



Application for Licence

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

Licence Number	L9453/2024/1
Applicant	Ulysses Mining Pty Ltd
ACN	153 592 208
File number	DER2024/000427
Premises	<p>Ulysses Gold Project</p> <p>Part of tenements G40/4, G40/5, G40/6, L40/11, L40/12, L40/30, L40/34, M40/3, M40/101, M40/107, M40/110, M40/137, M40/166, M40/174, M40/20, M40/288, M40/289, M40/290, M40/291, M40/292, M40/293, M40/340</p> <p>Shire of Menzies</p> <p>As defined by the premises maps attached to the issued licence</p>
Date of report	13 December 2024
Decision	Licence granted

**A/SENIOR MANAGER, RESOURCE INDUSTRIES
INDUSTRY REGULATION (STATEWIDE DELIVERY)**

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

Table of Contents

1. Decision summary	1
2. Scope of assessment	1
2.1 Regulatory framework	1
2.2 Application summary and overview of premises	1
2.2.1 Category 6: Mine dewatering	1
2.2.2 Category 89: Putrescible landfill	2
2.2.3 Used Tyre storage and disposal	2
3. Other relevant approvals	4
3.1 Part V of the EP Act	4
3.1.1 Recent works approval	4
3.1.2 Native Vegetation Clearing Permit	4
3.2 Rights in Water and Irrigation Act	4
3.3 Mining Act	5
4. Risk assessment	5
4.1 Source-pathways and receptors	5
4.1.1 Emissions and controls	5
4.1.2 Receptors	7
4.2 Risk ratings	10
5. Consultation	15
6. Conclusion	15
References	16
Appendix 1: Summary of applicant’s comments on risk assessment and draft conditions	17
Table 1: Proposed applicant operational controls	5
Table 2: Sensitive human and environmental receptors and distance from prescribed activity	8
Table 3: Risk assessment of potential emissions and discharges from the premises during operation	10
Table 4: Consultation	15
Figure 1: Map of the boundary and infrastructure layout of the prescribed premises	3
Figure 2: Distance to sensitive receptors near King WRL	9

1. Decision summary

This decision report documents the assessment of potential risks to the environment and public health from emissions and discharges during the operation of the premises. As a result of this assessment, licence L9453/2024/1 has been granted.

2. Scope of assessment

2.1 Regulatory framework

In completing the assessment documented in this decision report, the Department of Water and Environmental Regulation (the department; DWER) 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

On 15 August 2024, Ulysses Mining Pty Ltd (the applicant) applied to DWER for a licence to the department under section 57 of the *Environmental Protection Act 1986* (EP Act).

The application is to seek a licence relating to the operation of category 6 'mine dewatering' and category 89 'putrescible landfill site' at the premises after having been constructed and temporarily operated under works approval W6536/2021/1. The infrastructure includes dewatering pipelines between existing open pits and a landfill facility. The premises is approximately 32 km south of Leonora.

The premises relates to the categories and assessed design capacity under Schedule 1 of the *Environmental Protection Regulations 1987* (EP Regulations) which are defined in licence L9453/2024/1. The infrastructure and equipment relating to the premises category and any associated activities which the department has considered in line with *Guideline: Risk Assessments* (DWER 2020) are outlined in licence L9453/2024/1.

An overview of the proposed operations for the premises is outlined below. Figure 1 below shows the overview of the Premises infrastructure layout.

2.2.1 Category 6: Mine dewatering

The applicant proposes to dewater up to 640,000 kL per annum (~656,000 tpa) from existing open pits and underground mines to allow for mining developments. Until now, dewatering operations has been limited to about 40,000 kLpa (~41,000 tpa) at Ulysses West Pit to Ulysses Central Pit, which is below the prescribed premises threshold for category 6 of 50,000 tonnes or more per year at the premises, as defined in Schedule 1 of the EP Regulations. The 40,000 kLpa dewatering was approved in 2020 by the Department of (Energy,) Mines, Industry Regulation and Safety (DEMIRS) to allow construction of the underground portal under Mining Proposal Reg ID 89641 (GML, 2020).

Now in addition to Ulysses West Pit, another 600,000 kL per annum of dewatering operations is proposed, specifically between Ulysses West Pit to Ulysses Central Pit and Admiral Pit to Dunluce Pit. There are no turkeys nests; water transfer between pits are direct, pit to pit.

Further licence amendment applications are expected for future developments required for Ulysses Central, Butterfly, King, Clark, Danluce and Orient Well Pits. These have not been assessed in the risk assessment below and will not be considered any further in this decision report.

Transfers of water to Ulysses Central Pit and Danluce Pit are supported by an updated water balance derived from a hydrological and hydrogeological assessment undertaken by Groundwater Resource Management (GRM), who were engaged by the applicant in 2022.

Up to 250,00 kLpa (~246,000 tpa) of mine water is anticipated to be used in mine processing and dust suppression before the excess (390,000 kLpa (~383,760 tpa)) mine dewater is disposed of at Danluce Pit. However, if inflows and rainfall at the Ulysses West Pit, Ulysses Central Pit and Admiral Pit are high, Danluce Pit may reach capacity. In this event, excess dewater will be disposed of in Orient Well Pit.

