



Application for Works Approval Amendment

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

Works Approval Number	W6459/2020/1
Works Approval Holder	Water Corporation
File Number	DER2020/000433~1
Premises	Canning Beach Road Pumping Station Reserve 41516 60 Canning Beach Road APPLECROSS 6153 WA Legal description - Lot 11312 on Deposited Plan 189373 and part of Canning Beach Road Reserve Certificate of Title Volume LR3000 Folio 695 As defined by the coordinates in Schedule 2 of the Works Approval
Date of Report	28 February 2023
Decision	Revised works approval granted

**SENIOR ENVIRONMENTAL OFFICER
REGULATORY SERVICES**

*Officer delegated under section 20
of the Environmental Protection Act 1986*

Table of Contents

1. Decision summary	2
2. Scope of assessment	2
2.1 Regulatory framework	2
2.2 Application summary	2
3. Risk assessment	2
3.1 Source-pathways and receptors	2
3.1.1 Emissions and controls	2
3.1.2 Receptors	4
3.2 Risk ratings	4
4. Consultation	6
5. Conclusion	6
5.1 Summary of amendments	6
References	8
Appendix 1: Summary of DBCA comments on amendment application	9
Appendix 2: Summary of City of Melville comments on amendment application	10
Appendix 3: Application validation summary	11
Table 1: Works Approval Holder controls	3
Table 2: Sensitive human and environmental receptors and distance from prescribed activity	4
Table 3: Risk assessment of potential emissions and discharges from the premises during operation	5
Table 4: Consultation	6
Table 5: Summary of works approval amendments	6

1. Decision summary

Works Approval W6459/2020/1 is held by Water Corporation (Works Approval Holder) for the Canning Beach Road Pumping Station (the Premises), located at 60 Canning Beach Road, Applecross 6153 WA.

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 construction and operation of the Premises. As a result of this assessment, Revised Works Approval W6459/2020/1 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. The Revised Works Approval has been granted in a new format with existing conditions being transferred, but not reassessed, to the new format.

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 14 November 2022, the Works Approval Holder submitted an application to the department to amend Works Approval W6459/2020/1 under section 59 and 59B of the *Environmental Protection Act 1986* (EP Act).

An amendment of the Works Approval is being sought to allow the disposal of dewatering effluent firstly to the sewer (to the maximum capacity) and then to the stormwater system should dewatering rates exceed the initial predictions.

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 operation which have been considered in this Amendment Report are detailed in Table 1. Table 1 also details the control measures the Works Approval Holder has proposed to assist in controlling these emissions, where necessary.

Table 1: Works Approval Holder controls

Emission	Sources	Potential pathways	Proposed controls
Dewatering effluent	Excess dewatering effluent discharged into stormwater system	Discharge to river via stormwater system	<p>No exceedance of discharge quality limits into sewer as per DBCA Policy 50 guideline.</p> <p>Rate of discharge to not exceed 8L/s into the stormwater system.</p> <p>Treatment chain of dewatering effluent prior to discharge to stormwater and river to include:</p> <ul style="list-style-type: none"> • Clarification using baffled clarifier tanks, pH dosing and chemical flocculation • Chlorine dosage • Filtration using Metals Reduction Module and carbon • Nitrate removal unit <p>Monitoring of stormwater in the field to occur daily to include flowrates and volumes, pH, electrical conductivity, dissolved oxygen, redox potential, total titratable acidity and total alkalinity.</p> <p>Monitoring of stormwater in the laboratory to occur weekly for pH, Electrical Conductivity, Total Dissolved Solids, Total Suspended Solids, Turbidity, Acidity, Alkalinity, Calcium, Magnesium, Potassium, Sulfate, Chloride and Sodium. Total and Dissolved Aluminium, Arsenic, Cadmium, Chromium, Iron, Manganese, Nickel, Selenium, Zinc, Ammonia as Nitrogen, Nitrate as Nitrogen, Total Nitrogen, Reactive Phosphorus, Total Phosphorus. <i>E. coli</i></p> <p>If monitoring identifies that water discharged to stormwater / river exceed the DBCA Policy 50 criteria, immediate adjustments to the treatment system will be made, which include, but are not limited to:</p> <ul style="list-style-type: none"> • Increase chemical dosage rate • Reduce abstraction rates • Increase backwash frequency of filter media <p>Limited duration (4 weeks) of dewatering discharge</p>

3.1.2 Receptors

In accordance with the *Guideline: Risk assessments* (DWER 2020), the Delegated Officer has excluded employees, visitors and contractors of the Works Approval Holder's 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 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
Recreational users of the Canning River	Approximately <10m
Environmental receptors	Distance from prescribed activity
Surface water bodies – Canning River	Approximately <10m
Specified Ecosystems – Important/ Geomorphic Wetlands (Swan-Canning Estuary and Conservation Category Wetland)	Mapped adjacent / within approximately <10m
Environmentally Sensitive Areas / DBCA Legislative Tenure – <i>Swan and Canning Rivers Management Act 2006</i>	Mapped adjacent/ within Lot boundary/Premises area

3.2 Risk ratings

Risk ratings have been assessed in accordance with the *Guideline: Risk Assessments* (DWER 2020) for those emission sources which are proposed to change and takes into account potential source-pathway and receptor linkages as identified in Section 3.1. Where linkages are incomplete they have not been considered further in the risk assessment.

