

# **Decision Report**

## **Application for Works Approval**

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

Works Approval Number	W6449/2020/1
Applicant	GSM Mining Company Pty Ltd
ACN	165 235 030
File Number	DER2020/000457
Premises	Granny Smith Gold Mine
	Part of Mining Tenements M38/205 and M38/532
	LAVERTON WA 6440
	As defined by the Premises maps attached to the issued works approval
Date of Report	15/04/2021
•	
Decision	Works approval granted

#### Sonya Poor 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

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 a new tailings storage facility (TSF) Cell at the Granny Smith Gold Mine (the Premises). As a result of this assessment, Works Approval W6449/2020/1 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 <a href="https://dwer.wa.gov.au/regulatory-documents">https://dwer.wa.gov.au/regulatory-documents</a>.

### 2.2 Application summary and overview of Premises

GSM Mining Company Pty Ltd (the applicant) currently operates the Granny Smith Gold Mine (the Premises) which includes a processing plant and associated TSF (Cells 1 - 3). On 15 September 2020, 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 an additional TSF Cell (TSF Cell 4) at the Premises. The Premises is approximately 23 km south of Laverton, Western Australia.

The Premises relates to the category and assessed design capacity under Schedule 1 of the *Environmental Protection Regulations 1987* (EP Regulations) which are defined in Works Approval W6449/2020/1. 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 2017) are outlined in Works Approval W6449/2020/1.

TSF Cell 4 will comprise of two sub-cells (north paddock and south paddock) and the outer embankment will be raised in stages. TSF Cell 4 will be located directly west of the existing Cell 3 and approximately 2.5 km south-east of the ore processing plant as shown in Figure 1. Cell 4 is designed to a maximum height of RL 425 m and will cover a footprint area of 104 ha. The anticipated storage capacity of Cell 4 is approximately 16 million tonnes. Construction will be undertaken in seven stages over an eight year period.



#### Figure 1: GSM site layout and TSF

The starter embankments (stages 4A and 4B) are proposed to be constructed by a downstream method in two stages to a maximum height of approximately 10 m (RL 419 m AHD). Five upstream raises (4C - 4G) are planned to be constructed beyond the starter embankments, typically in 2 m height lifts. The applicant has requested that stages 4A to 4D are subject to this works approval, with future lifts being assessed through future works approvals.

Embankment raises will be constructed using tailings materials borrowed from the tailings beach, in an upstream direction, consistent with current TSF operations. A division embankment will be constructed (west to east) in the centre of the TSF Cell 4 to divide the cell in two subcells (north and south paddocks). The division embankment will be constructed using a modified centreline method.

A cut-off trench will be constructed below the upstream toe of the starter embankments (stages 4A and 4B) and will be backfilled with low permeability compacted fill. Table 1 shows a summary of the seven proposed stages for Cell 4. Stages 4A to 4D only are assessed in this decision report. The tailings storage capacity was conservatively estimated with an in situ dry tailings density of 1.4 t/m<sup>3</sup>. Based on laboratory testing it is estimated that an average in situ dry density of 1.45 to 1.5 t/m<sup>3</sup> is likely to be achieved. Deposition is proposed to be at a production rate of 1.75 Mtpa.

Stage	Crest elevation (RL m AHD)	Tailings storage area (m²)	Tailings storage (m³)	Cumulative storage (m <sup>3</sup> )	Tailings storage (tonnes)	Cumulative storage (tonnes)
4A Starter embankment	416.5	621,344	1,775,240	1,775,240	2,485,336	2,485,336
4B Starter embankment	419.0	758,819	1,728,709	3,503,949	2,420,193	4,905,529
4C Upstream raise	421.0	776,416	1,548,058	5,052,007	2,167,281	7,072,810
4D Upstream raise	423.0	797,525	1,573,453	6,625,460	2,202,834	9,275,644
4E Upstream raise	425.9	809,253	1,605, 640	8,231,100	2,247, 896	11,523,540
4F Upstream raise	427.0	798,119	1,609,644	9,840,744	2,253,502	13,777,042
4G Upstream Raise	429.0	801,487	1,599,523	11,440,267	2,239,332	16,016,374

Table 1: Proposed stages for TSF Cell 4 (Stages 4A to 4D covered by this approval)

### 2.3 Department of Mines, Industry Regulation and Safety

The applicant has submitted a Mining Proposal to the Department of Mines, Industry Regulation and Safety (DMIRS) under the *Mining Act 1978* for the construction and operation of the TSF. The Mining Proposal (MP 91496) was approved on 25 March 2021.