The water balance modelling and the water quality has not changed from the works approval assessment. As stated in the amendment report for works approval W6536/2021/1 (DWER2023) *The hydrogeological assessment estimated that there is sufficient capacity in both the Danluce and Orient Well Pits to store excess water from the Ulysses and Admiral, Butterfly, Clark and King mining operations.*

The amendment report also states that previous groundwater sampling results did not exceed ANZECC stock watering limits, and groundwater quality is not expected to significantly change through ongoing dewatering activities

The dewatering pipelines were constructed under works approval W6536/2021/1 (refer to section 3.1.1).

2.2.2 Category 89: Putrescible landfill

The applicant requires disposing up to 5,000 tpa of putrescible waste from its operations at the premises, which is proposed to occur at King Waste Rock Landform (WRL) landfill facility. The landfill facility was constructed under works approval W6536/2021/1 (refer to section 3.1.1).

At this facility unlined class II landfills will be excavated and covered progressively; that is once a trench or 'slot' is filled, the next trench will be dug as required (GML, 2024a). Dust suppression using water carts across the operation of the landfill facility will be used as required.

Currently, one trench has been constructed at the facility under a works approval (refer to section 3.1.1). The trench is 30 m in length, 5 m in width and 5 m in depth. Windrows have been constructed around the perimeter of the trench. The facility is fenced to prevent windblown waste and signed to indicate which waste is accepted.

2.2.3 Used Tyre storage and disposal

Used tyres will be generated from the applicant's mining fleet. Due to the premises' remote location, heavy tyre recycling is limited. Prior to burial, the applicant will ensure less than 100 tyres will be stored on any designated storage location onsite, staying below the prescribed premises threshold of category 57 (storage of 100 or more used tyres).

The applicant will bury used tyres within an active WRL 5 m or more from the landform's outer surface. Each used tyre will be laid flat with a minimum of 1 m separation between adjacent tyres. Used tyres will be placed individually and not stacked. Up to 20 tyres may be placed in an active WRL burial location. A 10 m horizontal and 5 m vertical buffer zone will be used between tyre burial locations. The number of used tyres buried, and their locations will be recorded. These measures are to prevent an uncontrolled fire.

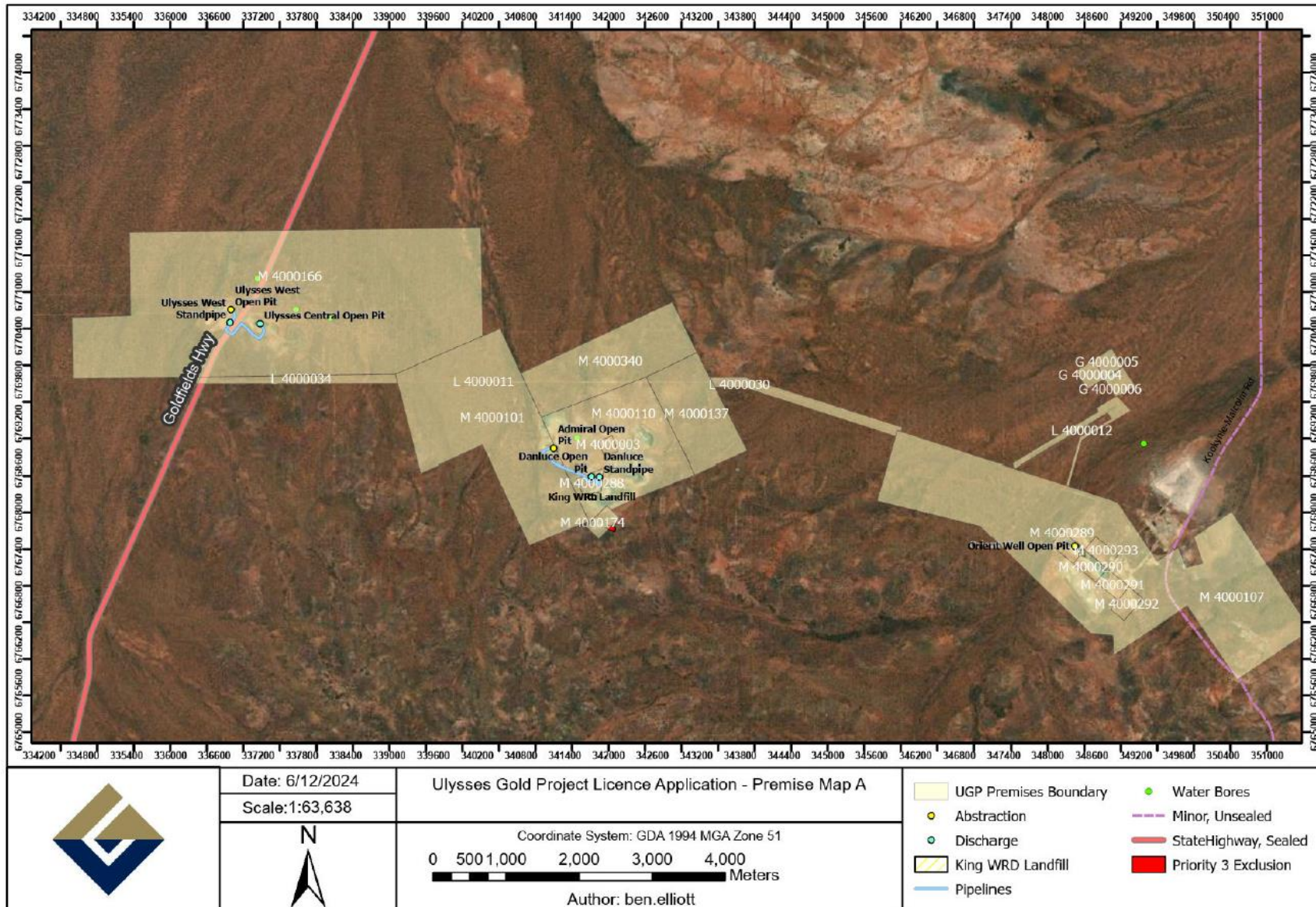


Figure 1: Map of the boundary and infrastructure layout of the prescribed premises

