipeline network and site layout. Licence holder provided an update figure.	Noted and updated.