## 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 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.

#### 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 2 below. Table 2 also details the proposed control measures the applicant has proposed to assist in controlling these emissions, where necessary.

Emission	Sources	Potential pathways	Proposed controls
Construction		1	
Dust	Earthworks, increased vehicle movement	Air/windborne pathway	<ul> <li>Dust suppression via use of water trucks, control of mobile equipment movements / restricted speed.</li> <li>Clearing not to be undertaken during period of high winds.</li> <li>Roads/tracks to be maintained.</li> <li>Daily inspections of construction areas to be undertaken to ensure dust control measures are being implemented and are effective.</li> </ul>
Noise	Earthworks, increased vehicle movement	Air/windborne pathway	No blasting proposed and due to lack of receptors, no proposed controls by applicant.
Operation			
Tailings seepage water	TSF Cell 4	Seepage through base and embankments of TSF to surrounding soil and groundwater	<ul> <li>Low permeability layer constructed over the basin areas by <i>in situ</i> treatment of foundation soils and imported mine waste materials from local waste rock dumps to achieve the saturated hydraulic conductivity of 2.0 x 10<sup>-8</sup> m/s.</li> <li>Underdrainage and seepage collection/cut-off systems to be installed to adequately manage seepage. This will include toe drains, drainage network below the final decant pond locations, and seepage collection drain upstream of the embankment below the low permeability liner to collect shallow seepage and groundwater mounding.</li> <li>A finger drainage system to be installed below the pond decant location to reduce the seepage flux through the base of TSF-Cell 4.</li> <li>12 additional monitoring bores proposed around the perimeter of TSF Cell 4 for groundwater monitoring.</li> </ul>
Tailings and slurry	TSF Cell 4 associated pipelines	Direct discharge from pipeline rupture	<ul> <li>A combination of trenches, diversion bunds, monitoring devices, flow metres and shut off valves will be installed.</li> <li>Conduct daily shift-based inspections on pipeline serviceability on all</li> </ul>

### Table 2: Proposed applicant controls

Emission	Sources	Potential pathways	Proposed controls
			associated TSF pipelines.
			<ul> <li>Daily shift-based inspections on decant operations.</li> </ul>
			• Operating and maintenance manual to be updated to include TSF Cell 4 during the detailed design stage, prior to commissioning of the facility.
Tailings and slurry	TSF Cell 4	Overtopping	<ul> <li>Maintain sufficient freeboard for the facility to contain rainfall from a 1 in 100 annual exceedance probability.</li> </ul>
			<ul> <li>Measurement of key items that contribute to the water balance (slurry concentration, tailings tonnage, return water, tailings moisture content) during operations to refine water balance.</li> </ul>
			<ul> <li>Daily inspections (shift-based) to include checking for tailings deposition (location of open spigots, flow rate, beach formation, beach freeboard, beach erosion and low points).</li> </ul>
			<ul> <li>Monthly inspections to cover all aspects of the daily TSF inspections.</li> </ul>
			• Operating and maintenance manual to be updated to include TSF Cell 4 during the detailed design stage, prior to commissioning of the facility.
Contaminated stormwater	TSF Cell 4	Stormwater runoff	A reinforced toe buttress wall to be installed along the toe of the western embankment to protect the TSF embankment from flood inundation and scour under flow velocities.

#### 3.1.2 Receptors

In accordance with the *Guideline: Risk Assessment* (DWER 2017), the Delegated Officer has excluded employees, visitors and contractors of the applicant'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 3 and Figure 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 2016)).