Licence: L9453/2024/1

3. Other relevant approvals

3.1 Part V of the EP Act

3.1.1 Recent works approval

Between 2021 and 2024, works approval W6536/2021/1 (the works approval) was granted with two amendments for the construction and time limited operations of the dewatering pipelines and the putrescible landfill facility. The works approval decision report and amendments as follows:

- On 30 July 2021, the works approval was granted for up to 250,000 kL per annum of mine dewater utilised for dust suppression and in mining water demand at the premises. The source of the dewater for dust suppression was approved from the pit lakes and or the underground mines of the Admiral, Butterfly, Orient Well, Ulysses Central and Ulysses West pits;
- On 9 June 2023, the works approval was amended to include the construction and time limited operations of dewatering infrastructure connecting the pits together via a network of turkeys nests and dewatering pipelines to move water between the pits as required by mining development needs; and
- On 11 March 2024, the works approval was amended to include the construction of a putrescible landfill facility and time limited operations of an unlined trench within the expanded footprint of the King Waste Rock landform (WRL).

Construction Compliance Reports (CCR) were submitted to the department by the applicant (formerly the Works Approval Holder) to demonstrate compliance against the relevant conditions. The dewatering pipelines and the putrescible landfill facility were deemed compliant by the department are described below:

- On 31 May 2024, the CCR for the dewatering pipelines between Admiral Pit to Dunluce Pit and Ulysses West Pit to Ulysses Central Pit and Ulysses turkey's nest was received. The department noted a slight deviation to the pipeline route which did not change the risk to the environment. The construction of the dewatering pipeline was deemed compliant by the department on 15 July 2024.
- On 1 July 2024, Construction Compliance Report for the King Waste Rock Landform landfill facility was received. The department noted that the trench was constructed shorter at 30 m instead of 50 m. As the length of the trench does not change to the risk profile of landfilling, the department decided no further action was required. This decision was made on 12 August 2024.

3.1.2 Native Vegetation Clearing Permit

On 28 January 2021, clearing permit 7052/3 was granted for up to 280 hectares of native vegetation to be cleared around the Ulysses Pits for the purpose of mineral production and associated activities.

On 22 October 2021, clearing permit 9132/1 was granted for up to 580 hectares of native vegetation to be cleared around the remainder of the premises for the purpose of mineral production and associated activities.

3.2 Rights in Water and Irrigation Act

Since 5 April 2023, groundwater licence GWL182709(5) allows the applicant to take up to 1,035,000 kL of groundwater annually for the purposes including mine dewatering and dust suppression for the activities on Licence L9453/2024/1.

3.3 Mining Act

The proposed activities align with the pits and service corridors of Mining Proposal Reg ID: 112250, approved on 26 July 2023 by the Department of Energy, Mines, Industry Regulation and Safety (DEMIRS).

4. 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.

4.1 Source-pathways and receptors

4.1.1 Emissions and controls

The key emissions and associated actual or likely pathway during premises operation which have been considered in this decision report are detailed in Table 1 below. Table 1 also details the control measures the applicant has proposed to assist in controlling these emissions, where necessary.

Table 1: Proposed applicant operational controls

Emission	Sources / activities	Potential pathways	Proposed operational controls
Category 6			
Brackish mine water (1,000 – 7,000 mg/L)	Dust suppression	Surface runoff and infiltration	Discharge of dewater through dust suppression to occur across an area of approx. 2,000 ha within the Premises (DWER, 2021);
	Spills and leaks from turkey's nest and dewater transfer pipelines	Surface runoff and infiltration	<ul style="list-style-type: none"> Turkeys nest for storage of dewater will be clay lined and a 500 mm freeboard maintained at all times (DWER, 2021). Daily inspections of dewatering pipelines to confirm visual integrity of pipelines, bund and scour pits during dewatering operations; and Shutdown required section of dewatering system if any leaks or spills from the pipeline are detected until the leak has been repaired (DWER, 2023).
	Discharge into pit lakes	Air / windborne pathway; direct discharge	Maintain discharge pipeline far enough over the pit crest or down the ramp to reduce exposure to wind and prevent scouring of pit walls.
	Seepage of receiving pit lakes	Infiltration	Ensure Danluce pit lake is maintained below maximum water level of 425m AHD (5 mbgl) (DWER, 2023).

