



Application for Works Approval Amendment

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

| | |
|------------------------------|--|
| Works Approval Number | W6569/2021/1 |
| Works Approval Holder | IB Operations Pty Ltd |
| ACN | 165 513 557 |
| File Number | DER2021/000390 |
| Premises | North Star Magnetite Project Shay Gap MARBLE BAR WA 6760 Part of L45/547 As defined by the coordinates in Schedule 1 of the works approval |
| Date of Report | 18 May 2022 |
| Proposed Decision | Intent to grant revised works approval |

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A/MANAGER WASTE INDUSTRIES
REGULATORY SERVICES

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

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1. Decision summary

Works Approval W6569/2021/1 is held by IB Operations Pty Ltd (Works Approval Holder) for the North Star Magnetite Project (the Premises), located at Part of L45/547.

This Amendment Report documents the assessment of potential risks to the environment and public health from proposed changes to the emissions and discharges during the works approval commissioning of the Premises. As a result of this assessment, Revised Works Approval W6569/2021/1 has been granted.

The Revised Works Approval issued as a result of this amendment consolidates and supersedes the existing Works Approval previously granted in relation to the Premises.

2. Scope of assessment

2.1 Regulatory framework

In completing the assessment documented in this Amendment Report, the department has considered and given due regard to its Regulatory Framework and relevant policy documents which are available at <https://dwer.wa.gov.au/regulatory-documents>.

2.2 Application summary

On 27 April 2022, the Works Approval Holder submitted an application to the department to amend Works Approval W6569/2021/1 under section 59 and 59B of the *Environmental Protection Act 1986* (EP Act). The following amendments are being sought:

- Extend the Commissioning timeframe from 60 days to 105 days under works approval condition 5.

This amendment is limited only to changes to Category 54 activities from the Existing Works Approval. No other changes to the aspects of the existing Works Approval relating to Category 54 have been requested by the Works Approval Holder.

2.3 Part IV of the EP Act

The applicant has a relevant Part IV Ministerial Statement that relates to the North Star Magnetite Project (Ministerial Statement MS 993).

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.

The decision report for the original works approval W6569/2021/1 included a detailed description of the key emissions, relevant nearby receptors, pathways and proposed applicant controls. As these have not changed in relation to this application they have not been reiterated in this amendment report. The decision report for the original works approval (A2061994) is available on DWER's website at <https://www.der.wa.gov.au/our-work/licences-and-works-approvals/current-licences>.

3.1 Risk ratings

Risk ratings have been assessed in accordance with the *Guideline: Risk Assessments* (DWER 2020). Where linkages are in-complete they have not been considered further in the risk assessment.

Where the Delegated Officer considers the Works Approval Holder'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 Works Approval Holder's controls are not deemed sufficient. Where this is the case the need for additional controls will be documented and justified in Table 1.

The Revised Works Approval W65469/2021/1 that accompanies this Amendment Report authorises commissioning only. The conditions in the Revised Works Approval have been determined in accordance with *Guidance Statement: Setting Conditions* (DER 2015).

A licence is required following the commissioning and time-limited operational phase authorised under the works approval to authorise emissions associated with the ongoing operation of the Premises i.e. Category 54 activities. A risk assessment for the operational phase has been included in this Amendment Report, however licence conditions will not be finalised until the department assesses the licence application.

Table 1. Risk assessment of potential emissions and discharges from the Premises during commissioning

| Risk Event | | | | | Risk rating ¹ | Works Approval Holder's controls sufficient? | Conditions ² of works approval | Justification for additional regulatory controls |
|--------------------------|--------------------|---|------------------------------|---|---|--|---|--|
| Source/Activities | Potential emission | Potential pathways and impact | Receptors | Works Approval Holder's controls | C = consequence L = likelihood | | | |
| Commissioning | | | | | | | | |
| Commissioning activities | Dust | Air/windborne pathway causing impacts to health and amenity | Residences 30km north | Water cart. Speed restrictions. | C = Slight L = Unlikely Low Risk | Y | N/A | N/A |
| | Noise | | | Sitting. Package plant so noise is limited. | C = Slight L = Unlikely Low Risk | Y | N/A | N/A |
| | Spills | Seepage to soil, vegetation and groundwater | Fauna, flora and groundwater | Storage of small volumes of WWTP associated chemicals will comply with Australian Standards. Bunded storage area. HDPE piping to SIF. Sludges will be removed from the WWTP and disposed off the premises. Inspections and maintenance. | C = Slight L = Unlikely Low Risk | Y | Condition 1 | N/A |