# Table 3: Sensitive human and environmental receptors and distance from prescribed activity

Human receptors	Distance from prescribed activity		
Mount Margaret Community is the closest residential receptor	Approximately 20 km north-west of the proposed works.		
Laverton townsite	Approximately 23 km north of proposed works.		
Environmental receptors	Distance from prescribed activity		
One priority flora species, <i>Phyllanthus baeckeoides</i> (P3) was recorded in a 2020 survey at one location, where 70 plants were recorded.	Located to the west of TSF 3, within the proposed footprint of TSF Cell 4. Impacts to flora will be assessed under the Native Vegetation Clearing Permit concurrently submitted with this approval.		
No threatened fauna species within the prescribed area but one priority fauna species (Long-tailed Dunnart) could potentially be impacted.	Within the proposed footprint of TSF-Cell 4 Impacts to fauna will be assessed under the Native Vegetation Clearing Permit concurrently submitted with this approval.		
Childe Harold Creek, Windich Creek and Lake Carey Salt Lake are the nearest surface water bodies to the proposed TSF area.	Childe Harold Creek – 150 m west Windich Creek – 700 m south east		
Childe Harold Creek is an ephemeral creek which drains into Lake Carey. Windich Creek no longer conveys surface water flow as TSF Cells 1-3 were constructed over this creek.	Lake Carey Salt Lake – 5 km southwest		
The Premises is located within the Goldfields Groundwater Management Area, according to the <i>RIWI Act 1914.</i> Groundwater salinity mapping from the department's GIS database indicates the groundwater is hypersaline. Groundwater at the Premises is not considered suitable for agricultural or pastoral use. The closest stock watering bore is located 5 km away up-hydraulic gradient and is hosted within a superficial aquifer. The regional flow direction of groundwater is towards Lake Carey. Lake Carey is the closest groundwater and surface water receptor to the Prescribed Premises	Current groundwater levels are generally in an east-west gradient away from the existing TSF, towards Childe Harold Creek. Groundwater levels are currently suppressed due to ongoing abstraction from the seepage abstraction bores. Prior to installation of these bores (2017), groundwater to the west of TSF Cell 4 location was $1 - 3$ metres below ground level (mbgl). In 2020, groundwater levels range from $1.8 - 11.2$ mbgl.		

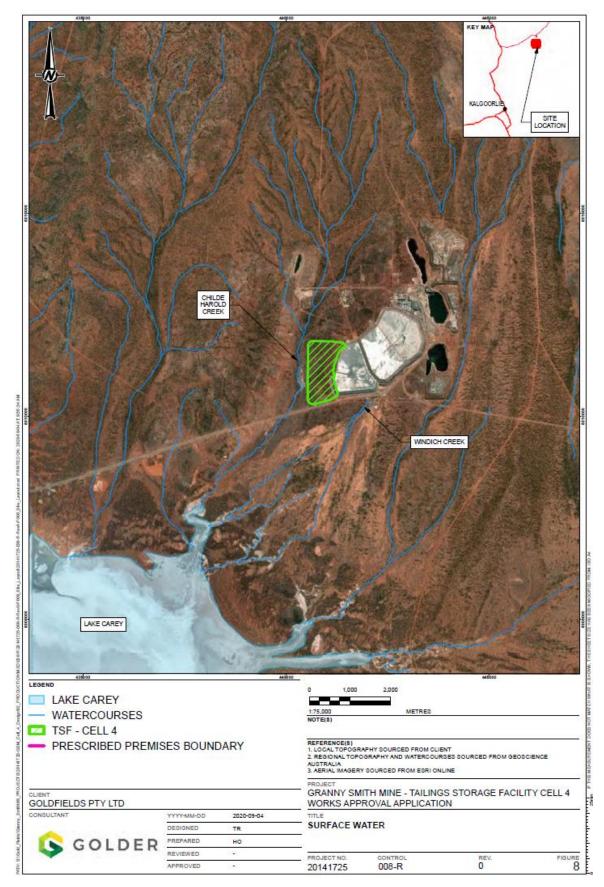


Figure 2: Distance to nearest surface water bodies

## 3.2 Risk ratings

Risk ratings have been assessed in accordance with the *Guideline: Risk Assessments* (DWER 2017) 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 4.

Works Approval W6449/2020/1 that accompanies this Decision Report authorises construction and time-limited operations. The conditions in the issued Works Approval, as outlined in Table 4 have been determined in accordance with *Guidance Statement: Setting Conditions* (DER 2015).

