Application for Works Approval

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

Works Approval Number	W6754/2022/1
Applicant	Horizon Minerals Limited
ACN	007 761 186
File number	DER2022/000601
Premises	Cannon Gold Project City of Kalgoorlie Boulder Legal description - Within the mining tenements M25/333, M25/357, L25/48, L26/240 and L26/270 As defined by the coordinates in Schedule 1 of the Works Approval
Date of report	02 March 2023
Decision	Works approval granted

Christine Pustkuchen

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A/MANAGER, RESOURCE INDUSTRIES
REGULATORY SERVICES
an officer delegated under section 20 of the *Environmental Protection Act 1986* (WA)

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1. Decision summary

This decision report documents the assessment of potential risks to the environment and public health from emissions and discharges during the construction and operation of the premises. As a result of this assessment, works approval W6754/2022/1 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 02 November 2022, Horizon Minerals Limited (the applicant) submitted an application for a works approval to the department under section 54 of the *Environmental Protection Act 1986* (EP Act).

The application is to undertake construction works relating to mine dewatering at the Cannon Gold Project (the premises). The premises is approximately 30 km north-northwest of town of Kalgoorlie-Boulder and is located within the mining tenements M25/333, M25/357, L25/48, L26/240 and L26/270. A previous mining campaign has conducted in the premises between 2015 and 2017 and has suspended in August 2017. The premises retains remnant infrastructure including an open pit with a pit lake, two waste rock dumps, a haul road/access road, run of mine (ROM) Pad, and various other hardstand/laydown areas (Figure 1). The applicant anticipates recommencing mining activities at the premises developing an underground mining operation. It is proposed that the ore will be transported to a nearby operation, where the ore will be processed.

The premises relates to the category 6 and assessed design capacity under Schedule 1 of the *Environmental Protection Regulations 1987* (EP Regulations) which are defined in works approval W6754/2022/1. 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 works approval W6754/2022/1.

2.2.1 Proposed Activities

The applicant is seeking approval to discharge mine dewater from the Cannon open pit into the Golden Ridge open pit via an overland pipeline, including construction of infrastructure associated with the mine dewatering operation and water transfer. Approval is sought for an estimated throughput of 100,000 kiloliters (kL) including a 10% contingency.

The proposed activity involves construction of an approximately 12 km long HDPE pipeline to allow transfer of water from Cannon open pit to Golden Ridge pit as seen in Figure 1. Cannon pit holds approximately 90,000 kL of saline water in its pit lake. This water is required to be removed to expose the underground portal to allow for the underground mining operation to recommence. The applicant estimates that dewatering of Cannon pit is required at a rate of 25 L/s for 42 days.

Mine dewater will be abstracted via a submersible pump mounted on a pontoon within the Cannon pit lake, and then the abstracted water will be pumped into 4x 22kL or 2x 50kL polyethylene mine water storage tanks (figure 2) or tanks with a similar approximate volume, located on the north-western edge of the pit. These tanks will act as a transfer point prior to being sent to Golden Ridge pit. Beginning at the water storage tanks, the route predominantly follows internal road networks as well as a haul road on L25/48 for approximately 6.5 km until the intersection with L26/270 (figure 1).