| Risk Event | | | | | Risk rating ¹ C = consequence L = likelihood | Works Approval Holder's controls sufficient? | Conditions ² of works approval | Justification for additional regulatory controls |
|--------------------------|--------------------|---|------------------------------|--|---|--|--|--|
| Source/Activities | Potential emission | Potential pathways and impact | Receptors | Works Approval Holder's controls | | | | |
| Commissioning activities | Odour | Air / windborne pathway causing impacts to health and amenity | Residences 30km north | <p>WWTP employ tanks and containers which are contained (closed) and reduce odour.</p> <p>Properly treated wastewater should not produce significant odour at the SIF.</p> <p>Inspections and maintenance.</p> | <p>C = Slight</p> <p>L = Unlikely</p> <p>Low Risk</p> | Y | N/A | N/A |
| Commissioning activities | Treated sewage | Seepage to soil, vegetation and groundwater | Fauna, flora and groundwater | <p>Discharge to SIF – 4.7ha in total.</p> <p>Sitting of SIF.</p> <p>Nutrient application criteria.</p> <p>Monitoring of effluent quality.</p> <p>Above ground sprinkler system.</p> <p>No pooling of treated wastewater on the ground.</p> <p>Low level ground maximum slope of 0.5% with limited permeability (permeability rate of 8m/d).</p> <p>Sparsely vegetated.</p> | <p>C = Moderate</p> <p>L = Possible</p> <p>Medium Risk</p> | Y | Condition 1, 5, 7, 8, 11, 12, 13, 14, 15 and 16. | N/A |

| Risk Event | | | | | Risk rating ¹ C = consequence L = likelihood | Works Approval Holder's controls sufficient? | Conditions ² of works approval | Justification for additional regulatory controls |
|-------------------|--------------------|-------------------------------|-----------|---|---|--|---|--|
| Source/Activities | Potential emission | Potential pathways and impact | Receptors | Works Approval Holder's controls | | | | |
| | | | | <i>Groundwater more than 40 m below ground level.</i> <i>Windrow on southwest boundary to contain runoff.</i> <i>Fenced, locked and will display signage.</i> <i>Inspections and maintenance.</i> <i>Sludge will be removed from the tanks and disposed off-site.</i> | | | | |

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

Note 2: Proposed Works Approval Holder's controls are depicted by standard text. **Bold and underline text** depicts additional regulatory controls imposed by department.

4. Consultation

Table 2 provides a summary of the consultation undertaken by the department.

Table 2: Consultation

| Consultation method | Comments received | Department response |
|---|--|---------------------|
| <i>Works Approval Holder was provided with draft amendment on 12 May 2022. A response was provided 13 May 2022.</i> | <i>No comment – requested to waive comment period and amend as soon as possible.</i> | <i>Noted</i> |

5. Conclusion

Based on the assessment in this Amendment Report, the Delegated Officer has determined that a Revised Works Approval will be granted, subject to conditions commensurate with the determined controls and necessary for administration and reporting requirements.

5.1 Summary of amendments

Table 3 provides a summary of the proposed amendments and will act as record of implemented changes. All proposed changes have been incorporated into the Revised Works Approval as part of the amendment process.

Table 3: Summary of works approval amendments

| Condition no. | Proposed amendments |
|---------------|--|
| 5 Table 2 | Amend a period not exceeding 60 days to 105 days |

References

1. Department of Environment Regulation (DER) 2015, *Guidance Statement: Setting Conditions*, Perth, Western Australia.
2. Department of Environment and Conservation (NSW) 2004, *Environmental Guidelines, Use of Effluent by Irrigation*.
3. Department of Water and Environmental Regulation (DWER) 2020, *Guideline: Environmental Siting*, Perth, Western Australia.
4. DWER 2020, *Guideline: Risk Assessments*, Perth, Western Australia.
5. Department of Health (DOH) 2011. *Guidelines for the Non-potable Uses of Recycled Water in Western Australia*. Perth, Western Australia.
6. Department of Water (DOW) 2008. *Water Quality Protection Note 22 (WQPN22): Irrigation with nutrient rich wastewater*. Perth, Western Australia.
7. Department of Health (DoH) 2021, *Site and soil evaluation for onsite wastewater management*, Perth, Western Australia.
8. Department of Planning, Lands and Heritage 2019, *Government Sewerage Policy*, Perth, Western Australia.