Where the Works Approval Holder 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 Works Approval Holder's proposed controls to be critical to maintaining an acceptable level of risk, these will be incorporated into the works approval/licence 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 3.

The Revised Works Approval W6459/2020/1 that accompanies this Amendment Report authorises construction only. The conditions in the Revised Works Approval have been determined in accordance with *Guidance Statement: Setting Conditions* (DER 2015).

The existing registration is required to authorise emissions associated with the ongoing operation of the Premises i.e., Category 85A activities. A risk assessment for the operational phase has been included in this Decision Report, however licence conditions will not be finalised until the department assesses the licence application.

Table 3. Risk assessment of potential emissions and discharges from the premises during operation

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				
Excess dewatering effluent discharge into stormwater system	Dewatering effluent potentially containing nutrients and sediment	Discharge to river via stormwater system causing degradation of water quality.	Canning River ecosystem Recreational users of Canning River	Refer to Section 3.1	C = Moderate L = Unlikely Medium Risk	Y	Condition 7 Condition 9 Condition 10 <u>Condition 8</u>	Applicant proposed controls are considered sufficient to mitigate the risk and have been placed on the works approval as regulatory controls. Works Approval condition added to ensure management of scour of the riverbed and formation of visible silt plumes

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

Table 4: Consultation

Consultation method	Comments received	Department response
The Department of Biodiversity, Conservation and Attractions (DBCA) advised of proposal (22 December 2022)	Comments received on 04 January 2023, summarised in Appendix 1: Summary of DBCA comments on amendment application.	The department has noted DBCA approval of the provided DMP. Advice from DBCA noted and applied to works approval if deemed necessary.
The City of Melville advised of proposal (22 December 2022)	Comments received on 30 January 2023, summarised in Appendix 2: Summary of City of Melville comments on amendment application.	The department has noted the comments and requested the City inform Water Corporation of the advice given if not already done so.
Applicant was provided with draft documents on 22 February 2023	No comment and request the consultation period of 21 days is waived.	The department notes the applicants request to waive the consultation period.

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 5 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 5: Summary of works approval amendments

Existing works approval condition no.	Revised works approval condition no.	Amendments
n/a	n/a	Legal description of premise details updated to include “and part of Canning Beach Road Reserve”
1	1	Updated to reflect the Construction Environmental Management Plan (CEMP) was submitted, deemed compliant and now must be implemented. Inclusion of the Dewatering Management Plan implementation.
2	n/a	Removed due to being no longer applicable as the condition was fulfilled in the submitted CEMP.
3	2	Updated to reflect the Emergency Discharge Response Procedure (EDRP) was submitted, deemed compliant and must be implemented.

Existing works approval condition no.	Revised works approval condition no.	Amendments
4	n/a	Removed as no longer applicable due to the condition being fulfilled in the submitted EDRP.
5	5	Updated to include ASS or PASS excavated during works is removed off-site to an appropriately authorised facility as defined in the works approval.
9, 10	7	Conditions consolidated into new condition to capture all management of dewatering effluent included in the amendment.
n/a	8	New condition to include management of scour and silt plume in the Canning River.
n/a	9	New condition to include dewatering effluent discharge to stormwater monitoring.
n/a	10,12	New condition to include sampling to be done by National Association of Testing Authorities (NATA) accredited laboratories.
11	11	Table updated to: <ul style="list-style-type: none"> •be in a consistent format •include laboratory monitoring fortnightly •change Electrical Conductivity to 'µS/cm' unit of measurement
14	13	Reworded to be clearer.
3	2	Condition numbers changed
5	3	
6	4	
7	5	
8	6	
12	13	
13	14	
14	15	
15	16	
16	17	
n/a	5,13,14,16,17	Condition number references amended.
Schedule 2	Schedule 2	Coordinates updated from GDA94 Zone 50 to GDA 2020 Zone 50
Definitions	Definitions	Updated to include definitions for; appropriately authorised facility, Construction Environmental Management Plan, CFU, Dewatering Management Plan, Emergency Discharge Response Procedure, MPN, NTU. Updated to remove definition of 'Environmental Commissioning Report'.

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.