Emission	Sources / activities	Potential pathways	Proposed operational controls
Brackish mine water (1,000 – 7,000 mg/L)	Overtopping of receiving pit lakes	Surface runoff	<ul style="list-style-type: none"> • Ensure Danluce pit lake is below maximum water level of 425m AHD (5 mbgl); • Record the volume of water discharged each month flow meters; • Monthly monitoring of pit lake water level (freeboard capacity) and compared against surface RL's; and • If required, transfer any excess mine dewatering to the Orient Well Pit (DWER, 2023).
Category 89			
Dust	Waste covering	Air / windborne pathway	<ul style="list-style-type: none"> • Visual monitoring to assess the emission; and • Dust suppression measures with water carts during operations as necessary (DWER, 2024).
Noise	General operations of the landfill facility	Air / windborne pathway	<ul style="list-style-type: none"> • The applicant is committed to ensuring operations comply with the <i>Environmental Protection (Noise) Regulations 1997</i>. • Complaints from stakeholders regarding noise emissions will be acted on immediately and management measures reviewed accordingly.
Windblown waste	General operations of the landfill facility	Air / windborne pathway	<ul style="list-style-type: none"> • Fencing to be maintained around the landfill facility to limit wind-blown waste and prevent access from animals; • Routine covering of waste in accordance with the <i>Environmental Protection (Rural Landfill) Regulations 2002</i>; and • Weekly visual inspection of the landfill facility to determine whether additional covering is required, and any waste caught by the fencing is to be disposed of in an active landfill trench (DWER, 2024).
Leachate	Waste decomposition	Infiltration	<ul style="list-style-type: none"> • Height of the King WRL is currently 18 m (large separation distance between base of landfill and groundwater); and • Addition of waste rock on landfill to decrease long term infiltration rate (DWER, 2024).

Emission	Sources / activities	Potential pathways	Proposed operational controls
Contaminated stormwater	General operations of the landfill facility	Overland runoff	<ul style="list-style-type: none"> • Installation of landfill windrows for every trench to reduce the incidence of surface water; and • New landfill trenches to be located more than 35 m from King WRL perimeter (DWER, 2024).
Tyre storage and disposal			
Smoke from tyre fire	Storage within the premises and disposal of tyres within the waste rock landforms	Air / windborne pathway	<ul style="list-style-type: none"> • No more that 100 used tyres stored at any designated location at the premises at any one time; • Disposal within the waste rock landforms only and at 5 m or more from the landform outer surface; • Tyres to be disposed of horizontally and individually with a minimum distance of 1 m from the adjoining tyre; • A 3 m firebreak to be in good order around the used tyre burial locations; and • Emergency Management Plan to be followed in case of a fire (DWER, 2024). • Earthen bunding to be used to prevent run-off.
Contaminated stormwater i.e. Fire debris and wash waters from tyre fire		Surface runoff and infiltration	

4.1.2 Receptors

In accordance with the *Guideline: Risk Assessment* (DWER 2020), the Delegated Officer has excluded the applicant’s employees, visitors, and contractors 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 and Figure 2 below provides a summary of potential human and environmental receptors that may be impacted as a result of activities upon or emission and discharges from the prescribed premises (*Guideline: Environmental Siting* (DWER 2020)).

Table 2: Sensitive human and environmental receptors and distance from prescribed activity

Human receptors	Distance from prescribed activity
Users of Goldfields Highway	Highway runs south-west to north-east between Ulysses West and Ulysses Central pits, <200 m from both pits.
Environmental receptors	Distance from prescribed activity
Surface water lines	<p>Small shallow diffuse drainage lines from the west of the project extend to approximately 200 m from the Butterfly pit and drain towards a floodplain north of the premises (DWER 2023).</p> <p>Dingo Creek (a defined stream that passes close to western edge of Orient Well pit and discharges into the Lake Raeside valley east of the project). Smaller tributaries of Dingo Creek cross project infrastructure west and east of Orient Well Pit. Streams next to Ulysses West, Admiral and Orient Well Pits are large enough to provide a floodwater ingress risk (DWER 2023).</p>
Proclaimed groundwater area	<p>The premises overlaps the Goldfields groundwater area (Geocortex, (Rights in and Water Irrigation Act 1914 (RIWI) - Groundwater Areas).</p> <p>The standing water level measured near the Ulysses mining area ranges from 22.9 meters below ground level (mbgl) to 32.9 mbgl and water quality marginal to moderately saline (920 - 4,120 mg/L TDS). The Ulysses pits are about 200 m apart.</p> <p>Around the Admiral-Butterfly-Clark deposits, standing water levels range between 32.4 m and 38.78 mbgl and water quality brackish to saline (1,600 - 8,000 mg/L TDS). Admiral and Danluce pits are about 500 m apart.</p> <p>Groundwater contained in the pits is similar to regional groundwater with water quality marginal to saline (1,000-7,000 mg/L TDS).</p>
Rare fauna	Historic opportunistic sightings only of Malleefowl (<i>Leipoa ocellata</i>) within the boundary of mining tenement M40/166 (DWER, 2024).
Native Vegetation	<p>Vegetation association: Barlee 18; Low woodland; Mulga (<i>acacia aneura</i>) overlaps the Premises.</p> <p>Pre-European low, open and sparse woodland vegetation of the Mulga (<i>Acacia aneura</i>) and associated species are adjacent to outer boundary of the King, Admiral and Butterfly waste rock landform.</p>
PEC	<i>Calytrix hislopii</i> (P3) have population exclusion zones (of at least 10 m) within M40/101 and about 6 m south of the King WRL and M40/174 more than 200 m south of the King WRL. No disturbance within 10 m buffer zone.
Cultural receptors	Distance from activity / prescribed premises
Aboriginal heritage site Brittania Burials Registered Aboriginal Site (1097)	<p>More than 5 km north.</p> <p>The applicant undertook a site inspection within the premises and found that due to significant previous disturbance, the integrity of any other possible sites has not remained.</p>