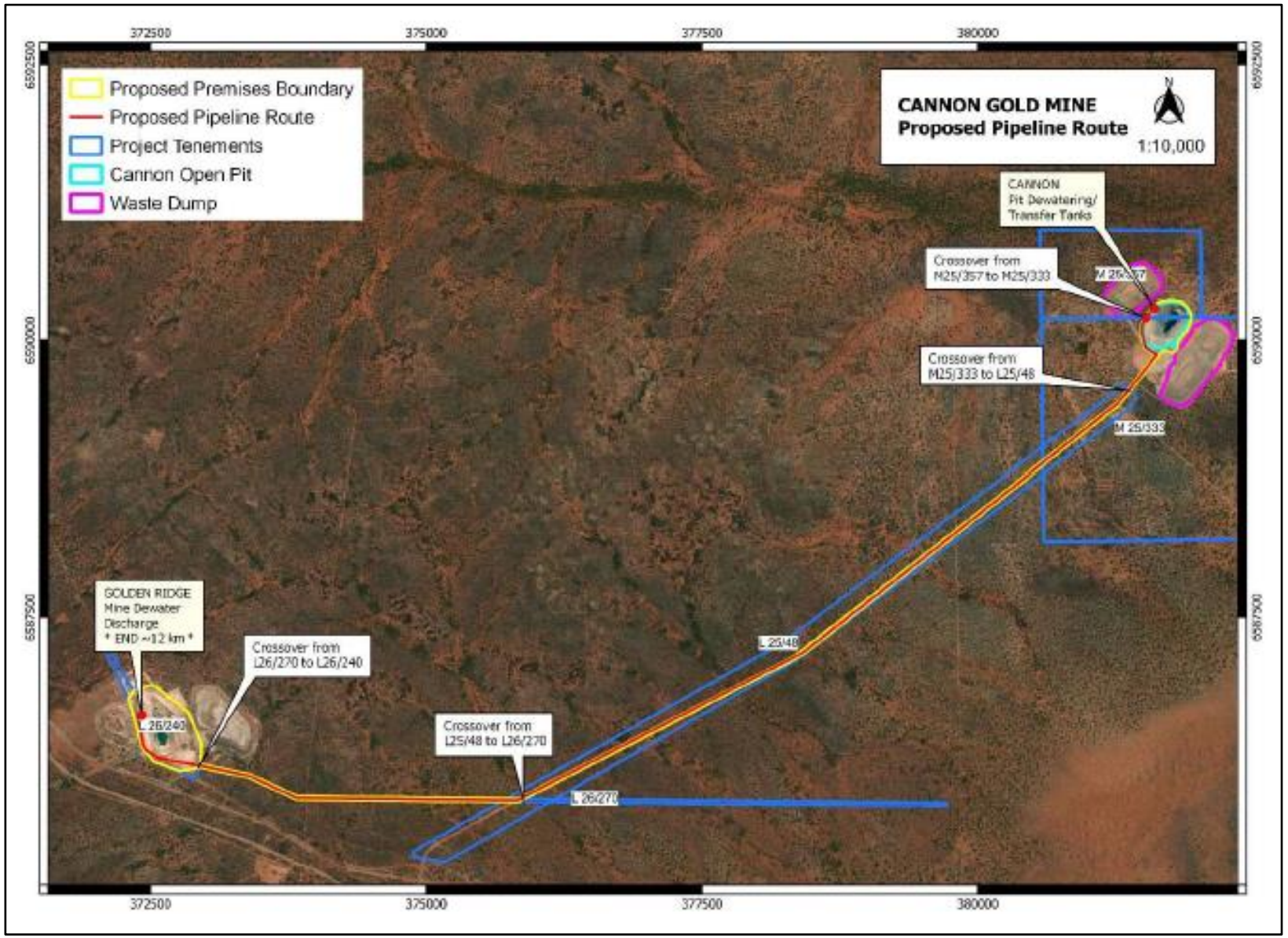

Figure 1: Site layout and proposed pipeline route

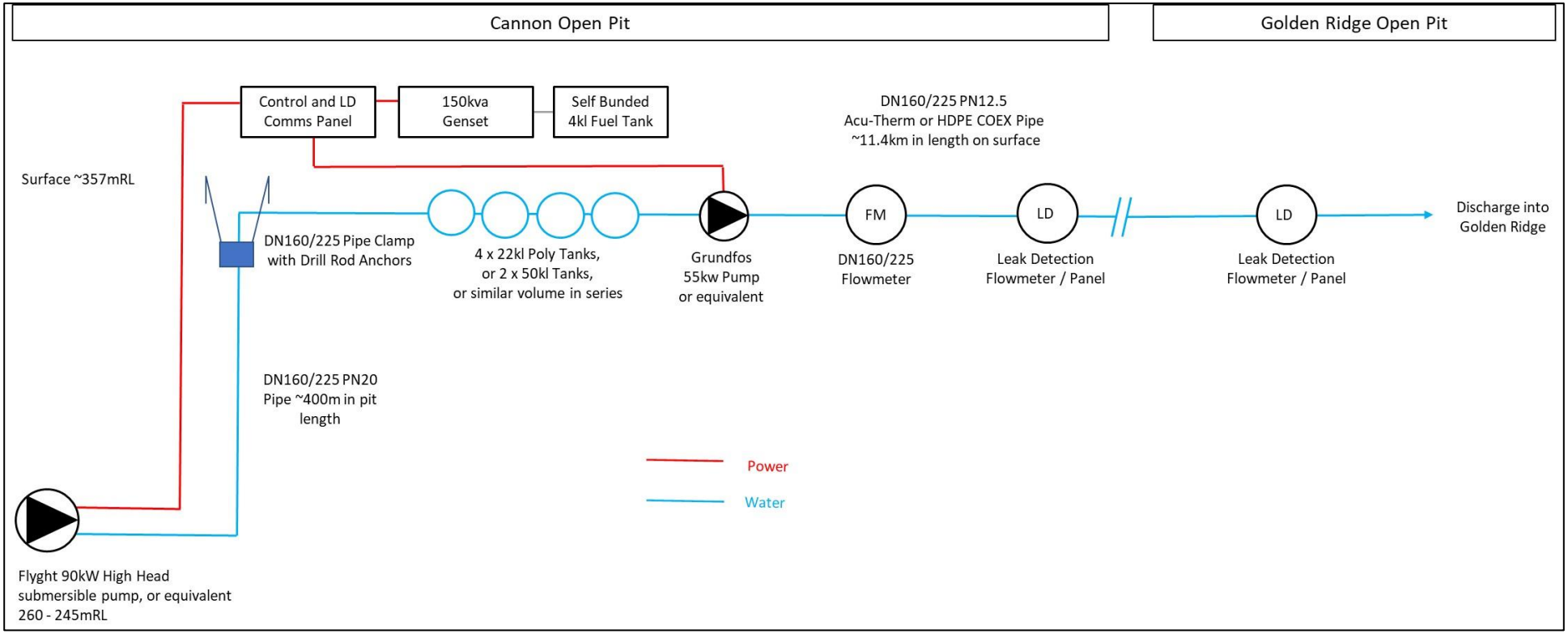

Figure 2: Schematic diagram for water abstraction and transfer

From that point, the pipeline will head towards west within L26/270 for approximately 3 km and will cross over onto L26/240 and terminate at the Golden Ridge Pit. The discharge outfall to be extend beyond the pit crest approximately 0.5 m to minimise potential impacts.

