

Decision Report

Application for Works Approval

Part V Division 3 of the Environmental Protection Act 1986

Works Approval Number W6793/2023/1

Applicant ACN	Poseidon Nickel Limited 060 535 206
File number	DER2023/000087
Premises	Black Swan Nickel Mine Mining tenements M27/39 and M27/200 KALGOORLIE WA 6430
Date of report	29 June 2023
Decision	Works approval granted

Alana Kidd Manager, Resource Industries 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 W6793/2023/1 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 Background

Development of the Black Swan site commenced in 1996 and continued under the ownership of various companies until 2008 when operations were placed into care and maintenance by then owner Norilsk Nickel. Poseidon acquired the Black Swan assets and tenements from Norilsk in April 2015, and continues to care for and maintain the site, with underground dewatering and resource drilling continuing.

Recommencement of operations under existing approvals is planned for 2023. The reopening will utilise the existing Black Swan open pit mine, Silver Swan underground mine, nickel concentrator plant, tailings storage facilities, and associated ancillary infrastructure which operates under current licence L6933/2011/1 for Category 5 Processing and beneficiation of metallic ore, at a design capacity of 3,000,000 tonnes per year and Category 6 Mine dewatering at a design capacity of 450,000 tonnes per year.

A previous works approval (W4347/1996/1) for the construction of a Stage 5 and Stage 6 embankment lift of the Black Swan Disseminated Tailings Storage Facility (BSDTSF) was approved on 12 January 2012, however the proposed works were not completed prior to the operation being placed into care and maintenance and subsequently the Works Approval expired on 15 July 2014.

2.3 Application summary and overview of premises

On 1 February 2023, 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 the recovery of tailings from the existing Silver Swan Tailings Storage Facility (SSTSF) for blending into the plant fed, subsequent storage of the blended tails in the BSDTSF, and raising of the BDSTSF to allow an increase in tailings storage capacity. No changes to the current licence L6933/2011/1 categories or throughput will be required as a result of the changes proposed in this works approval application.

The premises relates to the categories and assessed production / design capacity under Schedule 1 of the *Environmental Protection Regulations 1987* (EP Regulations) which are defined in works approval W6793/2023/1. 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 W6793/2023/1.

2.4 Recovery of tailings

As part of recommencement of operations at Black Swan, the applicant plans to reclaim up to 110,000 tpa of old tailings from the Silver Swan TSF (SSTSF1) for the purpose of recovering additional nickel and blending with mined ore and stockpiled material to improve the final smelter grade concentrate. The reclamation will occur up to the perimeter embankment on the west, north and east sides of the facility and the Cygnet TSF separating wall on the south. Tailings from Cygnet TSF will not be disturbed and no new deposition of tailings to Silver Swan or Cygnet TSF is proposed.

The tailings in the surface zone reflect partially the results of surface oxidation and partly a lower-grade feed source. This material is not considered suitable resource for the currently proposed reprocessing and will be retained in SSTSF1. The remainder of the tailings material in SSTSF1 (approximately 675,000 tonnes) is a suitable grade for reprocessing and is proposed to be reclaimed.

Dry mechanical reclamation of tailings has been selected which involves the use of a diesel hydraulic excavator to dig up the tailings into trucks by conventional top load or by excavating underhand and loading trucks running on the base rock. There is flexibility to start and stop this reclamation at any time.

The truck delivers materials to a tailings storage pad (TSP) on the Run of Mine (ROM) pad to be stockpiled for feeding to the plant. A maximum of 1,500 tonnes of tailings will be stored on a TSP at any one time. The dimensions of the pad will be 40 m by 13.5 m, raised a minimum of 0.5m above the surrounding ROM pad to ensure surface sheet runoff does not enter the area.