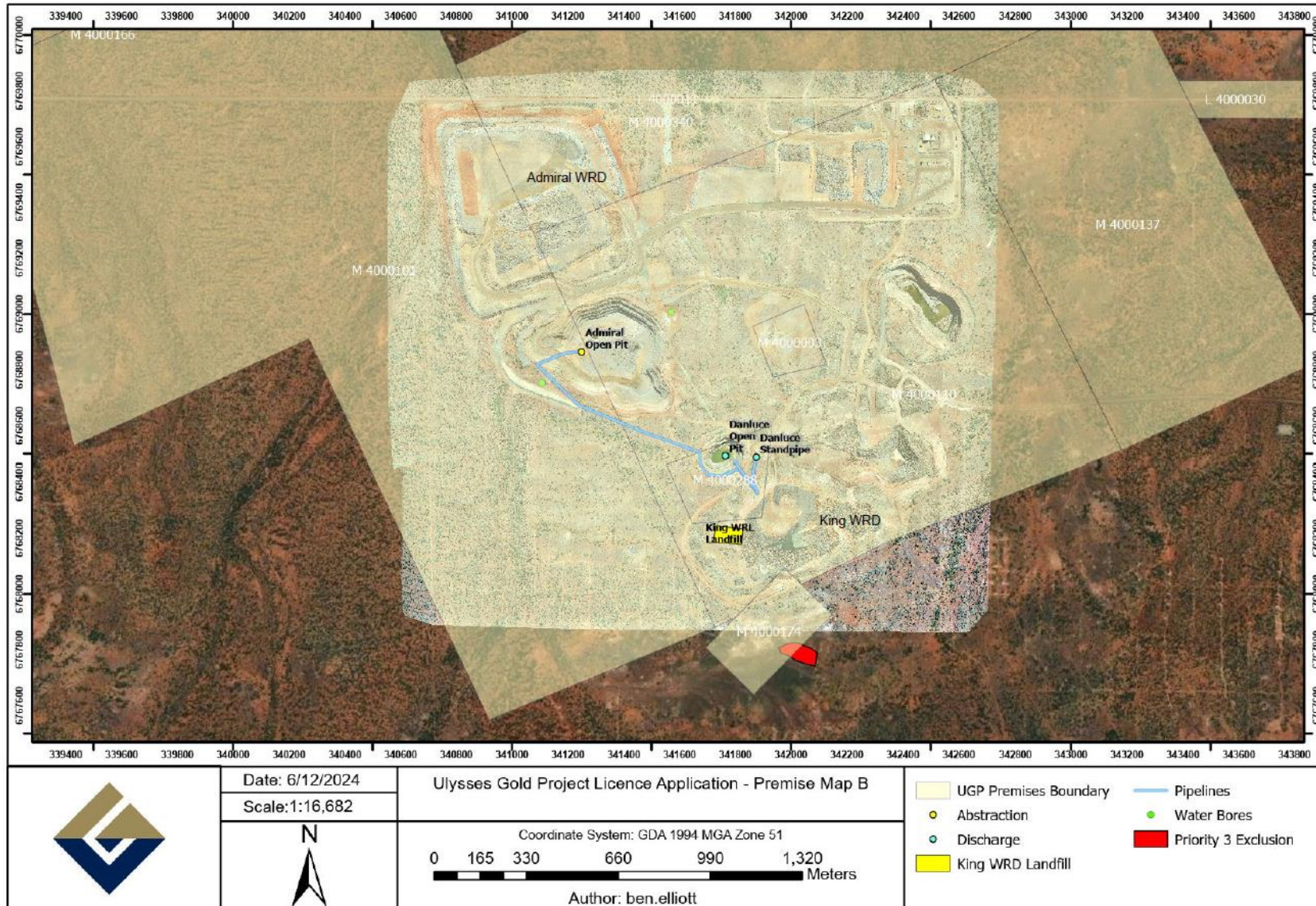


Figure 2: Distance to sensitive receptors near King WRL

Licence: L9453/2024/1

4.2 Risk ratings

Risk ratings have been assessed in accordance with the *Guideline: Risk Assessments* (DWER 2020) for each identified emission source and takes into account potential source-pathway and receptor linkages as identified in Section 4.1. Where linkages are in-complete they have not been considered further in the risk assessment.

Where the applicant has proposed mitigation measures/controls (as detailed in Section 4.1), 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 licence 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 3.

Licence L9453/2024/1 that accompanies this decision report authorises emissions associated with the operation of the premises i.e., from category 6 and 89 activities.

The conditions in the issued licence, as outlined in Table 3 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 events					Risk rating ¹	Applicant controls sufficient?	Conditions ² of licence	Decision and justification for additional regulatory controls
Sources / activities	Potential emission	Potential pathways and impact	Receptors	Applicant controls	C = consequence L = likelihood			
Category 6								
Discharge of dewater to land via dust suppression	Saline mine water	Surface runoff and infiltration through soil causing direct impacts to surface water quality, vegetation and loss of habitat, food and breeding areas for fauna.	Native vegetation Surface water	Refer to Section 3.1	C = Minor L = Possible Medium Risk	N	<u>Condition 3 – Dust suppression</u>	Condition 3 has been added to protect sensitive receptors using saline water for dust suppression. This condition has been derived from a similar condition in W6536/2021/1.
		Direct discharge to soil may also lead to contamination of soil and infiltration to groundwater causing contamination via salination.	PEC Rare fauna Proclaimed groundwater area		C = Major L = Unlikely Medium Risk			

