

Decision Report

Application for Licence

Part V Division 3 of the Environmental Protection Act 1986

Licence Number L7910/2003/6

Applicant MacPhersons Resources Limited

ACN 139 357 967

File Number 2012/006888

Premises Nimbus Silver-Zinc-Gold Project

Mining tenements M26/490 and M26/598

KALGOORLIE WA 6430

Date of Report 18 February 2021

Decision Licence granted

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

The Delegated Officer has determined to renew Licence L7910/2003/6 for the Nimbus Silver-Zinc-Gold Project (the Premises). The renewal is administrative in nature however the Premises is presently in care and maintenance, so this is provided for in the approved throughput and conditions of the renewed licence. This does not alter the risk profile of the Premises, as the primary activity, emissions and receptors as stated in the original approval will remain unchanged.

This Decision Report documents the changes made pursuant to section 59 and 59(B) of the *Environmental Protection Act 1986* (EP Act). As a result of this assessment, Licence L7910/2003/6 has been granted.

2. Scope of assessment

2.1 Regulatory framework

In completing the assessment documented in this Decision 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 and overview of Premises

On 28 October 2020, MacPhersons Resources Limited (the applicant) submitted an application for a licence to the department under section 57 of the *Environmental Protection Act 1986* (EP Act).

The application is to seek a renewal of the existing licence relating to processing of metallic ore at the Premises. The Premises is approximately 14 km east of the City of Kalgoorlie-Boulder.

The Premises relates to the category and assessed production capacity under Schedule 1 of the *Environmental Protection Regulations 1987* (EP Regulations) which are defined in Licence L7910/2003/6. The infrastructure and equipment relating to the premises category and any associated activities which the department has considered in line with *Guidance Statement: Risk Assessments* (DER 2017) are outlined in Licence L7910/2003/6.

There are no changes proposed to the activities carried out on the Premises and the site has been in care and maintenance since 2007 with the processing plant decommissioned. The mining tenement containing the major infrastructure, M26/490 expires on the 26 February 2022. As the company will no longer have occupancy of the tenement that is the major part of the licenced Premises L7910/2003/6 can only be renewed for the remaining term of the mining lease. Should tenement M26/490 be renewed the applicant will either need to apply to amend or renew the licence for the Premises to keep the licence active.

Prior to being placed in care and maintenance the Premises was found to be processing ore with high levels of mercury, and therefore became registered as a contaminated site with the status of contaminated – remediation required. A 'Contaminated Sites Act 2003 (CS Act): basic summary of records search response', covering the premises, is attached at Appendix 3. The Delegated Officer notes that the Applicant is required to carry out further investigations, including soil, groundwater and surface water monitoring, as well as a Human Health Risk Assessment, in accordance with the provisions of the CS Act and separate to this licence renewal application.

Two works approvals are current for the Premises:

 W5574/2013/1 (expires 16 February 2022) – authorises construction of a Category 89: putrescible landfill. No documentation on the completion of construction or application for addition of Category 89 to the licence has been received by the Department so this category has not been added to the licence. Disposal of putrescible waste is not currently authorised at the Premises.

 W5726/2014/1 (expires 7 December 2022) – authorises construction of new processing plant infrastructure and a new TSF as an integrated waste landform on a new mining tenement. No documentation on the completion of construction or application for addition of the new infrastructure and tenement to the licence has been received by the Department therefore these details have not been added to the licence. Disposal of tailings to any point other than TSF2 is not approved under L7910/2003/6.

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 *Guidance Statement: Risk Assessments* (DER 2017).

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.

Given the Premises is currently on care and maintenance with no ore processing operations and therefore no emissions, this licence renewal is administrative only. Emissions and discharges have not been reassessed at this time. The following administrative changes have been made to the licence and conditions:

- The licence has been converted to the new format;
- Records and reporting conditions have been updated to the new standard conditions removing redundancies in the wording;
- The premises map in Schedule 1 (Figure 1) of the licence has been updated to the requirements of the current template without alteration of the boundary;
- Schedule 2 has been removed as a redundant form given the new format of condition 10:
- The authorised production capacity (throughput) for category 5 operations has been set at 50,000 tonnes of ore per year; and
- Condition 17 has been added to the licence, requiring the Applicant to notify the Department six months in advance of recommencing ore processing operations at the Premises.

The Delegated Officer notes that the Applicant will need to apply for amendments to the licence should the proposed new infrastructure authorised under W5574/2013/1 and W5726/2014/1 be constructed, in order to allow ongoing operation of proposed new infrastructure. In addition, prior to recommencement of operations, the suitability of existing infrastructure on the Premises may need to be reviewed, which may trigger the requirement for additional assessment and approvals under Section 53 of the EP Act

4. Consultation

Table 1 provides a summary of the consultation undertaken by the department.