Reclamation Stability Assessment

A stability assessment was carried out by Tetratech Coffey to assess the stability of the TSF walls during wet or dry reclamation of tailings. The results indicated an adequate factor of safety for the worst case of wet reclamation of tailings. Dry reclamation as proposed in this works approval is a much lower risk. Placement of gravel on the tailings surface may be required for use of wheeled vehicle during reclamation to improve trafficability.

2.5 Raising of BDSTSF

The BSDTSF was originally commissioned in September 2004. It was constructed in 4 stages to the current (Stage 4) embankment level of RL 11,378 m (approximately 15 to 18 m above natural ground level). The BSDTSF currently holds approximately 6.6 Mt of nickel tailings (4.4 Mm³ at an assumed density of 1.5 t/m³), with total capacity for 7.6 Mt (6.0 Mm³). Deposition of tailings in the BSDTSF ceased in late 2008 however the facility has since been used to infiltrate and evaporate dewatering. The works approval holder proposes to raise the BSDTSF in two additional lifts (Stage 5 and 6). This works approval application is for the Stage 5 Phase 1 lift only. A further works approval application will be submitted for future TSF lifts.

The BSDTSF is a rectangular paddock-type facility, comprising a single cell, integrated within a waste landform (IWL) formed by the BSDTSF and Black Swan Disseminated Waste Rock Dump (BSDWRD). It has an impoundment area of approximately 52.5 ha and an embankment height of approximately 23.5 m at the Stage 5 Phase 1 crest RL of 11,382.5 m. The facility is underlain by clayey soils which help to limit vertical seepage through the foundation soil. The general arrangement of the BSDTSF and surrounding waste landform is shown in Figure 1.

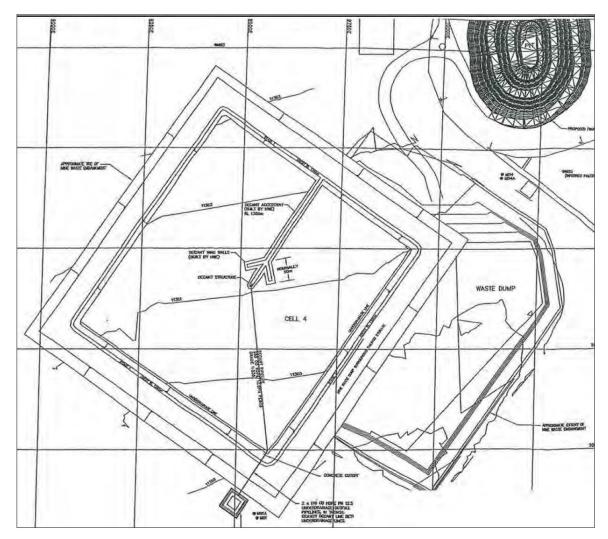


Figure 1: General Arrangement of BDSTSF and IWL

The BSDTSF has been designed to be constructed in staged lifts using downstream construction methods. The BSDTSF perimeter embankments consist of an inner 8 m wide compacted clay embankment (Zone A) against the BSDWRD and will be raised using downstream construction techniques (Figure 2), with the exception of the north-western corner.

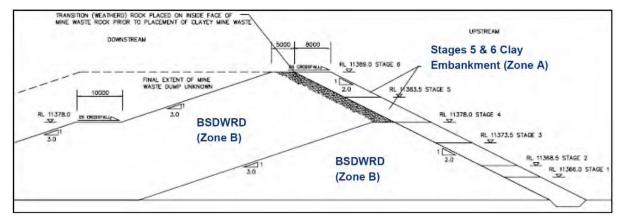


Figure 2: Downstream Raise of Embankments of BSDTSF

The BSDTSF north-western corner comprises upstream raised embankments. The existing Stage 4 clay embankment crest level is at approximately RL 11378.0 m which was built using downstream construction technique. For proposed future raises, the embankment at this corner will be raised using upstream construction method (Figure 3) due to space constraint which prohibits downstream construction method. The upstream-raised embankment width is 13 m, which will be constructed using compacted clayey fill materials / clayey mine waste.