Risk events					Risk rating ¹	Applicant controls sufficient?	Conditions ² of licence	Decision and justification for additional regulatory controls
Sources / activities	Potential emission	Potential pathways and impact	Receptors	Applicant controls	C = consequence L = likelihood			
Spills and leaks from turkey's nest and dewater transfer pipelines		Pipeline leak or rupture causing surface runoff and infiltration through soil causing direct impacts to surface water quality, vegetation and loss of habitat, food and breeding areas for fauna.	Native vegetation Surface water	Refer to Section 3.1	C = Minor L = Possible Medium Risk	Y	Condition 1 – pipeline operational requirements Condition 2 – Daily pipeline inspections	N/A
		Direct discharge to soil may also lead to contamination of soil and infiltration to groundwater causing contamination via salination	PEC Rare fauna Proclaimed groundwater area		C = Major L = Unlikely Medium Risk			
Discharge into pit lakes	Saline mine water	Aerosolised spray impacting vegetation and loss of habitat, food and breeding areas for fauna.	Native vegetation	Refer to Section 3.1	C = Minor L = Unlikely Medium Risk	Y	Condition 1 – pipeline operational requirements	N/A
			PEC Rare Fauna		C = Major L = Unlikely Medium Risk			
			Users of Goldfields Highway		C = Major L = Rare Medium Risk			
Seepage of receiving pit lakes		Seepage through soil to groundwater causing surface expression in surface water bodies; groundwater mounding impacting on root zone of vegetation, leading to loss of habitat, food and breeding areas for fauna	Native vegetation Surface water	Refer to Section 3.1	C = Minor L = Unlikely Medium Risk	Y	Condition 4 – Authorised discharge points Condition 5 – Emission and discharge limits	Condition 5 had been added to specify the authorised discharge limits as assessed PEC by DWER.
			PEC Threatened fauna		Refer to Section 3.1			

Risk events					Risk rating ¹ C = consequence L = likelihood	Applicant controls sufficient?	Conditions ² of licence	Decision and justification for additional regulatory controls
Sources / activities	Potential emission	Potential pathways and impact	Receptors	Applicant controls				
Overtopping of receiving pit lakes	Saline mine water	Overland runoff reducing surface water quality and vegetation health, leading to loss of habitat, food and breeding areas for fauna.	Native vegetation Surface water	Refer to Section 3.1	C = Moderate L = Rare Medium Risk	Y	Condition 1 – Pit freeboard operational requirements	N/A
			PEC Threatened fauna		C = Major L = Rare Medium Risk			
Category 89								
General operations of the landfill facility	Noise	Air/windborne pathway impacting fauna movement within and around the prescribed premises area; impacts to breeding and foraging.	Rare fauna	Refer to Section 3.1	C = Moderate L = Unlikely Medium Risk	Y	Condition 1 – Landfill operational requirements	N/A
Covering of waste with at the King Waste Rock Landform Landfill facility	Dust	Air/windborne pathway impacting plant health. Dust on surface water quality.	Native vegetation Surface water lines	Refer to Section 3.1	C = Slight L = Unlikely Low Risk	Y	Condition 3 – Dust suppression	N/A
			PEC	Refer to Section 3.1	C = Moderate L = Rare Medium Risk			
Waste decomposition	Leachate	Infiltration through soil to groundwater causing contamination, stress and deterioration of vegetation; migration of contaminants through groundwater expressing in surface water bodies causing water quality impacts	Native vegetation Surface water lines	Refer to Section 3.1	C = Minor L = Unlikely Low Risk	Y	Condition 6 – Waste acceptance Condition 7 – Process requirements	N/A
			PEC Proclaimed groundwater area		C = Moderate L = Possible Medium Risk			

Risk events					Risk rating ¹ C = consequence L = likelihood	Applicant controls sufficient?	Conditions ² of licence	Decision and justification for additional regulatory controls
Sources / activities	Potential emission	Potential pathways and impact	Receptors	Applicant controls				
General operations of the landfill facility	Windblown waste	Air/windborne and overland pathways smothering young plants, deposition into surface water lines causing contamination; ingestion by fauna.	Native vegetation Surface water lines	Refer to Section 3.1	C = Slight L = Unlikely Low Risk	Y	Condition 1 – Landfill operational requirements Condition 7 – Process requirements (covering waste)	N/A
			PEC Rare fauna	Refer to Section 3.1	C = Moderate L = Unlikely Medium Risk			
	Contaminated stormwater	Surface water runoff into surface lines and discharge into vegetation; infiltration into soil and groundwater impacting vegetation and fauna health.	Native vegetation Surface water lines	Refer to Section 3.1	C = Slight L = Unlikely Low Risk	Y	Condition 1 – Landfill operational requirements	N/A
			PEC Proclaimed groundwater area Rare fauna		C = Moderate L = Unlikely Medium Risk			
Used Tyres								
Storage and burial of used tyres	Air emissions from combustion including VOCs, polycyclic aromatic hydrocarbons (PAH), dioxins, ash, nitrogen oxide and carbon oxides	Air/windborne pathway causing impacts to amenity of cultural sites, health and amenity impacts to users of public roads, ash drop out into surface waters and onto vegetation	Aboriginal heritage site Users of Goldfields Highway Native vegetation Surface water lines	Refer to Section 3.1	C = Moderate L = Rare Medium Risk	Y	Condition 1 – Operational requirements (Used tyre storage area) Condition 6 – Waste acceptance Condition 7 – Waste processing requirements	N/A