Table 1: Consultation

Consultation method	Comments received	Department response
Application advertised on the department's website (15/1/2021)	None received	N/A

Local Government Authority advised of proposal (15/1/2021)	None received	N/A
Department of Mines, Industry Regulation and Safety (DMIRS) advised of proposal (15/1/2021)	 DMIRS replied on 25/01/2021 advising that: The site is in 'Care and Maintenance' The tenements in the application are correct and M26/490 expires on 26/01/2022 Mining proposal 55304 for a processing plant and heap leach facility to process 1,000,000 tonnes per annum was approved on 2/10/2015. A mine Closure Plan has been submitted (ID: 83578) but not approved. 	The DMIRS response confirms the site is in 'Care and Maintenance' and the expiry date of the tenement. The mining proposal approved by DMIRS is noted to potentially include a processing method not yet assessed for the Premises and for a much higher throughput than assessed for works approval W5726/2014/1.
Applicant was provided with draft documents on (4/2/2021)	Refer to Appendix 1	Refer to Appendix 1

5. Conclusion

Based on the assessment in this Decision Report, the Delegated Officer has determined that the application to renew licence L7910/2003/6 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) 2016, *Guidance Statement: Environmental Siting*, Perth, Western Australia.
- 2. DER 2017, Guidance Statement: Risk Assessments, Perth, Western Australia.
- 3. DER 2015, Guidance Statement: Setting Conditions, 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
2	There are three ponds adjacent to each other south of the plant area, with the western and central ponds currently decommissioned. The eastern pond is still in use for storage of water from the Chappell bore (Groundwater Licence GWL 155204), when the bore is running to provide water for dust suppression. When the site comes out of care and maintenance, the eastern pond shall be used for return water / decant and no longer used for dust suppression.	Noted. Works to re-commission or repurpose ponds are actions that will be considered actions covered by Condition 17.
3	When the Chappell bore is not operating, there are no inspections on the line. When the bore is pumping, the line and dam are inspected every four hours (although not a condition of the GWL).	Water extraction from the Chappell bore is not part of the licenced activities. The inspections referred to in Condition 3 of the licence are inspections of the tailings and return water pipelines that run between the plant or ponds and the tailings storage. As there has been no application for amendment of the licence to accommodate Care and Maintenance conditions the tailings and return water pipelines are still required to be inspected twice daily. To make the condition reflect the non-operational state of the facility the frequency will be amended to: 'twice daily during operation of the plant and tailings storage facility'.
4	The Mercury Management Plan was last revised in April 2019 (Version 6.0). Plan was attached.	It is noted that the numbering for dust suppression in the 2019 version is now Section 6.9 and Condition 4 will be amended accordingly.
17	The company does not object to this clause.	Acknowledged.
N/A	In comment on the expiry date being set at 26/02/2022, and the reasoning for this being the expiry of the tenement limiting the proof of occupancy to this time, the applicant has replied:	As stated in the Application from for the renewal of the licence:
	We believe the inference that "the company will no longer have occupancy of the tenement" is assumed, and that extension of mining tenements, although not guaranteed, are a very common occurrence and a normal course of the Mining Act 1978 provided the tenements are in	Occupier is defined in section 3 of the EP Act and includes a person in occupation or control of the premises, or occupying a different part of the premises whether or not that person is the owner. Note: if a lease holder, the applicant must be the holder

Condition	Summary of applicant's comment	Department's response
	good standing, which in the case of M26/490, this tenement is in good standing. Our preference is that the Licence be extended as a normal 5 year period, with a caveat that the tenement is extended beyond February 2022, otherwise the Licence is rescinded at that time. If this is not possible, we request that a new application fee and full assessment should not be required to extend the Licence in one year's time, reducing duplication of work for both MacPhersons and the Department. Furthermore, if a new application is required, we request a rebate be applied for the new application in consideration of the licence being extended for one of a possible five years.	of an executed lease, not just an agreement to lease. As the lease of the tenement expires without evidence of a further executed lease held by the applicant over the Premises then the licence expiry remains at 26/02/2022. The application fee is calculated in the same way as the annual fee and so there is no increased payment being required from the applicant than if an annual fee had been required rather than a renewal application. It should also be noted that there has not been a full review of the licence during this renewal assessment as the renewal was primarily administrative in nature. Given that there appears to be discrepancies in the approvals provided by DMIRS and DWER in relation to the mining tenement M26/490 a review of the authorisations currently held covering the tenement is advisable.