An amendment to licence L8435/2010/3 is required following the time-limited operational phase authorised under the works approval to authorise emissions associated with the ongoing operation of the Premises i.e. use of the new TSF. 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 4: Risk assessment of potential emissions and discharges from the Premises during construction, time-limited operations and operation

•								
Risk Event					Risk rating <sup>1</sup>	Applicant controls sufficient?	Conditions <sup>2</sup> of works approval	
Source/Activities	Potential emission	Potential pathways and impact	Receptors	Applicant controls	C = consequence L = likelihood			Justification for additional regulatory controls
Construction								
	Dust		No human residential receptors in the vicinity of the premises	Refer to Section 3.1	C = Slight L = Rare <b>Low Risk</b>	Y	No conditions	N/A
Earthworks and increased vehicle movements	Noise	Air/windborne pathway causing impacts to health and amenity	Native vegetation including one Priority Flora Species (P3) Native fauna, including the long-tailed Dunnart (P4)	Refer to Section 3.1	C = Minor L = Rare <b>Low Risk</b>	Y	No conditions	N/A
Operation (including time-limited-operat	tions operations)							
		Seepage through base and embankments of TSF causing impacts of groundwater quality	Groundwater	Refer to Section 3.1	C = Moderate L = Possible <b>Medium Risk</b>		Condition 1 Condition 2	Refer to section 3.3 for detailed risk assessment on seepage of contaminated water. The applicant has proposed a low permeability compacted soil liner of 2 x 10 <sup>-8</sup> m/s. A
Deposition and storage of tailings in TSF Cell 4	Seepage of tailings	Seepage through base and embankments of TSF creating groundwater mounding and flow causing impacts to surface water quality and	Childe Harold Creek which flows into Lake Carey Salt Lake	Refer to Section 3.1	C = Moderate L = Possible <b>Medium Risk</b>	Ν	Condition 3 <u>Conditions 4 - 12</u> <u>Conditions 14 - 17</u>	program of testing of the compacted soils has been specified to ensure that the permeability is low. The likelihood has been rated 'possible' due to the calculation of the evaporation rates as part of the seepage modelling. Refer to section 3,3

Risk Event				Risk rating <sup>1</sup>	Annligent			
Source/Activities	Potential emission	Potential pathways and impact	Receptors	Applicant controls	C = consequence L = likelihood	Applicant controls sufficient?	Conditions <sup>2</sup> of works approval	Justification for additional regulatory controls
		health of native vegetation						for further justification.
		vegetation						Monitoring conditions during time-limited operations are included in the works approval to ensure infrastructure and equipment is operated and maintained adequately.
								When considering the duration of the works approval; the proposed timeline for staged construction, along with the uncertainty of evaporation rates, the Delegated Officer has approved construction and operation of the TSF to Stage 4D only. Future raises will need to be assessed under future works approval applications.
	Tailings	Overtopping of TSF cells causing impacts to surface water quality, health of native vegetation and localised soil contamination	Surface water (Childe Harold Creek and Lake Carey Salt Lake) Native vegetation including one Priority Flora Species (P3)	Refer to Section 3.1	C = Major L = Unlikely <b>Medium Risk</b>	Y	Condition 1 <u>Conditions 4 – 7</u> Condition 13 Condition 14	N/A. Some additional regulatory requirements apply to reporting and time limited operations commencement and duration.
			Native fauna, including the long-tailed Dunnart (P4)					
		Pipeline burst or leak causing	Surface water		C = Moderate		Condition 1	
	Tailings and slurry	impacts to surface water quality, health of native	(Childe Harold Creek and Lake Carey Salt	Refer to Section 3.1	L = Possible <b>Medium Risk</b>	Y	Condition 3 Condition 13	N/A

Risk Event	Risk Event					Annligent		
Source/Activities	Potential emission	Potential pathways and impact	Receptors	Applicant controls	C = consequence L = likelihood	Applicant controls sufficient?	Conditions <sup>2</sup> of works approval	Justification for additional regulatory controls
		localised soil contamination.	Lake) Native vegetation including one Priority Flora Species (P3) Native fauna, including the long-tailed Dunnart (P4)				Condition 14	

Note 1: Consequence ratings, likelihood ratings and risk descriptions are detailed in the Guideline: Risk Assessments (DWER 2017).

Note 2: Proposed applicant controls are depicted by standard text. Bold and underline text depicts additional regulatory controls imposed by department.