The route within L26/270 is not within a previously disturbed area and native vegetation clearing is required (approx. 1.5 ha). As this clearing is for a pipeline route, less than 10ha and occurs within a mining tenement, this clearing is authorised under the *Mining Act 1978*.

The applicant proposes to conduct environmental commissioning of the infrastructure to ensure quality of the mine dewater, discharge flow rate and infrastructure integrity. However, department recommends that these activities can be performed as a part of the time limited operation and environmental commissioning phase will not be required.

The applicant is anticipated to conduct the mine dewatering activities under time limited operations considering the temporary nature of the operation (approx. 42 days). Thus, a licence application will not be submitted by the applicant to be approved for any ongoing mine dewatering at the premises.

2.2.2 Pit water quality and mine dewater discharge impacts to the groundwater

Water quality assessment has undertaken at both Cannon Pit and the Golden Ridge pit in 2022, and Chappel bore (in 2020), which is located approximately 3km north of the Golden Ridge pit, to identify the characteristics in the pit lake water and the groundwater in the local aquifer (Table 1). Based on the results, it has determined that the water quality of both pits is similar with both pits containing saline water. The average salinities of the Cannon and Golden Ridge pits at >5 m depth are about 42,600 and 49,400 mg/L total dissolved solids (TDS), respectively, and the pH ranges between 7.0 and 8.0 pH units. Overall hydrochemistry of the water is also similar in both pit lakes.

Table 1: Water quality data of the Cannon Pit, Golden Ridge pit and the Chappel bore

Sample Location and Year **Water Quality Parameter**	**Cannon Pit Lake (2022)**	**Golden Ridge Pit Lake (2022)**	**Chappel Bore (2020)**
pH	7.97	7.85	6.95
Electrical Conductivity @25^{o}C	65,000	73,000	64,000
Total Dissolved Solids @180^{o}C	53,000	59,000	50,700
Hydroxide Alkalinity as$vCaCO_3$	<1	<1	<1
Carbonate Alkalinity as $CaCO_3$	<1	<1	<1
Bicarbonate Alkalinity as $CaCO_3$	223	182	653
Total Alkalinity as $CaCO_3$	223	182	653
Sulphate as SO_4	5750	4740	3480
Chloride	22400	26800	23000
Calcium	578	1370	1140
Magnesium	2550	2510	1880
Sodium	12800	16700	1380
Potassium	235	162	111

Aluminium	<0.05	0.13	<0.10
Antimony	<0.005	<0.01	-
Arsenic	0.008	0.025	0.024
Beryllium	<0.005	<0.01	-
Barium	0.070	0.074	-
Cadmium	0.0006	0.0021	0.0014
Chromium	<0.005	<0.010	<0.10
Cobalt	<0.005	0.019	-
Copper	<0.005	<0.010	-
Lead	<0.005	<0.010	<0.10
Manganese	0.018	0.486	3.74
Molybdenum	0.042	<0.010	-
Nickel	0.126	0.105	-
Selenium	<0.05	<0.10	<0.10
Silver	<0.005	<0.010	-
Uranium	<0.005	<0.010	-
Zinc	<0.025	<0.050	2.09
Boron	16.8	19.6	-
Iron	<0.25	<0.50	1.66
Mercury	<0.0002	<0.0002	<0.0002
Ammonia as N	0.24	0.24	0.17
Nitrite as N	0.02	<0.01	<0.01
Nitrate as N	0.55	0.07	<0.01
Nitrite + Nitrate as N	0.57	0.07	<0.01
Total Phosphorous as P	<0.02	0.03	<0.02
Reactive Phosphorous	<0.01	<0.01	<0.01

The qualities of the water in Cannon pit lake and Golden Ridge pit lake are similar to the pH in the groundwater in the local aquifer (Table 1). As defined in the *Goldfields Groundwater Area Management Plan 1994*, groundwater in the area is being used for the purpose of mining related activities including mineral processing. Due to the fact that the similar water quality in the pit lakes and the local aquifer, no significant impacts associated with disposal of water from Cannon Pit to Golden Ridge Pit are expected.

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 construction and operation which have been considered in this decision report are detailed in Table 2 below. Table 2 also details the control measures the applicant has proposed to assist in controlling these emissions, where necessary.