Appendix 2: Application validation summary

SECTION 1: APPLICATION SUMMARY (as updated from validation checklist)					
Application type					
Works approval					
		Relevant works approval number:		None	
		Has the works approval been complied with?		Yes □	No □
Licence		Has time limited operations under the works approval demonstrated acceptable operations?		Yes □	No □ N/A □
		Environmental Compliance Report / Critical Containment Infrastructure Report submitted?		Yes □ No □	
		Date Report received:			
Renewal		Current licence number:	L7910/2003/5		' 5
Amendment to works approval		Current works approval number:			
Amendment to licence		Current licence number:			
Amendment to licence	Ш	Relevant works approval number:		N/A	
Registration		Current works approval number:		None	
Date application received					
Applicant and Premises details					
Applicant name/s (full legal name/s)	MacPhersons Resources Ltd				
Premises name		Nimbus Silver-Zinc-Gold Project			
Premises location		Mining tenements: M26/490 and M26/598			
Local Government Authority	City of Kalgoorlie-Boulder				
Application documents					
HPCM file reference number:		2012/006888-1~3			
Key application documents (addition application form):	Previous licence				
Scope of application/assessment					
Summary of proposed activities or changes to existing operations.	Operation of Nimbus processing plant. Renewal with no amendments to existing operations.				

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

Table 1: Prescribed premises categories

Prescribed premises category and description	Assessed production or design capacity	Proposed changes to the production or design capacity (amendments only)
Category 5: Processing or beneficiation of metallic or non-metallic ore	120,000 tonnes per annual period	50,000 tonnes per annual period as site is on care and maintenance

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 □	Certificate of title □ General lease □ Expiry: Mining lease / tenement ⊠ Expiry: M26/490 – 26/02/2022 M26/598 – 10/10/2025 Other evidence □ Expiry:
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 No clearing is proposed.
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 No clearing is proposed.

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: GWL178231(3)
Does the proposal involve a discharge of waste into a designated area (as defined in section 57 of the EP Act)?	Yes ⊠ No □	Name: Goldfields Type: Proclaimed Groundwater Area Has Regulatory Services (Water) been consulted? Yes ☒ No ☐ N/A ☐ Regional office: Swan Avon/Goldfields
Is the Premises situated in a Public Drinking Water Source Area (PDWSA)?	Yes □ No ⊠	Name: N/A Priority: P1 / P2 / P3 / 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 ⊠	
Is the Premises within an Environmental Protection Policy (EPP) Area?	Yes □ No ⊠	
Is the Premises subject to any EPP requirements?	Yes □ No ⊠	
Is the Premises a known or suspected contaminated site under the Contaminated Sites Act 2003?	Yes ⊠ No □	Classification: contaminated – remediation required (C–RR) Date of classification: 18 June 2014 Basic Summary of Results downloaded from Contaminated Sites database available on DWER website and attached to this document as Appendix 3

Appendix 3: Contaminated Sites summary



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Contaminated Sites Act 2003 Basic Summary of Records Search Response

Report generated at 10:15:56AM, 04/01/2021

Receipt No:

ID No: 12956

Search Results

This response relates to a search request received for:

Boorara, WA, 6431

Nimbus Silver Mine Mining Tenement M26/490, Crown Reserve 17642 on Part of Lot 239 on Plan 194182 as shown on certificate of title LR3138/2, Boorara WA 6431

This parcel belongs to a site that contains 1 parcel(s).

According to Department of Water and Environmental Regulation records, this land has been reported as a known or suspected contaminated site.

Address

Boorara, WA, 6431

Nimbus Silver Mine Mining Tenement M26/490, Crown Reserve 17642 on Part of Lot 239 on Plan 194182 as shown on certificate of title LR3138/2, Boorara WA 6431

Parcel Status

Classification: 18/06/2014 - Contaminated - remediation required

Nature and Extent of Contamination:

Heavy metal and cyanide contamination is present in soil and groundwater associated with the site's mineral processing and waste disposal facilities.

Restrictions on Use:

Other than for remediation, access to the site is prohibited without the preparation of a site-specific health and safety management plan to address risks to human health or until remedial works have been successfully completed.

Reason for Classification:

This site was reported to the Department of Environment Regulation (DER) as per reporting obligations under section 11 of the 'Contaminated Sites Act 2003' (the Act), which commenced on 1 December 2006. The site classification was based on information submitted to DER by May 2008. These Reasons for Classification have been updated to reflect additional technical information submitted to DER by April 2014.