Appendix 2: Application validation summary

| SECTION 1: APPLICATION SUMMARY (as updated from validation checklist) | | | | |
|---|-------------------------------------|---|---|-------------------------------|
| Application type | | | | |
| Works approval | <input type="checkbox"/> | | | |
| Licence | <input type="checkbox"/> | Relevant works approval number: | | None <input type="checkbox"/> |
| | | Has the works approval been complied with? | Yes <input type="checkbox"/> No <input type="checkbox"/> | |
| | | Has time limited operations under the works approval demonstrated acceptable operations? | Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/> | |
| | | Environmental Compliance Report / Critical Containment Infrastructure Report submitted? | Yes <input type="checkbox"/> No <input type="checkbox"/> | |
| | | Date Report received: | | |
| Renewal | <input type="checkbox"/> | Current licence number: | | |
| Amendment to works approval | <input checked="" type="checkbox"/> | Current works approval number: | W6569/2021/1 | |
| Amendment to licence | <input type="checkbox"/> | Current licence number: | | |
| | | Relevant works approval number: | N/A | <input type="checkbox"/> |
| Registration | <input type="checkbox"/> | Current works approval number: | None | <input type="checkbox"/> |
| Date application received | | 27/4/2022 | | |
| Applicant and Premises details | | | | |
| Applicant name/s (full legal name/s) | | IB Operations Pty Ltd | | |
| Premises name | | North Star Magnetite Project | | |
| Premises location | | L45/547 Shay Gap | | |
| Local Government Authority | | Shire of East Pilbara | | |
| Application documents | | | | |
| HPCM file reference number: | | DER2021/000390 | | |
| Key application documents (additional to application form): | | Application Form and Attachments | | |
| Scope of application/assessment | | | | |
| Summary of proposed activities or changes to existing operations. | | <p><i>Works approval amendment</i></p> <p>Construction of WWTP.</p> <p>Extend commissioning from 60 days to 105 days.</p> | | |

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 54: sewage facility | 101m ³ /day | No changes |

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 <input checked="" type="checkbox"/> No <input type="checkbox"/> | Referral decision No: Managed under Part V <input type="checkbox"/> Assessed under Part IV <input type="checkbox"/> |
| Does the applicant hold any existing Part IV Ministerial Statements relevant to the application? | Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> | Ministerial statement No: MS993 EPA Report No: |
| Has the proposal been referred and/or assessed under the EPBC Act? | Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> | Reference No: EPBC 2021/6689 |
| Has the applicant demonstrated occupancy (proof of occupier status)? | Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> | Certificate of title <input type="checkbox"/> General lease <input type="checkbox"/> Expiry: Mining lease / tenement <input type="checkbox"/> Expiry: Other evidence <input type="checkbox"/> Expiry: |
| Has the applicant obtained all relevant planning approvals? | Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/> | 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 <input checked="" type="checkbox"/> No <input type="checkbox"/> | CPS No: MS993 |
| Has the applicant applied for, or have an existing CAWS Act clearing licence in relation to this proposal? | Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> | Application reference No: Licence/permit No: Clearing approved under MS993 |
| Has the applicant applied for, or have an existing RIWI Act licence or permit in relation to this proposal? | Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> | Application reference No: Licence/permit No: GWL175700 |

| | | |
|--|--|---|
| <p>Does the proposal involve a discharge of waste into a designated area (as defined in section 57 of the EP Act)?</p> | <p>Yes <input type="checkbox"/> No <input checked="" type="checkbox"/></p> | <p>Name: N/A Type: Proclaimed Groundwater Area/Surface Water Area Has Regulatory Services (Water) been consulted? Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/> Regional office: Swan Avon / Mid-West Gascoyne / Kwinana Peel / North West / South West / Goldfields / South Coast</p> |
| <p>Is the Premises situated in a Public Drinking Water Source Area (PDWSA)?</p> | <p>Yes <input type="checkbox"/> No <input checked="" type="checkbox"/></p> | <p>Name: N/A Priority: P1 / P2 / P3 / N/A Are the proposed activities/ landuse compatible with the PDWSA (refer to <u>WQPN 25</u>)? Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/> Note: If the proposed activity is not listed as a compatible land use with the PDWSA please consult with the relevant regional office (Regulatory Services - Water) and Water Source Protection (Science and Planning).</p> |
| <p>Is the Premises subject to any other Acts or subsidiary regulations (e.g. <i>Dangerous Goods Safety Act 2004, Environmental Protection (Controlled Waste) Regulations 2004, State Agreement Act xxxx</i>)</p> | <p>Yes <input type="checkbox"/> No <input checked="" type="checkbox"/></p> | <p>If Yes include details here.</p> |
| <p>Is the Premises within an Environmental Protection Policy (EPP) Area?</p> | <p>Yes <input type="checkbox"/> No <input checked="" type="checkbox"/></p> | <p>If Yes include details of which EPP(s) here.</p> |
| <p>Is the Premises subject to any EPP requirements?</p> | <p>Yes <input type="checkbox"/> No <input checked="" type="checkbox"/></p> | <p>If Yes, include details here, e.g. Site is subject to SO₂ requirements of Kwinana EPP.</p> |
| <p>Is the Premises a known or suspected contaminated site under the <i>Contaminated Sites Act 2003</i>?</p> | <p>Yes <input type="checkbox"/> No <input checked="" type="checkbox"/></p> | <p>If Yes include details here. Classification: N/A / possibly contaminated – investigation required (PC-IR) / not contaminated – unrestricted use (NC-UU) / contaminated – restricted use (C-RU) / remediated for restricted use (RRU) / contaminated – remediation required (C-RR) / decontaminated (Decon) Date of classification: N/A</p> |