Appendix 1: Summary of DBCA comments on amendment application

Summary of DBCA comments	Department's response
On 18 November 2022 DBCA approved the dewatering plan for the discharge of treated tailwater to stormwater subject to certain conditions outlined below	The Delegated Officer notes this information
Discharge of dewatering effluent to the river is permitted only if it can be demonstrated tailwater meets the criteria outlined in DBCA's Policy 50 - Planning for dewatering affecting the Swan Canning Development Control Area	The Delegated Officer notes this information and has determined to include regulatory controls on the quality of the dewatering effluent.
Once the local government has approved the use of its stormwater infrastructure, dewatering works can commence, with weekly or two weekly water quality results provided to DBCA demonstrating that the treatment train is continuing to function as expected	The Delegated Officer notes that DBCA will require frequent monitoring of results. The works approval requires dewatering monitoring results to be reported to DWER in the Environmental Compliance Report.
The stormwater outlet is to be monitored for turbidity during the dewatering works. Contingency methods will need to be put in place if there is any indication that high turbidity is occurring	The Delegated Officer notes that this is demonstrated in the DMP provided.
The stormwater outlet is to be monitored for any signs of scour.	The Delegated Officer notes this information and has determined to include regulatory controls to manage scour.
In the event of excess turbidity in the river, a silt curtain is to be installed and regularly checked and maintained to ensure no plumes extend beyond the outlet	The Delegated Officer notes this information and has determined to include regulatory controls to manage silt plumes.
It is recommended that background testing of the receiving environment (Canning River) is also undertaken at least twice during the period of discharge in order to ascertain any cumulative concentration of contaminants.	The Delegated Officer notes these conditions and has considered them as part of the assessment process.
If the monitoring results indicate that the treatment system is not functioning as expected, the discharge of dewatering effluent to the river is to cease until the previously approved water quality can be demonstrated. The release of dewatering effluent to the river cannot recommence until the treated water quality results have again been approved by DBCA	

Appendix 2: Summary of City of Melville comments on amendment application

Summary of City of Melville comments	Department's response
Water Quality Assessment and Authority to discharge into the river sits with DBCA as their asset.	The Delegated Officer notes these conditions and has considered them as part of the assessment process. The department has requested the City inform Water Corporation of the advice given if they have not already done so.
That the City continues to be provided with water quality test results as works progress, considering all adjacent development in the Canning Bridge precinct	
That should any exceedances occur, all pumping via the City's system will initially cease before establishing and rectifying the causes of the exceedances, rather than modifying treatments	
That any change in groundwater quality shall be communicated to DBCA/the City as soon as it occurs; and that given the close proximity of the site to the river, silt curtains shall be provided at the stormwater outlets.	

Appendix 3: Application validation summary

SECTION 1: APPLICATION SUMMARY				
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:	W6459/2020/1	
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	14 November 2022			
Applicant and Premises details				
Applicant name/s (full legal name/s)	Water Corporation			
Premises name	Canning Beach Road Pumping Station			
Premises location	Canning Beach Road Pumping Station Reserve 41516 60 Canning Beach Road, Applecross 6153 WA Legal description - Lot 11312 on Deposited Plan 189373 Certificate of Title Volume LR3000 Folio 695			
Local Government Authority	City of Melville			
Application documents				
HPCM file reference number:	DWERDT686087			
Key application documents (additional to application form):	Revised CEMP Revised Dewatering Management Plan 26D and 5C licences Development Approval			
Scope of application/assessment				
Summary of proposed activities or changes to existing operations.	Amendment to allow the disposal of dewatering effluent to firstly the sewer (to the maximum capacity) and then to the stormwater system should dewatering rates exceed the initial predictions			

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
Category 85: Sewage pumping station	N/A	Allow the disposal of dewatering effluent to firstly the sewer (to the maximum capacity) and then to the stormwater system should dewatering rates exceed the initial predictions.

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 type="checkbox"/> No <input checked="" 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 type="checkbox"/> No <input checked="" type="checkbox"/>	Ministerial statement No: EPA Report No:
Has the proposal been referred and/or assessed under the EPBC Act?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Reference No:
Has the applicant demonstrated occupancy (proof of occupier status)?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Certificate of title <input checked="" 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 type="checkbox"/> No <input checked="" 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 type="checkbox"/> No <input checked="" type="checkbox"/>	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 <input type="checkbox"/> No <input checked="" type="checkbox"/>	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 <input type="checkbox"/> No <input checked="" type="checkbox"/>	Application reference No: Licence/permit No: Licence / permit not required.

<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 checked="" type="checkbox"/> No <input type="checkbox"/></p>	<p>Name: Perth Groundwater/Swan-Canning River system Type: Proclaimed Groundwater Area Has Regulatory Services (Water) been consulted? Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/> Regional office: Swan Avon</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 checked="" type="checkbox"/></p>
<p>Is the Premises subject to any other Acts or subsidiary regulations (e.g. <i>Dangerous Goods Safety Act 2004</i>, <i>Environmental Protection (Controlled Waste) Regulations 2004</i>, <i>State Agreement Act xxxx</i>)</p>	<p>Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p>	<p>Environmental Protection (Unauthorised Discharge) Regulations 2004</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>Is the Premises subject to any EPP requirements?</p>	<p>Yes <input type="checkbox"/> No <input checked="" type="checkbox"/></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>Classification: N/A Date of classification: N/A</p>