## 3.3 Detailed risk assessment – Seepage of contaminated water

#### 3.3.1 Overview of risk event

Seepage of contaminated water through the base and embankments of TSF Cell 4 may contain constituents such as arsenic and cyanide and has the potential to adversely impact groundwater, soil/sediment and native vegetation.

#### 3.3.2 Groundwater analysis and seepage modelling

The current operational TSF (TSF 3) at the premises has a history of seepage which caused some vegetation stress. Seepage management has been in place since 2012 which consists of a seepage management trench and recovery bores. Currently groundwater levels within proximity of the recovery bores are showing a continued decline. As a result, drawdown extent is influencing and reducing mounding.

The application for the works approval includes seepage modelling. The seepage rate has been calculated by an assumption that the evaporation from the decant pond in TSF Cell 4 can be defined by applying a pan factor of 0.75, which is from a large fresh water body under specific conditions. In practice, the evaporation rate from a water surface decreases with increasing salinity, due to the effects of dissolved solids in decreasing the vapor pressure of the water (Salhotra *et al.*, 1985). This may not be accurate as this pan evaporation rate applies to the evaporation of fresh water. The seepage modelling undertaken for the application has predicted a seepage rate of approximately 800 m<sup>3</sup>/day. This is unlikely to cause any significant environmental impact. However, adverse impacts could occur if the seepage rates were higher than this. This would be caused by significant groundwater mounding occurring near the TSF which would potentially cause saline water to rise into the root zone of nearby vegetation.

#### 3.3.3 Justification for additional regulatory requirements

Considering the calculation of the seepage rates has been based on a pan evaporation rate for a large fresh water body, and the seepage history of TSF 3, the inclusion of monitoring conditions throughout the time-limited operational phase is justified. A detailed water balance is required in condition 17(b)(iii) to ensure an accurate rate of evaporation is calculated which can in turn impact the seepage rate. In addition to the water-balance, a full suite of groundwater monitoring is required by condition 15, as per current licence L8435/2010/3 condition 28. This includes standing water level which will identify if any mounding of groundwater is occurring.

## 4. Consultation

Table 5 provides a summary of the consultation undertaken by the department.

Consultation method	Comments received	Department response
Application advertised on the department's website (26/10/2020)	None received	N/A
Local Government Authority advised of proposal (22/10/2020)	None received	N/A
Department of Mines, Industry Regulation and Safety (DMIRS)	None received	N/A

#### Table 5: Consultation

Works Approval: W6449/2020/1

IR-T13 Decision Report Template (short) v2.0 (July 2020)

advised of proposal (22/10/2020)		
Applicant was provided with draft documents on 12 March 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 a works approval will be granted, subject to conditions commensurate with the determined controls and necessary for administration and reporting requirements. An amendment to licence L8435/2010/3 will be required following construction to allow ongoing operation of TSF Cell 4.

## References

- 1. Department of Environment Regulation (DER) 2015, *Guidance Statement: Setting Conditions*, Perth, Western Australia.
- 2. Department of Water and Environmental Regulation (DWER) 2016, *Guideline: Environmental Siting*, Joondalup, Western Australia.
- 3. DWER 2017, Guideline: Risk Assessments, Joondalup, Western Australia.
- 4. Golder Associates Pty Ltd, September 2020, *Design Report in Support of Tailings Storage Facility Cell 4 Works Approval Application, Granny Smith Gold Mine*, West Perth, Western Australia.
- 5. Golder Associates Pty Ltd, September 2020, *Works Approval Application Granny Smith Gold Mine Tailings Storage Facility 4*, West Perth, Western Australia.
- Salhotra, A.M., Adams, E.E. and Harleman, D.R., 1985. Effect of salinity and ionic composition on evaporation: analysis of Dead Sea evaporation pans. *Water Resources Research*, **21**, 1336-1344. The paper is available from the following web site

https://www.researchgate.net/profile/Eric\_Adams4/publication/253048775\_Effect\_of\_S alinity\_and\_lonic\_Composition\_on\_Evaporation\_Analysis\_of\_Dead\_Sea\_Evaporation Pans/links/552bbb720cf29b22c9c1de80/Effect-of-Salinity-and-Ionic-Composition-on-Evaporation-Analysis-of-Dead-Sea-Evaporation-Pans.pdf.