Table 2: Proposed applicant controls

Emission	Sources	Potential pathways	Proposed controls
Construction			
Dust Noise	Construction and installation of dewatering infrastructure (pipelines, bunds, pumps) Vehicle movements	Air/windborne pathway	• Significant dust/noise emissions will not be generated during the construction activities. Considerable separation distance to the potential sensitive receptors is also observed. However, the applicant proposed to, • Manage haul roads to minimize traffic and speed limit restricted to ~60 km/hr. • Driving to be restricted to marked/cleared roads.
Time limited Operation			
Dust Noise	Vehicle movements	Air/windborne pathway	• Separation distance is significant with any potential sensitive receptor. The applicant proposed to, • Manage haul roads to minimize traffic and speed limit restricted to ~60 km/hr. • Driving to be restricted to marked/cleared roads.
Hypersaline mine dewater	Operation of new dewatering pipelines and storage tanks	Rupture of pipeline causing hypersaline water discharge into the environment	• Pipeline to be contained within an open v-drain, with earthen bund as required, providing secondary containment along the length of the pipeline route. • Leak detection to be installed to monitor water transfer. • Visual inspection of the transfer pipeline to be undertaken daily (during active dewatering).

Emission	Sources	Potential pathways	Proposed controls
	Dewatering discharge into Golden Ridge Pit	Seepage of mine dewater through base and walls of the pit to soil and groundwater	• No control proposed. (Recent hydrochemistry data has shown that the pit water qualities are similar to the local aquifer when compared to water quality data from a nearby bore.)
		Overtopping of Golden Ridge pit	• Daily Visual inspection to be carried out
	Dewater used for dust suppression	Spray drift onto soil and vegetation	• No controls proposed
Hydrocarbons (eg. Hydraulic oil or diesel)	Mobile equipment maintenance and servicing activities Storage and use of hydrocarbons and chemicals.	Spills or leaks to ground, overflow during filling and/or breach of containment, resulting in direct discharge.	• No controls proposed.

3.1.2 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 3 and Figure 3 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 3: Sensitive human and environmental receptors and distance from prescribed activity

Human receptors	Distance from prescribed activity
Town of Kalgoorlie-Boulder	approximately 30 km east-southeast of Cannon Gold Project. **Note: screened out as a receptor due to separation distance**
Hampton Hill Homestead	Approximately 7km North of Cannon Gold Project **Note: screened out as a receptor due to separation distance**
Environmental receptors	**Distance from prescribed activity**
Threatened/Priority Fauna	Inactive and active Malleefowl mounds have been recorded within and around the premises. The most recent survey conducted by Botanica Consulting in August 2022 revisited mounds previously recorded in 2015 (Bamford) and

	conducted a targeted survey for Malleefowl along the proposed transfer pipeline route within L26/270. No evidence of Malleefowl was observed along the proposed pipeline route within L26/270 and therefore Botanica consulting noted that it is very unlikely that Malleefowl would use this area for mound building due to the low levels of leaf litter observed.
Surface water	Stream flow in the area is ephemeral and associated with significant rainfall events, 6 ephemeral streams intersect with the premises boundary. No permanent watercourses intersect with the premises boundary. Lake Yindarlgooda is the closest water body located 15km North East of Cannon pit, the lake is hypersaline and non-perennial.
Aboriginal and other heritage sites	The nearest registered aboriginal heritage sites #ID3011 and #ID1279 are approximately 2km and 3km North of Cannon.
Groundwater	The premises is located within the Goldfields Groundwater Area proclaimed under *Rights in Water and Irrigation Act 1914.* Groundwater is considered hypersaline at 30,000 to 150,000 mg/L Total Dissolved Solids (TDS) (DWER Geocortex). The regional standing water level (SWL) is estimated to be about 50 meters below ground level (mbgl) (Rockwater, 2022).
Native Vegetation	Native vegetation is present within and surrounding the premises boundary and is predominately open woodland. There are no conservation significant ecological communities.