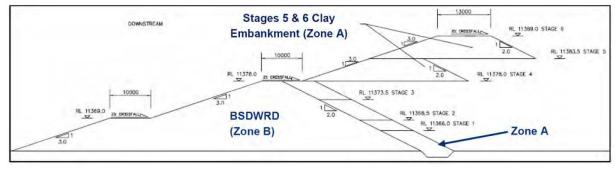


Figure 3: Upstream Raise of Embankments of BSDTSF

Storage capacity and characteristics for the BSDTSF when constructed to the Stage 5 Phase 1 design are listed in Table 1, based on an anticipated tailing dry density of 1.62 t/m, adopted tailings beach slope of 1.5% and average production rate of 1.6 Mtpa (production varying from 1.0 to 2.2 Mtpa).

Stage	Embankment Crest RL	Storage Area (ha)	Storage Vol (m3)	Culumative Storage Vol (Mm3)	Cumulative Storage Capacity (Mm3)	Cumulative Storage Life (Years)	Rate of Rise (m/year)
Existing Stage 4 remaining capacity	11,378.0	36.9	1,807,600	1.81	2.93	1.8	-
Proposed Stage 5 Phase 1	11,382.5	46.0	1,978,000	3.79	6.14	3.8	1.2

 Table 1: BSDTSF Storage Characteristics

Surface Water Management

The only source of water into the BSDTSF will be from rainfall. The crest of BSDWRD will be graded outwards so that rainfall runoff from the BSDWRD crest will not flow into BSDTSF. The facility is designed with a minimum 500 mm total freeboard, such that a 1 in 100 AEP, 72-hour storm event can be temporarily stored on top of the facility in addition to the normal operating pond level.

A runoff coefficient of 1 was used for a conservative calculation of the stormwater volume within the BSDTSF. Calculations indicate that a maximum water storage capacity of approximately 1.128 Mm³ will be available within the BSDTSF Stage 5 Phase 1 impoundment area (including the 5-day operation water pond volume and the 500 mm total freeboard requirement).

Seepage Management

The applicant has estimated that total seepage from the BSDTSF would be approximately 37.25 m³/d under normal operating conditions. The applicant notes that the pond size has a great influence on the seepage outflows from the BSDTSF and the position of the phreatic surface. The supernatant pond size, when present, will be minimised as far as possible during operation of the facility, which will minimise outgoing seepage. Seepage will be managed using existing infrastructure for seepage recovery from the BSDTSF including an underdrainage system, a toe drain and several monitoring bores.

Monitoring bore MB06 is currently equipped for seepage recovery and will be operated for as required. Additional bores can be equipped for seepage recovery if necessary. A seepage interception trench will be installed if seepage through the embankment is encountered.

Water Recovery and Return Water Dam

Free supernatant water pond will pool near the centre of BSDTSF, and water liberated from the tailings is recovered via a decant system. This decant system comprises of a centrally located decant structure with a gravity decant outflow pipeline which discharges into a HDPE-lined external return water pond located to the south of BSDTSF. Stage 5 decant structure and accessway will be raised concurrently with the perimeter embankments, using centreline construction methods as shown in Figure 4

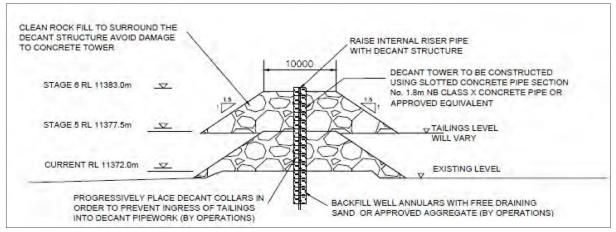


Figure 4: Decant Structure Raise, Typical Section.

The existing external lined Return Water Dam will be filled and a replacement constructed immediately south due to the BSDWRD expansion to the south of the BSDTSF. The Return Water Dam will be constructed as shown in Figure 5 with a 2 mm HDPE liner. Water collected in the Return Water Dam will be pumped back to process water ponds for reuse in the plant.