The site was used as a facility for the open pit mining and mineral processing of gold and silver, including tailings and effluent ponds, processing plant, smelting works, tailings pipeline and in-pit tailings disposal facilities. These are land uses that have the potential to cause contamination as specified in the guideline "Potentially Contaminating Activities, Industries and Land uses" (Department of Environment [DoE], October 2004). It is understood that the operations on site have currently ceased and facility is in "care and maintenance" mode only.

The site was the subject of an occupational health and safety report in August 2006 relating to the possible exposure of workers to mercury vapours, derived from contaminated silver ore within the mineral processing facility. Elevated blood mercury concentrations in workers on site were recorded. As a result, the processing of silver ores on site was suspended.

Between September 2006 and February 2008 the site has been the subject of limited soil and

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Contaminated Sites Act 2003 Basic Summary of Records Search Response

Report generated at 10:15:56AM, 04/01/2021

groundwater investigations and visual surveys.

Soil investigations carried out in July 2007 and February 2008 identified inorganic mercury, cyanide, lead and arsenic in near surface soils in a number of locations about the processing plant, tailings pipeline, ore stockpile and waste disposal area, exceeding Health Investigation Levels for commercial/Industrial use (HIL F), as published in 'Assessment Levels for Soil, Sediment and Water' (DoE, 2003).

In February 2008, limited sampling was undertaken within the water accumulated within the effluent ponds, tailings dam and the two open pit excavations. The analysis of this water identified arsenic, lead and mercury at concentrations exceeding Freshwater Guidelines (FWG) and Australian Drinking Water Guidelines (ADWG) as published in 'Assessment Levels for Soil, Sediment and Water' (DoE, 2003).

Limited groundwater investigations within the mine tailing disposal pit were carried out between September and November 2006. These investigations identified mercury and cyanide in groundwater exceeding FWG and ADWG and copper and zinc exceeding FWG as published in 'Assessment Levels for Soil, Sediment and Water' (DoE, 2003). Additional investigations carried out in July 2007 confirmed the presence of mercury, cyanide and other metals in groundwater exceeding ADWG and FWG.

Visual inspection of the site was conducted in August 2006, December 2006 and April 2008. These inspections identified a number of breaches in pipeline integrity that resulted in tailing spills and areas of mercury standing/residues around existing plant structures, building and outdoor areas within the processing facility. In addition, an area to the northeast of the processing plant had been used for the unauthorised disposal of mine tailings known to exhibit elevated concentrations of heavy metal contamination including mercury and cyanide.

The site has been the subject of three stages of remedial works undertaken between 2008 and 2011. These works were primarily focused on the clean-up of plant infrastructure and areas where elevated mercury had been previously identified. DER understands that plant infrastructure and some equipment was washed, dismantled and/or decommissioned and disposed within the tailings storage facility. However, DER has not been provided with sufficient evidence to indicate that these works were appropriate or successful.

DER understands that routine groundwater monitoring, has been carried out since 2009 to comply with the premises' Part V 'Environmental Protection Act 1986' licence conditions. However, this data contains insufficient technical/hydrogeological information to meet the contamination investigation standards set out in DER's 'Contaminated Sites Management Series Guidelines'.

As an appropriate human health risk assessment has not been carried out, DER cannot comment on the suitability of the site for its current or proposed future re use as an operation mine site.

As the site has been shown to be contaminated, and remediation is required to reduce unacceptable risks to human health, the environment or any environmental value to acceptable levels, the site is classified as 'contaminated - remediation required'.

DER, in consultation with the Department of Health, has classified this site based on the information available to DER at the time of classification. It is acknowledged that the contamination status of the site may have changed since the information was collated and/or submitted to DER, and as such, the usefulness of this information may be limited.

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Contaminated Sites Act 2003 **Basic Summary of Records Search Response**

Report generated at 10:15:56AM, 04/01/2021

In accordance with Department of Health advice, if groundwater is being, or is proposed to be abstracted, DER recommends that analytical testing should be carried out to determine whether the groundwater is suitable for its intended use. **Action Required** Further investigations, including soil, groundwater and surface water, and a human health risk assessment is required to be carried out accordance with DER's Contaminated Sites Management Series of guidelines and the National Environment Protection (Assessment of Site Contamination) Measure 1999. **Certificate of Title** Under the Contaminated Sites Act 2003, this Site has been classified as "Contaminated - remediation required". An instrument affecting land which comprises all, or part of, this Site will not be registered or accepted for registration, unless the CEO of the Department of Environment & Conservation consents to the registration in writing. For further information on the contamination status of this Site, or this restriction, please contact the Contaminated Sites section of the Department of Environment & Conservation. Type of Regulatory Notice: Nil

Current Regulatory Notice Issued

Date Issued: Nil

General

Memorial

No other information relating to this parcel.

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