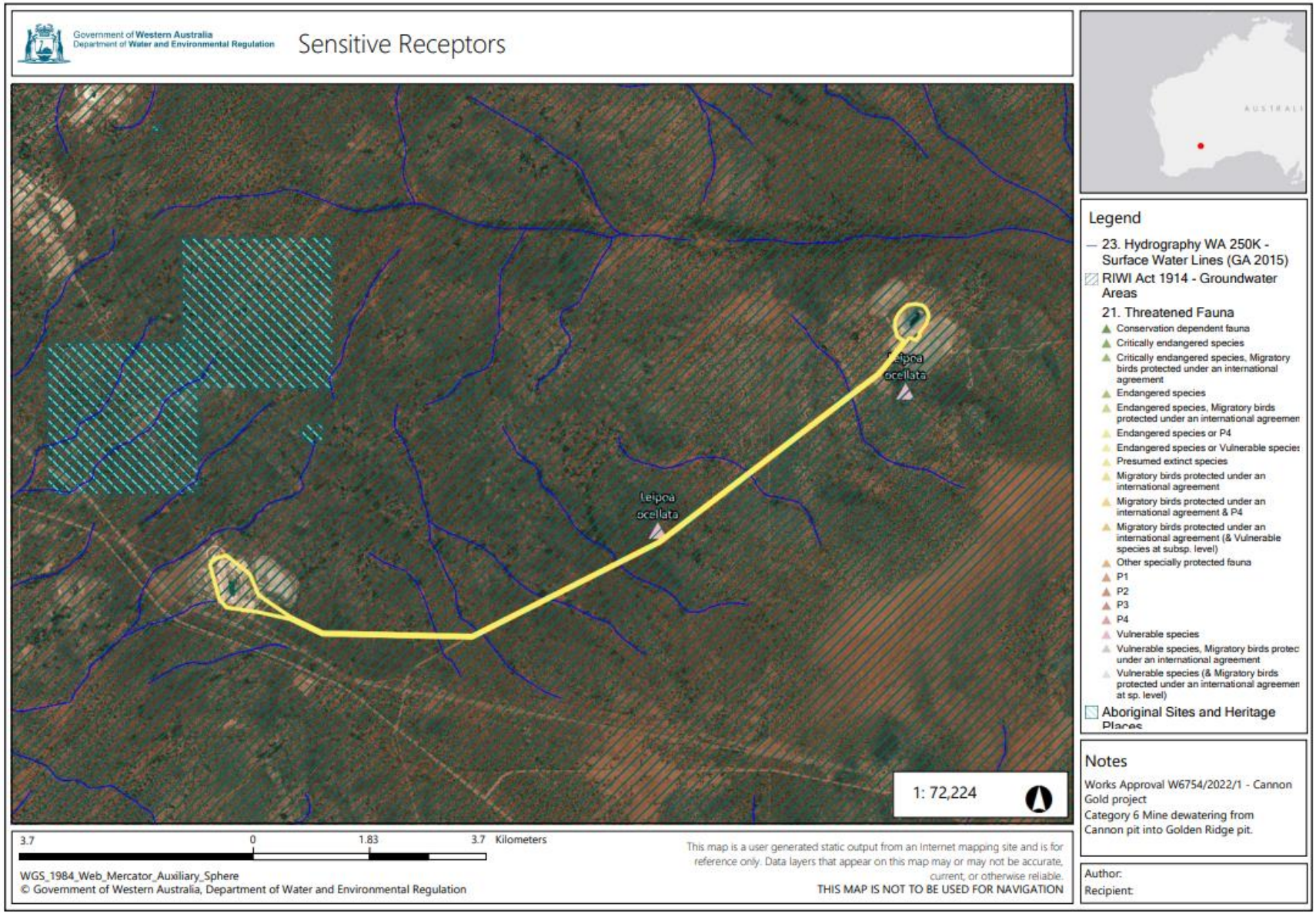

Figure 3: Distance to sensitive receptors

3.2 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 3.1. 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 3.1), these have been considered when determining the final risk rating. Where the delegated officer considers the applicant's proposed controls to be critical to maintaining an acceptable level of risk, these will be incorporated into the works approval as regulatory controls.

Additional regulatory controls may be imposed where the applicant's controls are not deemed sufficient. Where this is the case the need for additional controls will be documented and justified in Table 4.

Works approval W6754/2022/1 that accompanies this decision report authorises construction and time-limited operations. The conditions in the issued works approval, as outlined in Table 4 have been determined in accordance with *Guidance Statement: Setting Conditions* (DER 2015).

A licence is required following the time-limited operational phase authorised under the works approval to authorise emissions associated with the ongoing operation of the premises i.e., only if continued discharge into Golden Ridge pit is required.

Table 4: Risk assessment of potential emissions and discharges from the premises during construction, and time limited operation

Risk events					**Risk rating [1]** **C = consequence** **L = likelihood**	**Applicant controls sufficient?**	**Conditions [2] of works approval**	**Justification for additional regulatory controls**
Sources / activities	**Potential emission**	**Potential pathways and impact**	**Receptors**	**Applicant controls**				
Construction								
Construction and installation of dewatering infrastructure (pipelines, bunds, pumps) Vehicle movements	Dust	Air/windborne pathway causing impacts to health	Native Vegetation	Refer to Section 3.1	C = Slight L = Unlikely **Low Risk**	Y	N/A	N/A
	Noise	Construction activities carried out near potentially active Malleefowl mounds Impact: Disturbance to Malleefowl breeding	Malleefowl (Threatened fauna)	Refer to Section 3.1	C = Slight L = Unlikely **Low Risk**	Y	N/A	Additional regulatory controls are not required. Based on the information summarised in the section 3.1.2, during the recent survey, no evidence of Malleefowl was observed along the proposed pipeline route within L26/270. Also, it is noted that it is very unlikely that Malleefowl would use this area for mound building due to the low levels of leaf litter observed. Applicant also proposed to avoid disturbance to the dense shrublands where possible Malleefowl habitat /mounds occur.
Time-limited-operations								
Vehicle movements related to activities of mine dewatering operation	Dust	Air/windborne pathway causing impacts to health and amenity	Native Vegetation	Refer to Section 3.1	C = Slight L = Rare **Low Risk**	Y	N/A	N/A
	Noise / Disturbance	Vehicle movements near potentially active Malleefowl mounds Impact: Disturbance to Malleefowl breeding	Malleefowl (Threatened fauna)	Refer to Section 3.1	C = Slight L = Unlikely **Low Risk**	Y	N/A	Additional regulatory controls are not required. Based on the information summarised in the section 3.1.2, during the recent survey, no evidence of Malleefowl was observed along the proposed pipeline route within L26/270. Also, it is noted that it is very unlikely that Malleefowl would use this area for mound building due to the low levels of leaf litter observed. Applicant also proposed to avoid disturbance to the dense shrublands where possible Malleefowl habitat /mounds occur.
Operation of new dewatering pipelines and storage tanks	Hypersaline mine dewater	Rupture of pipeline causing hypersaline water discharge into the environment Impact: Soil	Soil Native Vegetation	Refer to Section 3.1	C = Minor L = Possible **Medium Risk**	Y	Condition 1 - Infrastructure requirements Condition 4,5,7 & 9 – Time limited operation, commencement, duration,	The Delegated Officer has determined that the Applicant's proposed controls including secondary containments and leak detection flowmeters, are adequate to manage any potential impacts from direct discharge of hypersaline mine dewater due to pipeline failure. Those controls have conditioned within the