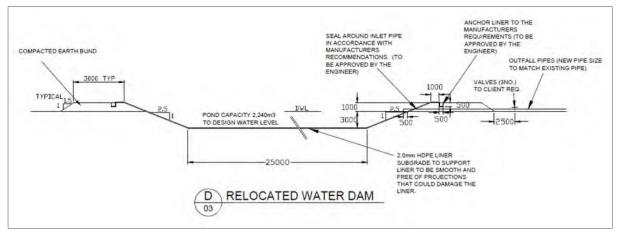


Figure 5: Return Water Dam Design

The decant pond on the TSF surface is equivalent to about 5 days slurry water inflow, which is estimated to be about 45,200 m³ (based on eventual production throughput of 2.2 Mtpa with 40% solids). Sequencing of tailings deposition will be conducted such that the decant water pond extent can be kept about 130 m radius or at least 200 m away from the embankment under normal operating conditions.

Stability Assessment

The TSF raise was designed in accordance with the following guidelines:

- Australian National Committee on Large Dams (ANCOLD guidelines (20191), 'Guidelines on Tailings Dam Planning, Design, Construction, Operation and Closure'.
- Department of Mines, Industry Regulation and Safety (DMIRS, 2013), 'Code of practice: tailings storage facilities in Western Australia'; and
- DMIRS (2015), 'Guide to the preparation of a design report for Tailings Storage Facilities (TSFs)'.

In accordance with ANCOLD guidelines the hazard rating for the TSF was deemed as Medium — Category 1. The BSDTSF consequence category considering Medium impact and a population at risk of \geq 1 to <10, is Significant. It is assessed that the severity of impact on the natural environmental from the BSDTSF dam spill would be Minor with a population at risk assigned to a TSF dam spill of < 1, therefore BSDTSF has a Very Low hazard with respect to the Environmental Spill Consequence Category. The dam break assessment for the Stage 5 Phase 1 TSF indicated that the Black Swan pit would be unaffected in event of a major dam breach.

2.6 Tailings chemical properties

The key elements of potential environmental significance in the tailings are nickel, cobalt, arsenic and to a lesser degree antimony. Total concentrations of arsenic (100 mg/kg), cobalt (100 mg/kg), nickel (4,300 mg/kg) are similar to or lower than previous tailings deposited into the BSDTSF. The magnesium content is also similar which is consistent with a dominant serpentine mineralogy.

The tailings will be non acid forming. This is contrast to the feed material as it is within SSTSF1 (i.e. re-processing will produce more benign tailings overall). The pH of tailings seepage will remain circum-neutral to alkaline and is expected to remain in the range pH 7 to pH 8 in perpetuity. Concentrations of soluble salts are variable depending on the process water used for metallurgical trials, however production tailings will be hypersaline (expected 50,000 mg/L to 60,000 mg/L total dissolved solids) as per all previous tailings production at Black Swan. Black Swan Pit will be a permanent hypersaline groundwater sink to the north of

the BSDTSF post closure.

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 below. Table also details the control measures the applicant has proposed to assist in controlling these emissions, where necessary.