Risk events					Risk rating ¹ C = consequence L = likelihood	Applicant controls sufficient?	Conditions ² of licence	Decision and justification for additional regulatory controls
Sources / activities	Potential emission	Potential pathways and impact	Receptors	Applicant controls				
Storage and burial of used tyres	Liquid emissions including pyrolytic oils containing hydrocarbons, metals and particulate matter Contaminated fire water and burnt materials Fire Fighting Equipment (PFAS)	Surface water runoff potentially causing impacts to vegetation and fauna health or impacting surface water quality Infiltration of oils and hydrocarbons through soil causing contamination to groundwater	Native vegetation Surface water lines	Refer to Section 3.1	C = Moderate L = Rare Medium Risk	N	Condition 1 – Operational requirements (Used tyre storage area) Condition 6 – Waste acceptance Condition 7 – Waste processing requirements	The Delegated Officer considers that bunding around the used tyre storage area is required to contain wash water in the event of a fire.
			PEC Proclaimed groundwater area Rare fauna	Refer to Section 3.1	C = Major L = Rare Medium Risk			

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

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

5. Consultation

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

Table 4: Consultation

Consultation method	Comments received	Department response
Application advertised on the department's website on 23 September 2024	None received	N/A
Shire of Menzies advised of proposal on 26 September 2024	None received	N/A
The applicant was provided with draft documents on 27 November and 9 December 2024	Refer to Appendix 1	Refer to Appendix 1

6. Conclusion

Based on the assessment in this decision report, the delegated officer has determined that a licence will be granted, subject to conditions commensurate with the determined controls and necessary for administration and reporting requirements.

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.
4. DWER 2021, *Decision report W6536/2021/1*, Perth, Western Australia.
5. DWER 2021, *Works Approval W6536/2021/1*, Perth, Western Australia.
6. DWER 2023, *Amendment report W6536/2021/1*, Perth, Western Australia.
7. DWER 2023, *Works Approval W6536/2021/1*, Perth, Western Australia.
8. DWER 2024, *Amendment report W6536/2021/1*, Perth, Western Australia.
9. DWER 2024, *Works Approval W6536/2021/1*, Perth, Western Australia.
10. Genesis Minerals Limited (GML) 2020, *Ulysses Project Mining Proposal Amendment*, Reg ID 89641, Version 6, 14 January 2020, Perth, Western Australia.
11. GML 2024a, *Construction Compliance Report (Progressive) Ulysses Gold Project W6536/2021/1 Admiral Landfill*, Version 1, June 2024, Perth, Western Australia.
12. GML 2024b, *Licence Application Supporting Information Ulysses Gold Project*, Version 1, August 2024, Perth, Western Australia.

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

Condition	Summary of applicant's comment	Department's response
Decision Report		
Item 1 - Applicant to provide higher resolution image of the map boundary and infrastructure layout.	Maps updated and attached.	Updated map added to Figure 1.
Item 2 - Applicant to depict all sensitive receptors in map where possible.	P3 population of <i>Calytrix hislopii</i> exclusion added to map.	Updated map added to Figure 2.
Item 3 - Applicant to provide 40,000 kLpa in tonnes for consistency and comparability to the schedule 1 threshold for category 6 in the EP Regulations.	Use of density estimate for saline water of 1.025 kg/L. 40,000 kL = 41,000 tonnes. Note have requested a more cumulative approach to the dewatering.	Volume included in section 2.2.1
Item 4 - Confirm that less than 100 used tyres will be stored on any designated storage location onsite.	Confirmed, less than 100 waste tyres will be stored onsite.	Wording "less than 100 tyres" included in section 2.2.3.
Item 5 - Applicant to confirm whether there are any visual markers on pit walls so that freeboard can be easily determined.	Monthly survey undertaken and compared against surface RL's. Update of these have been provided to DWER in memo response.	Table 1, Proposed applicant operational control, overtopping surface water control updated to read "Monthly monitoring of pit lake water level (freeboard capacity) and compared against surface RL's".
Item 6 - Applicant to provide control for wash waters around the tyre storage and disposal area.	Earthen bunding to be used to prevent run-off.	Earthen bunding control added to Table 1, Proposed applicant operational control, Contaminated stormwater.

Condition	Summary of applicant's comment	Department's response
Item 7 - Applicant to label King WRL	Maps updated and attached.	Updated map added.
Section 2.2.1 and front page of Licence	Assessed Cat 6 production capacity should be 656,000 tonnes with the 1.025 density factor (currently reads 629,760 tonnes for 640,000 kL)	Value updated to 656,000 tonnes.
Licence		
Condition 1, Table 1, Item 1	Update item a to specify 'Telemetry systems or pressure sensors to allow the detection of leaks and failures.' Telemetry and pressure sensors are two separate systems that serve a similar function. The current format of the licence varies from the requirements in the works approval and the current system as constructed.	Condition has been updated to include the word 'or'.
Condition 1, Table 1, Item 6	Update infrastructure location to specify burial within 'Active Waste Rock Landfill'. Current King Waste Rock Landform is inactive, to bury the tyres to the required specification requires re-disturbance of the current closed landform resulting in additional environmental impact. Proposal to allow burial in an active Waste Rock Landform reduces material movement requirements and negates disturbing closed landforms.	Items 5 and 6 have been removed from Table 1. The requirements of these rows for the landfill and tyre storage area have been replaced into Table 5: Waste processing requirements, and therefore not duplicated in Table 1.
Condition 3	Update to remove b) Priority Ecological Communities and d) Malleefowl habitats. The condition already adequately captures these under item 'a) native vegetation' as this will capture Malleefowl habitats and Priority Ecological Communities that could be impacted by overspray. Additionally, surveys associated with the development of the mine did not identify PEC's or Malleefowl activity within the Prescribed Premise Area (available on request from Mining Proposal Registration ID112250).	This condition has been updated to remove parts (b) and (d) as requested. The Delegated Officer agrees that 'native vegetation' reflects PECs and Malleefowl habitats.