		contamination and plant stress or death					and operating requirements Condition 10 – Time limited operation monitoring requirements	works approval in accordance with *Guidance statement: Risk Assessments (DER 2017)*. Some regulatory requirements apply for reporting and time limited operations commencement and duration. These are standard conditions required for most Works Approvals authorising mine dewatering activities within a prescribed premises.
		Spills / leaks of mine dewater storage tanks	Soil Native Vegetation	Refer to Section 3.1	C = Minor L = Unlikely **Medium Risk**	Y	Condition 1 - Infrastructure requirements	The Mine dewater storage tanks will be consisted of a series of four polythene tanks and to be placed on the northwestern edge of the pit. Thus, any spills or overtopping of mine dewater will possibly be captured into the Cannon pit and the direct discharge to the environment will be minimal. Therefore, the Delegated officers determined that additional controls are not required to manage any potation impacts from spills/leaks of mine dewater storage tanks.
Dewatering discharge into Golden Ridge Pit	Hypersaline mine dewater	Seepage of mine dewater through base and walls of the pit to soil and groundwater Impact: Contamination of groundwater, groundwater mounding	Groundwater Native vegetation	Refer to Section 3.1	C = Minor L = Unlikely **Medium Risk**	Y	Condition 1 - Infrastructure requirements Condition 4,5, 7,8 & 9 – Time limited operation commencement, duration, and operating requirements Condition 10 – Time limited operation monitoring requirements	Based on the water quality data, it has been identified that the water quality within each pit is very similar (Table 1). Also, hydrochemistry data shows that the pit water qualities are similar to the local aquifer when compared to water quality data from a nearby bore. Additionally, there are no known groundwater dependent ecosystems, sensitive aquifers or groundwater users nearby to the Cannon or Golden Ridge pits that could be affected by a change in water level or quality. The groundwater table in the vicinity of the Project area is between 60 and 80 m below ground level. Thus, significant groundwater mounding that could impact native vegetation is not expected. The applicant's proposed controls are deemed adequate to identify and mitigate any potential risks from seepage of mine dewatering. Some regulatory requirements apply for reporting and time limited operations commencement and duration. These are standard conditions required for most Works Approvals authorising mine dewatering activities within a prescribed premises.
		Overtopping of Golden Ridge pit Impact: Soil and groundwater contamination and plant stress or death	Soil Groundwater Native vegetation	Refer to Section 3.1	C = Moderate L = Rare **Medium Risk**	Y	Condition 1 - Infrastructure requirements Condition 4,5,6 & 7 – Time limited operation commencement, duration, and operating requirements Condition 10 – Time limited operation monitoring requirements	A recent dewatering assessment has estimated that the total void volume of Golden Ridge Pit to be about 7,113,000 m^3. Currently, 358,000 m^3 is occupied by the Golden Ridge pit lake The proposed 90,000 m3 of mine dewater discharge will approximately occupy 1.5% of the capacity of the Golden Ridge pit. It is also estimated that the proposed dewatering activity will raise the current pit water level by 6m and thus the final pit water level is estimated as 94 mbgl. Therefore, no overtopping of the Golden Ridge pit will be expected as a consequence of the proposed dewatering activities. Additional regulatory controls are not required to minimise any potential impacts from overtopping of the Golden Ridge pit other than discharge limit and those requiring reporting and authorising time limited operations commencement and duration.

Use of hypersaline dewater effluent for dust suppression	Hypersaline mine dewater	Direct discharge to land	Soil Native vegetation	Refer to Section 3.1	C = Minor L = Possible **Medium Risk**	N	**<u>Condition 7 – operating requirements</u>**	The applicant is proposing to use hypersaline mine dewatering effluent for dust suppression activities within the premises boundary. Low risk on site impacts may occur from spray drift of hypersaline water causing vegetation distress or death. A condition has been added to the works approval to ensure the works approval holder avoids impact to native vegetation along haul roads and open areas.
Mobile equipment maintenance and servicing activities. Storage and use of hydrocarbons and chemicals.	Hydrocarbons (eg. Hydraulic oil or diesel)	Spills or leaks to ground, overflow during filling and/or breach of containment, resulting in direct discharge. Impact: Soil and groundwater contamination causing plant stress or death	Soil Groundwater Native vegetation	Refer to Section 3.1	C = Slight L = Possible **Low Risk**	Y	N/A	Proposed infrastructure includes 4kL self-bunded diesel fuel tank to store required fuel for the operation. Possible hydrocarbon spills/discharge can be occurred through mobile equipment, during maintenance and servicing, and storage. Risk of hydrocarbons spills has been determined to be low. This emission is adequately regulated by the Environmental Protection (Unauthorised Discharges) Regulations 2004