7. Existing Licence L8435/2010/3 for Granny Smith Gold Mine, issued to GSM Mining Company Pty Ltd on 12 April 2021, available from the following website:

https://www.der.wa.gov.au/our-work/licences-and-works-approvals

## Appendix 1: Summary of applicant's comments on risk assessment and draft conditions

Condition	Summary of applicant's comment	Department's response
Works Approval and Decision Report premises address.	Mining leases on premises address incorrectly listed as L38/205 and L38/532. The correct leases are M38/205 and M38/532.	Mining leases corrected. As per the premises boundary map provided by the applicant, only parts of the tenements are encompassed. Therefore the premises address will be listed as 'part of Mining Tenements M38/205 and M38/532'
Works Approval Condition 1	Punctuation error in title	Error corrected
Decision Report Table 4	Incorrect reference to permeability of liner at $1 \times 10^{-8}$ m/s. This should be 2.0 x $10^{-8}$ m/s as per works approval application.	The works approval application has several incorrect references of permeability of $1 \times 10^{-8}$ m/s in the documents. DWER has since clarified with the applicant that the permeability is $2 \times 10^{-8}$ m/s and the seepage rate has been calculated on this. Therefore, amending the incorrect references to $2 \times 10^{-8}$ m/s will not alter the risk assessment. Table 4 amended to reflect $2 \times 10^{-8}$ m/s.
Works Approval Table 1	Incorrect reference to permeability of liner at $1 \times 10^{-8}$ m/s. This should be 2.0 x $10^{-8}$ m/s as per works approval application.	Works approval Table 1 amended to reflect 2 x $10^{-8}$ m/s for reasons outlined above.
Works Approval Condition 5(e)	Spelling error of word 'party'	Spelling corrected
Works Approval Table 4	The applicant requests to remove proposed monitoring wells MB76S and MB76D from the groundwater monitoring program. Further assessment of the bores' proposed location identified they fall within a Heritage site immediately south of the Wallaby haul road (ID 20006 recorded in the Department of Planning, Land and Heritage's (DPLH) Aboriginal Heritage Inquiry System (AHIS). The applicant's position is to avoid disturbance in all registered or potential Heritage sites (under the appropriate approvals). These bores were originally proposed to monitor groundwater level and quality southwest of TSF Cell 4. Given the spatial constraints of the Heritage exclusion zone, existing monitoring bores, Cell 4 and the disturbance envelope (as per the associated Mining Proposal), relocation of MB76 is not feasible. The nearest	The removal of these bores will not impact on the risk assessment. Monitoring bores MB76S and MB76D have been removed.

Condition	Summary of applicant's comment	Department's response		
	bores outside, but in close proximity, to the Heritage site are existing nested bores MB62 and MB53, and proposed new nested bores MB72 (shallow and deep).			
	These wells are located where groundwater modelling recommended monitoring is completed for the site and will perform the monitoring purpose intended for MB76.			
	An updated proposed groundwater monitoring network has been provided by the applicant.			
Decision Report Table 2	As per comment above, the applicant proposes to reduce the additional number of monitoring bores from 14 to 12 by removing MB76 (shallow and deep) from the monitoring program.	Decision Report Table 2 updated to reflect change to proposed number of bores.		
Works Approval – Table 4	Spelling error in word 'odour'.	Spelling corrected.		
Works Approval – condition 13	Spelling error in word 'works'.	Spelling corrected.		
Works Approval – condition 13 Table 5	Incorrect measurement unit of 500 cm for freeboard. Should be 500 mm	Measurement unit corrected.		
Works Approval – Table 6	The applicant has requested clarification as to which monitoring instrumentation this condition refers to.	Monitoring instrumentation refers to the vibrating wire piezometers along with survey pins. The intent of this condition is for daily checks to this equipment to ensure no damage has occurred to these instruments.		
Works Approval – Table 7	Standing water level has a subscript 1 next to it, however no footnote associated.	Note 1 was omitted in error. It has now been included and explains that non- NATA accredited analysis is permitted for those parameters.		
Works Approval – Premises Map	The applicant was requested to provide a premises boundary map for the premises encompassing TSF Cell 4 only. A map has been provided.	New map included to the Works Approval.		
Decision Report – Table 2	Spelling error in word 'stage'.	Spelling corrected.		
Decision Report – Table 3	The applicant has responded to the department's note regarding the Mount Margaret Community. The community is located approximately 20 km north-west of the proposed works.	Table 3 updated to include details of Mount Margaret Community as a human receptor.		