		Potential pathways	Proposed controls					
Construction								
Dust	Dust Earthworks associated with construction of TSF wall raise and tailings stockpile pad impacts to health and amenity		 Dust suppression water sprays on unloading and rehandling operations and stockpiles. Water trucks will be used on haul roads and the TSF excavation area. Temporary suspension of unloading and rehandling if necessary, in especially hot, dry, windy conditions if dust cannot be adequately controlled. 					
Operation								
Tailings dust	Stockpiling and handling of Silver Swan Tailings Mining of old Silver Swan Tailings	Air/windborne pathway causing impacts to health and amenity	During operation the Process Superintendent (or designated person) shall ensure adequate dust suppression to minimise any adverse environmental impacts. Current premises operations use water from the underground dam settling pond for dust suppression.					
Tailings sediments	Stockpiling and handling of Silver Swan Tailings	Stormwater runoff from stockpile pad	The tailings storage area will have a 'depressed cone' on the top surface and will be capable of storing a considerable body of water during and after a rainstorm. The minimum operational freeboard should be maintained at 0.3 m and total freeboard 0.5 m above the normal operating pond plus stormwater level for a 1:100 Annual Exceedance Probability (AEP), 72-hour rainfall event.					
Tailings spills	Mining of old Silver Swan Tailings Tailings disposal in	Direct discharge to land spills from overtopping or	Excavation and loading of tailings will be within the existing SSTSF1 tailings cell, keeping the tailings wall intact and ensuring any spills are contained within the TSF. Ramps will be constructed to allow					

Table 2: Proposed applicant controls

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Emission	Sources	Potential pathways	Proposed controls
	lifted BSDTSF	failure of TSF embankment causing smothering of vegetation and contamination of surface soil.	truck access over the TSF walls without damage to the walls. Tailings will be deposited in discrete layers from multiple spigots (discharge points). at low velocity, forming a beach sloping downward toward the central decant facility. The discharge point will be regularly moved to ensure even beach development. Frequent inspections of infrastructure in accordance with the premises licence L6933/1996/14.
Leachate	Tailings disposal in lifted BSDTSF	Seepage of leachate through BSDTSF base and embankments causing contamination of groundwater and groundwater mounding such that it enters the root zone or surface soils.	Frequent inspections of infrastructure in accordance with the premises licence L6933/1996/14. Separation distance to groundwater. Ambient groundwater quality monitoring is undertaken in accordance with the premises licence L6933/1996/14.

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 2 and **Error! Reference source not found.** 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
City of Kalgoorlie-Boulder	Approximately 38km South-West of the Premises
Broad Arrow tavern	Approximately 29 km from Silver Swan TSF
Environmental receptors	Distance from prescribed activity
Bullock Holes Timber Reserve	Approximately 9km south east of BSD TSF
Broad Arrow Dam Catchment Area PDWSA – priority not assigned	Approximately 28.5km west of SSTSF
Threatened fauna – Leipoa ocellata (mallee	Historically recorded within 1km west of BSD TSF

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fowl)	but not recorded on the premise.
	The groundwater as reported in the Black Swan Operations Triennial Groundwater Monitoring Review 2019-2021 showed groundwater around the BSD TSF is between approximately 9 mbgl – 21 mbgl, pH is between 7 – 4.5 and total dissolved solids (salinity) measures between 34,000 mbgl - 81,000mg/L. The groundwater as measured in monitoring bores around the SS TSF is between approximately 17 mbgl – 30 mbgl, pH is between 3.2 – 8 and total dissolved solids (salinity) measures between 17,000mg/L and 55,000mg/L.
	The applicant provided the following information regarding groundwater monitoring results:
Groundwater	 Water levels around the BSDTSF have trended down from 2009 to 2021 with pH and salinity fluctuating with no apparent long-term trends. Groundwater around the BSDTSF is acidic to neutral (pH 4 to 7) and hypersaline (TDS 30,000 to 50,000 mg/L). Metal concentrations fluctuate within historical ranges with no apparent long-term trends. Water levels around the SSTSF have continued to trend downwards in the shallow bores since tailings deposition ceased; conversely there is an increasing trend in the deeper bores, possibly due to regional discharge. Salinity and pH continue to fluctuate within historical ranges with no long-term trends. The groundwater around the Silver Swan TSF is acidic to alkaline (pH 3 to 8) and hypersaline (TDS 15,000 to 70,000 mg/L). Metals including aluminium, cobalt, copper, manganese, nickel, and zinc are generally present in slightly elevated concentrations. Values at many bores continue to exceed ANZECC guidelines of 1 mg/L for livestock drinking water for nickel and cobalt, however given the naturally poor quality of the water there is in any case little or no realistic prospect of such use. Weak-acid-dissociable cyanide (WAD-CN) was below detection limits in all bores except TDMB10
	on the east side of SSTSF which had a very low level 0.007 mg/L. This very much below the limit of 0.5 mg/L the Commonwealth Guidelines for Cyanide Management for the Mining Industry (DRET 2008) recommend for sites where there is potential for discharge to surface water.