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. **<u>Bold and underline text</u>** 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
Application advertised on the department's website on 22 November 2022	None received	N/A
Local Government Authority advised of proposal on 22 November 2022 (City of Kalgoorlie-Boulder)	City of Kalgoorlie-Boulder replied on the 03 January 2023 advising that "if the works approval activities result in the installation of or alteration of sanitary facilities, then an application is required to be submitted to the City of Kalgoorlie-Boulder in accordance with the *Health (Treatment of Sewage and Disposal of Effluent and Liquid Waste) Regulations 1974* prior to any construction or alteration."	No further action needed. Applicant does not propose a construction or installation of a Sewage facility within this Works Approval application. It is applicant's responsibility to obtain any relevant approvals from the local government authority if they are planning to construct/install a sewage facility. If that facility triggers the Category 54 threshold under the *Environmental Protection Regulation 1987*, the applicant is required to obtain the relevant approvals under Part V of the *Environmental Protection Act 1986* prior to construction and operation of that particular facility.
Department of Mines, Industry Regulation and Safety (DMIRS) advised of proposal 22 November 2022	None received	N/A
Applicant was provided with draft documents on10 February 2023	Comments received on 28 February 2023. Refer to Appendix 1.	Refer to Appendix 1.

5. Conclusion

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

References

1. Email titled “Application for Works Approval - Cannon Gold Project” dated 02/11/2022 authored by Catherine Wharton, available at DWER records (DWERDT680572).
2. Department of Water and Environmental Regulation (DWER) 2019, *Guideline: Decision Making*, Joondalup, Western Australia
3. Department of Environment Regulation (DER) 2015, *Guidance Statement: Setting Conditions*, Perth, Western Australia.
4. Department of Water and Environmental Regulation (DWER) 2020, *Guideline: Environmental Siting*, Perth, Western Australia.
5. DWER 2020, *Guideline: Risk Assessments*, Perth, Western Australia.

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

Condition / Item	Summary of applicant's comment	Department's response
Condition 1 Table 1.1	item (g): states "4x 22kL polyethylene mine dewater storage tanks…" Applicant mentioned that they will use "2 x 50kL tanks in lieu of 4 x 22kL tanks may be utilised, or a similar approximate volume"	Noted the proposed change. As the proposed storage tanks contains approximately similar volume as originally proposed, the proposed changes to the storage tanks are acceptable and therefore, the instrument and the decision report have updated accordingly.
Decision Report		
Page 1, Section 2.2	DWER requested the applicant to provide information on where the ore will be processed. The applicant responded that "Horizon has an allocation at FMR Investments Greenfields Mill near Coolgardie, where the ore shall be processed."	Noted. Updated the section to include this information.
Page 1, Section 2.2.1	It is stated that ".. water will be pumped in to four 22kL polyethylene mine water storage tanks (figure 2) …" Applicant has responded stating that "2 x 50kL tanks in lieu of 4 x 22kL tanks may be utilised, or a similar approximate volume".	Proposed changes are acceptable and updated the section accordingly.
Page 3 Figure 2	Schematic diagram for water abstraction and transfer. Applicant commented stating that "2 x 50kL tanks in lieu of 4 x 22kL tanks may be utilised, or a similar approximate volume." "in addition to constructing the pipeline with DN160 PN12.5 Acu-Therm pipe, the pipeline may also be constructed with HDPE COEX in lieu of Acu-Therm, and DN225 sized pipe."	Noted the proposed changes. Section updated with a new schematic diagram that include all the proposed changes.
Page 7	Reference Error.	Noted and updated the section with the correct reference.
Page 8 Section 3.2.1	Typographical error – "Lake Tindarlgooda" should be corrected to "Lake Yindarlgooda"	Noted and corrected accordingly.

Appendix 2: Application validation summary

SECTION 1: APPLICATION SUMMARY					
Application type					
Works approval	☒				
Licence	☐	Relevant works approval number:		None	☐
		Has the works approval been complied with?		Yes ☐ No ☐	
		Has time limited operations under the works approval demonstrated acceptable operations?		Yes ☐ No ☐ N/A ☐	
		Environmental Compliance Report submitted?		Yes ☐ No ☐	
		Date Report received:			
Renewal	☐	Current licence number:			
Amendment to works approval	☐	Current works approval number:			
Amendment to licence	☐	Current licence number:			
		Relevant works approval number:		N/A	☐
Registration	☐	Current works approval number:		None	☐
Date application received		02/11/2022			
Applicant and Premises details					
Applicant name/s (full legal name/s)		Horizon Minerals Limited			
Premises name		Cannon Gold Project			
Premises location		Part of tenements: M25/333: Black Mountain Gold - 28/03/2031 M25/357: Black Mountain Gold - 17/08/2036 L25/48: Black Mountain Gold - 20/07/2036 L26/240: PolyMetals - 19/08/2033 L26/270: PolyMetals - 24/04/2037			
Local Government Authority		City of Kalgoorlie Boulder			
Application documents					
HPCM file reference number:		DER2022/000601			
Key application documents (additional to application form):		Attachment 1A: Proof of Occupier Status Attachment 1B: ASIC Company Extract – Black Mountain Gold Attachment 1B: ASIC Company Extract – HRZ Attachment 1B: ASIC Company Extract – Polymetals Attachment 2 – Prescribed Premises Boundary Map Attachment 2A - Prescribed Premises Boundary Coordinates Attachment 3A – Env Commissioning Plan Attachment 3B – Proposed activities Attachment 6A - Emissions and Discharges			