Condition	Summary of applicant's comment	Department's response	
Decision Report – Appendix 2	CPS 9100/1 was granted on 7 January 2021	At the time of submission of the application the Clearing Permit had not been granted. The checklist in Appendix 2 has now been updated to reflect the granting of the Clearing Permit.	
Decision Report – Appendix 2	036960 – CAW application submitted on 21 February 2021 and currently under assessment.	At the time of submission of the application the CAW application was not submitted. The checklist in Appendix 2 has now been updated to reflect the status of the CAW application.	

# Appendix 2: Application validation summary

SECTION 1: APPLICATION SUMMARY (as updated from validation checklist)					
Application type					
Works approval	$\boxtimes$				
		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 Com Critical Containmen Report submitted?			
		Date Report received:			
Renewal		Current licence number:			
Amendment to works approval		Current works approval number:			
Amendment to licence		Current licence number:			
Amenament to licence		Relevant works approval number:		N/A	
Registration		Current works approval number:		None	
Date application received		15 September 2020			
Applicant and Premises details					
Applicant name/s (full legal name/s)		GSM Mining Company Pty Ltd			
Premises name		Granny Smith Gold Mine			
Premises location		Mining leases L38/205 and L38/532			
Local Government Authority		Shire of Laverton			
Application documents					
HPCM file reference number:		DER2020/000457			
Key application documents (additional to application form):		TSF Cell 4 Design Report (includes hydrological assessment and groundwater assessment) Vertebrate Fauna Report Reconnaissance Flora Report			
Scope of application/assessment					
Summary of proposed activities or changes to existing operations.		Construction of tailings storage facility cell 4 to allow approximately 16 million tonnes of tailings storage capacity from the processing plant over a 10 year period. Final crest height to be RL 429 m constructed in several stages (4A to 4B).			

		essed production or gn capacity		Proposed changes to the production or design capacity
Category 5: processing of ore	TSF	- Cell 4 – 1.75 mtpa		No change to throughput
egislative context and other approv	als			
Has the applicant referred, or do they intend to refer, their proposal to the EF under Part IV of the EP Act as a significant proposal?	PA	Yes 🗆 No 🖂	ŋ	Referral decision No: Managed under Part V □ Assessed under Part IV □
Does the applicant hold any existing P IV Ministerial Statements relevant to th application?		Yes 🗆 No 🖂	-	Ministerial statement No: EPA Report No:
Has the proposal been referred and/or assessed under the EPBC Act?		Yes 🗆 No 🖂	F	Reference No:
Has the applicant demonstrated occupancy (proof of occupier status)?		Yes 🛛 No 🗆	с 1	Certificate of title □ General lease □ Expiry: Mining lease / tenement □ Expiry: Other evidence □ Expiry:
Has the applicant obtained all relevant planning approvals?		Yes □ No ⊠ I	N/A 🗆 🛛 E	Approval: Mining Proposal being assessed in parallel to WAA. Expiry date: f N/A explain why?
Has the applicant applied for, or have a existing EP Act clearing permit in relati to this proposal?		Yes 🛛 No 🗆		CPS No: Clearing permit to be submitted in parallel to this WAA
Has the applicant applied for, or have existing CAWS Act clearing licence relation to this proposal?		Yes 🗆 No 🖂		Application reference No: N/A .icence/permit No: N/A
Has the applicant applied for, or have an existing RIWI Act licence or permit in relation to this proposal?		Yes □ No ⊠	l	Application reference No: Licence/permit No: Licence / permit not required.

Does the proposal involve a discharge of waste into a designated area (as defined in section 57 of the EP Act)?	Yes □ No ⊠	N/A
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
Is the Premises within an Environmental Protection Policy (EPP) Area?	Yes □ No ⊠	N/A
Is the Premises subject to any EPP requirements?	Yes □ No ⊠	N/A
Is the Premises a known or suspected contaminated site under the <i>Contaminated Sites Act 2003</i> ?		Classification: N/A Date of classification: N/A
	Yes □ No ⊠	