



Application for Works Approval Amendment

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

Works Approval Number	W6579/2021/1
Works Approval Holder	OZ Minerals Musgrave Operations Pty Ltd
ACN	640 213 341
File Number	DER2021/000448
Premises	West Musgrave Project Mining Licences: M 69/149, L 69/56 and L 69/57, as defined in Schedule 2 of the Works Approval
Date of Report	16 November 2022
Proposed Decision	Revised works approval granted

MANAGER, PROCESS INDUSTRIES

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 make amendments to Works Approval W6579/2021/1. The amendments are considered administrative in nature therefore they do not alter the risk profile of the Premises, providing that activities, emissions and receptors as stated in existing approvals remain unchanged.

This Amendment Report documents the amendments made pursuant to section 59 and 59(B) of the *Environmental Protection Act 1986* (EP Act).

The decision report for the Existing works approval will remain on the department's website for future reference and will act as a record of the department's decision making.

2. Scope of assessment

2.1 Regulatory framework

In amending the works approval, 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

The Premises relates to the categories and the assessed production/design capacity under Schedule 1 of the *Environmental Protection Regulations 1987* (EP Regulations) which are defined in existing Works Approval W6579/2021/1.

On 18 October 2022, the Works Approval Holder submitted an application to the department to amend Works Approval W6579/2021/1 under section 59B of the *Environmental Protection Act 1986* (EP Act). The amendment is limited only to the relocation of wastewater treatment infrastructure, including waste disposal.

2.2.1 Background

The application was made following the functional failure of the existing septic wastewater system operated at the Premises. The failed system was intended to support the exploration camp and during the transition to a larger construction workforce, prior to installing the Sequence Batch Reactor (SBR) wastewater treatment plant (WWTP) system and associated irrigation area. The SBR WWTP infrastructure was originally intended for installation near to the construction camp, as authorised under the existing Works Approval.

As the failed exploration camp WWTP operated at below the prescribed capacity threshold specified in the EP Regulations, a works approval was not required for its operation. In addition, the Works Approval Holder recently constructed a SBR WWTP at the exploration camp with a 19.6 kL/day capacity. The installation of the failed septic wastewater system and current SBR WWTP was approved under Health Act approvals by Shire of Ngaanyatjarraku and the Department of Health.

The approved daily discharge rate under existing Works Approval conditions is 325 kL across two WWTP systems: an SBR (100 kL/day); and membrane bioreactor (MBR)/Passive (225 kL/day) WWTP system (refer to section 2.2.5 of the Decision Report).

2.2.2 Works required

The Works Approval holder proposes to construct and operate the previously approved SBR WWTP and associated irrigation field (at a reduced effluent treatment rate of 19.6 kL/day) at the exploration camp, which exists within the prescribed premises boundary. The relocated SBR, and emergency SBR, already constructed are required to be operated until such time as the

MBR/Passive WWTP system is installed and commissioned at the permanent accommodation village (estimated timeframe of six months).

The required irrigation area for the disposal of wastewater from the SBR WWTP, in its reduced capacity, is 2.8 ha (28,000m²), or 5.6 ha if operated longer than the six months of anticipated operations. A second irrigation field will continue to be required to accept any treated waste that is not suitable or required for reuse from the permanent MBR/Passive WWTP already authorised through the existing Works Approval.

A licence for the two SBR WWTPs, with a combined capacity of 39.2 kL/day will be sought upon completion of environmental commissioning in accordance with existing conditions of the Works Approval. To allow the transition from commissioning to ongoing operation, time limited operations is authorised under the amended Works Approval.

2.3 Assessment

The exploration camp, and the associated SBR WWTPs, will be removed sooner than the original proposed SBR WWTPs due to the exploration camp being within the footprint of the proposed Nebo Waste Rock Dump. The Works Approval has advised that the proposal construction of the Passive WWTP remains unchanged.

The Delegated Officer has determined that based on the:

- lower throughput volumes at the SBR WWTPs;
- shorter operating timeframes;
- similar treated effluent quality and receiving environment; and
- future use of the disturbance footprint for a waste rock dump (no increase to clearing required for the West Musgrave Project),

the risk level does not increase from that previously assessed. Therefore conditions for existing approved permanent WWTPs can sufficiently manage the risks from wastewater treatment and disposal outlined in Table 8 of the original Decision Report.

3. Consultation

The Works Approval Holder was provided with the draft Amendment Report on 15 November 2022 and subsequently waived the comment period with comments related to administrative changes only.

4. Conclusion

Based on the assessment in this Amendment Report, the Delegated Officer has determined that an amended works approval will be granted to authorise the relocation of the WWTP and establishment of an additional wastewater irrigation field in support. Wastewater treatment and disposal is subject to conditions commensurate with the determined controls outlined in the existing Works Approval and consistent with the risk assessed in the original risk assessment (Decision Report).

A further administrative amendment has been made to correct the minimum required irrigation field size for the permanent WWTP. The change aligns the irrigation field area with the area specified in the original application submitted by the Works Approval holder.

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. OZ Minerals 2022, OZ Minerals West Musgrave Project W6579/2021/1 Works Approval Amendment Application 20 Oct 2022 (DWER records: DER2021/000448~1).