	Attachment 7 – Environmental siting Attachment 9 – Works Approval Costs
Activities	
Summary of proposed activities or changes to existing operations.	**Works approval** Construction of: • Dewatering pump • 4x 22kL poly mine water storage tanks • Transfer Pump • Dewatering Transfer Pipeline (~12km overland pipeline) • 4kL fuel tank Time limited operations: Transfer of 90,000kL of mine dewater from Cannon Pit to Golden Ridge Pit at approximately 25 L/s for 42 days under TLO. The dewatering of Cannon pit is required to expose the underground portal position to allow for the recommencement of underground mining at Cannon. Ongoing continuous dewatering of the cannon pit is not required hence, the applicant does not intend to apply for a licence. The water in Golden Ridge Pit will be subsequently pumped back to Cannon Pit for use underground and for dust suppression as Cannon mine will not produce sufficient water for these purposes. The applicant has proposed environmental commissioning for the dewatering pipeline and included an environmental commissioning plan (Attachment 3A) inclusive of water quality testing.

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

Table 1: Prescribed premises categories

Prescribed premises category and description	**Proposed production or design capacity**	**Proposed changes to the production or design capacity (amendments only)**
Category 6: Dewatering	Proposed – up to 100,000 tonnes per annual period (10% contingency included)	-

Legislative context and other approvals

Has the applicant referred, or do they intend to refer, their proposal to the EPA under Part IV of the EP Act as a significant proposal?	Yes ☐ No ☒	Referral decision No: Managed under Part V ☐ Assessed under Part IV ☐
Does the applicant hold any existing Part IV Ministerial Statements relevant to the application?	Yes ☐ No ☒	Ministerial statement No: EPA Report No:
Has the proposal been referred and/or assessed under the EPBC Act?	Yes ☐ No ☒	Reference No:
Has the applicant demonstrated occupancy (proof of occupier status)?	Yes ☐ No ☒	Mining lease / tenement ☒ Expiry: M25/333: Black Mountain Gold - 28/03/2031 M25/357: Black Mountain Gold - 17/08/2036 L25/48: Black Mountain Gold - 20/07/2036 L26/240: PolyMetals - 19/08/2033 L26/270: PolyMetals - 24/04/2037 Applicant has provided ASIC company statements (not extracts) showing: - Horizon Minerals own Black mountain and; - Macpherson's Resources own Polymetals.
Has the applicant obtained all relevant planning approvals?	Yes ☐ No ☐ N/A ☐	Approval: Expiry date: If N/A explain why?
Has the applicant applied for, or have an existing EP Act clearing permit in relation to this proposal?	Yes ☐ No ☒	CPS No: N/A Exemption applies under the Mining Act 1978. To allow clearing of up to 10ha per financial year per authority area. Approval is currently being sought from DMIRS. Applicant plans to clear on L26/270 only.
Has the applicant applied for, or have an existing CAWS Act clearing licence in relation to this proposal?	Yes ☐ No ☒	Application reference No: N/A Licence/permit No: N/A
Has the applicant applied for, or have an existing RIWI Act licence or permit in relation to this proposal?	Yes ☒ No ☐	Application reference No: Licence/permit No: GWL207297 Valid until 28/04/2032

Does the proposal involve a discharge of waste into a designated area (as defined in section 57 of the EP Act)?	Yes ☐ No ☒	Name: N/A Type: N/A Has Regulatory Services (Water) been consulted? Yes ☐ No ☐ N/A ☒ Regional office: N/A
Is the Premises situated in a Public Drinking Water Source Area (PDWSA)?	Yes ☐ No ☒	Name: N/A Priority: N/A Are the proposed activities/ landuse compatible with the PDWSA (refer to WQPN 25)? Yes ☐ No ☐ N/A ☒
Is the Premises subject to any other Acts or subsidiary regulations (e.g. *Dangerous Goods Safety Act 2004*, *Environmental Protection (Controlled Waste) Regulations 2004, State Agreement Act xxxx*)	Yes ☐ No ☒	N/A
Is the Premises within an Environmental Protection Policy (EPP) Area?	Yes ☐ No ☒	N/A
Is the Premises subject to any EPP requirements?	Yes ☐ No ☒	N/A
Is the Premises a known or suspected contaminated site under the *Contaminated Sites Act 2003*?	Yes ☐ No ☒	N/A