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 3.

Works approval W6793/2023/1 that accompanies this decision report authorises construction. The conditions in the issued works approval, as outlined in Table 3 have been determined in accordance with *Guidance Statement: Setting Conditions* (DER 2015). The current premises licence L6933/2011/1 conditions authorise emissions associated with the ongoing operation of the premises.

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

Risk events					Risk rating ¹	Annligent		Justification for
Sources / activities	Potential emission	Potential pathways and impact	Receptors	Applicant controls	C = consequence L = likelihood	Applicant controls sufficient?	Conditions ² of works approval	additional regulatory controls
Construction					·			
Earthworks associated with construction of all infrastructure	Dust	Air/windborne pathway causing impacts to health and amenity	Surrounding vegetation	Refer to section 3.1	C = Minor L = Unlikely Medium Risk	Y	Conditions 1, 2 and 3	N/A
Operation					1			
Stockpiling and handling of	Tailings dust	Air/windborne pathway causing impacts to health and amenity	Surrounding vegetation	Refer to Section 3.1	C = Minor L = Unlikely Medium Risk	Y	N/A – Operational conditions are specified on current Licence L6933/2011/1	N/A
Silver Swan Tailings	Tailings sediments	Stormwater runoff from stockpile pad	Vegetation, surface water	Refer to Section 3.1	C = Minor L = Unlikely Medium Risk	Y	N/A – Operational conditions are specified on current Licence L6933/2011/1	N/A
Mining of old Silver Swan Tailings	Tailings spills	Direct discharge to land causing smothering of vegetation and contamination of surface soil.	Vegetation Soils Stormwater	Refer to Section 3.1	C = Minor L = Rare Low Risk	Y	N/A – Operational conditions are specified on current Licence L6933/2011/1	N/A
	Tailings dust	Air/windborne pathway causing impacts to health and amenity	Surrounding vegetation	Refer to Section 3.1	C = Minor L = Unlikely Medium Risk	Y	N/A – Operational conditions are specified on current Licence L6933/2011/1	N/A

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Risk events			Risk rating ¹	•		hard the strengton		
Sources / activities	Potential emission	Potential pathways and impact	Receptors	Applicant controls	C = consequence L = likelihood	Applicant controls sufficient?	Conditions ² of works approval	Justification for additional regulatory controls
	Tailings spills	Direct discharge to land, spills from overtopping or failure of TSF embankment causing smothering of vegetation and contamination of surface soil.	Vegetation Soils Stormwater	Refer to Section 3.1	C = Minor L = Rare Low Risk	Ŷ	N/A – Operational conditions are specified on current Licence L6933/2011/1	N/A
Tailings disposal in lifted BSDTSF	Leachate	Seepage of leachate through BSDTSF base and embankments causing contamination of groundwater and groundwater mounding such that it enters the root zone or surface soils.	Groundwater Vegetation Stormwater	Section 3.1	C = Minor L = Unlikely Medium Risk	Ŷ	N/A – Operational conditions are specified on current Licence L6933/2011/1 An operational water balance for the site should be applied to the licence upon amendment.	N/A