Condition	Summary of applicant's comment	Department's response
Condition 4, Table 3	N/A	<p>The Delegated Officer has determined to remove column 2 which specified the total authorised discharge limit. This limit is already included in Condition 8, Table 7.</p> <p>Columns 3 and 4 have also been merged so that discharge point and discharge point location are the same column.</p>
Condition 5, Table 4	<p>Removal of limits of discharge volume for each pit.</p> <p>A cumulative limit associated with the premise licences assessed production capacity is already in place. The risk associated with dewatering overtopping of pits is managed through the conditioning of a Pit RL limit. This proposed change also adds consistency between other conditions in the licence (i.e. Table 3).</p>	<p>This Condition and corresponding Table have been removed. Condition 1, Table 1, already requires 5m freeboard to be maintained, and Condition 5, Table 5 (condition 6 and Table 5 in draft licence version) specify the waste limit. This condition was therefore considered to be a duplication of these two other conditions.</p>
Condition 5, Table 4	<p>Update Standing Water Limits for the Pits to the following to reflect the pit crest elevations.</p> <ul style="list-style-type: none"> - Ulysses Central Pit: 408 m RL - Danluce Pit: 424 m RL - Orient Wel Pit: 395 m RL <p>Pit crests for each pit are surveyed at the following heights.</p> <ul style="list-style-type: none"> - Ulysses Central Pit: 413 m RL - Danluce Pit: 429 m RL - Orient Well Pit: 400 m RL <p>The proposed update reflects the levels 5 m BGL for each pit more accurately.</p>	<p>As per the above row, this Condition and Table have been removed due to duplication with other conditions.</p>
Condition 7, Table 6	<p>Update covering schedule to reflect frequencies in Rural Landfill Regulations based on actual waste disposal vs design.</p> <p>Waste tonnages per annum are likely to be below 500 tonnes. A tiered approach for burial frequency based on the Rural Landfill Regulations will increase lifetime of facility by minimising volumes taken up with clean fill unnecessarily. This approach is currently applied in the Gwalia Premise Licence L8337/2009/2 (held by Genesis)</p>	<p>Reference to covering of waste has been removed from Condition 6, Table 5 (formerly Condition 7, Table 6 in draft).</p> <p>A new Condition 7 and Table 6 have been added to reflect the Rural Landfill Regulations cover requirements for up to 500 tonnes of waste received per annum, and to reflect consistency with licences for the same activities.</p>

Condition	Summary of applicant's comment	Department's response
Condition 7, Table 6	Update of tyre burial location to 'Active Waste Rock Landform'. The practicality and impact to disturbing the King Waste Rock Landform for the purpose of tyre burial can be better managed through disposal within active landforms within the Premise Boundary.	The word 'active' has been included before 'WRL'. This condition is now Condition 6 and Table 5.
Condition 8, Table 7	Update limit to reflect the licence limit of 640,000 kL per annum. Current proposed limit is less than the licence limit. The update better reflects rates specified throughout the document (i.e. Table 3.	Limit updated to '640,000' to reflect the cumulative total of all water discharged into all pits.
Condition 8, Table 7	Update SWL m AHD limit to reflect the recommended RL's specified in Condition 5, Table 4 of this table. Addition of Ulysses Central Pit, and Orient Well to the limits. Current limit proposed SWL limit is not representative of 5 m BGL for Danluce Pit. Limits for other pits have not been included in the table and recommended to be added for completeness.	Unit updated to 'RL'. SWL limits updated to provide accurate m RL limits for each pit.
Condition 8, Table 7 (updated to condition 9, table 8)	Update pH notarisation to allow for in-field monitoring. Holding times of 6 hours for pH cannot be met due to the remoteness of the site. Similar condition for managing pH in field is part of the Gwalia Premise Licence L8337/2009/2 (held by Genesis), and systems are established to undertake the field pH assessments.	Notation updated to give pH and EC note 1.
Table 7	Spelling of 'Orient Wel' to 'Orient Well'	Typological error corrected.
Condition 9	Remove condition. Duplication of condition 8 requirement.	Condition removed.
Figure 4, Schedule 1	N/A	This Figure depicted the Kings WRL Landfill. As reference to the Kings WRL has been removed from the licence, this Figure is no longer required. All references to Figure 4 have been removed.
Update Map Figures Figure 2 & Figure 3, Schedule 1	<ul style="list-style-type: none"> Figure 3 is an older duplication of Figure 2 (delete figure 3). Figure 2 commentary should specify Ulysses Dewatering Network (currently mentions it as the Admiral/Danluce) 	Figures have been updated so that all dewatering pipelines and pits mentioned in the Licence are correctly depicted. Commentary for Figures have also been updated where required.