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. 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
Application advertised on the department's website on 14 April 2023	No comments received	N/A
Local Government Authority advised of proposal on 14 April 2023	No comments received	N/A
Department of Mines, Industry Regulation and Safety (DMIRS) advised of proposal on 14 April 2023	DMIRS are continuing to consult with the applicant however they have not indicated any concerns with the matters relevant to DWER's risk assessment.	Noted.
	The works remain reliant on an approved and updated Mining Proposal. The integrity of the facility is regulated by DMIRS.	
	DMIRS were awaiting a clear strategy and commitment to how Poseidon are proposing to reclaim tailings from Silver Swan TSF Cell 1 without compromising the integrity of the TSF embankment.	
Applicant was provided with draft documents on 16 July	Applicant requested the works approval allow for the construction of one or two TSPs as needed.	Accepted. Both locations were considered in the risk assessment.
2023	Applicant identified typo in section 2.4 of decision report.	Corrected.

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. 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: Application validation summary

SECTION 1: APPLICATION SUMMARY (as updated from validation checklist)							
Application type							
Works approval	\boxtimes						
Licence		Relevant works approval number:		Non e			
		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 / Critical Containment Infrastructure 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:		Non e			
Date application received		01/02/2023					
Applicant and Premises details							
Applicant name/s (full legal name/s)		Poseidon Nickel Limited					
Premises name		Black Swan Nickel Operations					
Premises location		Mining Tenements M 27/200 and M27/39					
Local Government Authority		City of Kalgoorlie-Boulder					
Application documents							
HPCM file reference number:		DER2023/000087					
Key application documents (additional to application form):		Att 2A – Monitoring locations Att 2B – Premises plan Att 3B – Proposed activities Att 6A – Emissions and discharges Att 7 – Location and siting					

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SECTION 1: APPLICATION SUMMAR	RY (a	s updated from validation c	hecklist)			
Scope of application/assessment						
		Works approval				
Summary of proposed activities or changes to existing operations.		Construction of:				
		 Raising of the Black Swan Disseminated Tailings Storage Facility (BSDTSF) to allow increase tailings storage capacity Stage 5 Phase 1 is the only lift proposed for this work approval: 4.5 m raise from the current crest of RL 11,378 m to a new height of RL 11,382.5. 				
		 Construction of tailings storage pads at the Black Swa processing plant Run of Mine pad 				
		Operation of:				
		Recovery of tailings from the existing Silver Swan Tailings Storage Facility (SSTSF) for blending into the plant feed and subsequen storage of the blended tails in the BSDTSF.				
Category number/s (activities that	at ca	use the premises to beco	me prescribed premises)			
Table 1. Dressriked promises as		viaa				
Table 1: Prescribed premises categories						
Prescribed premises category and description		posed production or sign capacity	Proposed changes to the production or design capacity (amendments only)			
Category 5: Processing or beneficiation of metallic or non-		,000 tpa of tailings from er Swan TSF	N/A			
metallic ore.		egory already approved for cessing 3,000,000tpa of ore ne processing plant. The ngs will not increase this ughput.				
Legislative context and other ap	prova	als				
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: M27/200 – exp 24/01/2037			
			M27/39 – exp 29/10/2028			

SECTION 1: APPLICATION SUMMARY (as updated from validation checklist)					
Has the applicant obtained all relevant planning approvals?	Yes 🗆 No 🗆 N/A 🖂	If N/A explain why? Mining tenure			
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 🗆	Licence/permit No: GWL182644(1)			
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: Goldfields			
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 <u>WQPN 25</u>)? 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 □	Mining Act 1978 - Mining Proposal and Mine Closure plan to be submitted to DMIRS in January 2023			
Is the Premises within an Environmental Protection Policy (EPP) Area?	Yes □ No ⊠				
Is the Premises subject to any EPP requirements?	Yes □ No ⊠				

SECTION 1: APPLICATION SUMMARY (as updated from validation checklist)						
Is the Premises a known or suspected contaminated site under the Contaminated Sites Act 2003?	Yes ⊠ No □	Tenements M27/200 and M27/39 CSS Site ID: 6803 Classification: possibly contaminated – investigation required (PC–IR) Date of classification: 12/07/2011				