



| Source / Activity | Potential Emission | Potential Pathways and Impact | Controls | Further discussion required? |
|---|----------------------|---|--|---|
| Construction activities associated with TSF4 Cell 1 1,277.5mRL embankment raise. | Noise | Air/windborne pathway causing impacts to health and amenity. | Noise emissions and impacts on human receptors are regulated by a Noise Management Plan required by a Regulation 17 exemption under the Environmental Protection (Noise) Regulations 1997. | <p>No.</p> <p>Works proposed within this Application are in the same locations as previous works and not expected to change the noise profile of the Premises.</p> <p>Assessed under L4247/1991/13, W6618/2021/1 and W6901/2024/1.</p> <p>Regulated under a Regulation 17 exemption under the Environmental Protection (Noise) Regulations 1997.</p> |
| Operation (including TLO) | | | | |
| TSF4 Cell 1 operation at 1,277.5mRL resulting in increased tailings and contaminated water (acidic and metalliferous seepage) | Contaminated seepage | Direct infiltration through base and embankments of TSF4 (including Cell 1 1,277.5mRL raise) impacting groundwater and surface water Migration of contaminated water offsite causing | <p>Existing controls for TSF4 (W6618/2021/1, W6901/2024/1 and L4247/1991/13)</p> <ul style="list-style-type: none"> • Existing liners including a mixture of clay liner engineered with permeability of $<1 \times 10^{-9}$ m/s and bituminous geomembrane liner with permeability of $<1.0 \times 10^{-14}$ m/s. • Minimum BGM installation specifications to include: <ul style="list-style-type: none"> ○ The panels shall overlap 20 cm (minimum) for seaming. Ends and overlaps must be welded on a homogeneous and continuous basis, leaving 10 - 30 mm bitumen bead along the seam; ○ Quadruple overlaps due to the alignment of 4 strips are prohibited; ○ Immediately prior to covering the BGM shall be inspected for defects, tears, holes or damage; | <p>No.</p> <p>Further discussion included in Section 6A.2 for completeness with the TSF category checklist.</p> <p>Seepage from TSF4 has been assessed for all raises to final height. A TSF4 Seepage Assessment, consisting of series of additional geological and hydrogeological</p> |



| Source / Activity | Potential Emission | Potential Pathways and Impact | Controls | Further discussion required? |
|-------------------|--------------------|--|---|---|
| | | adverse impacts to ecosystem health and human health | <ul style="list-style-type: none"> ○ Tears, holes, blisters, and other defects shall be repaired with patches made of the same BGM, and extend a minimum of 200 mm beyond the edge of defects. ● Subgrade for BGM liner to have: <ul style="list-style-type: none"> ○ minimum 300 mm thickness on embankments; ○ be free from angular material (i.e. sharp rocks), vegetation, tree roots and stumps; ○ have less than 3% organic material. ● Toe drains <ul style="list-style-type: none"> ○ Collecting seepage from underdrainage system and sand drainage blanket. ● The pumping capacity of the decant system to be maintained to the requirements of the TSF4 water balance and in order to minimise the size of the decant pond as much as practicable; ● Underdrainage system <ul style="list-style-type: none"> ○ Freeboard on seepage ponds (Sump A, Sump B and Sump C) to allow for 10% exceedance probability 24-hour event; ○ Automatic valve shut off (at Sump A) in case of water level exceedance or pump failure; ○ Level sensors and automatically activated standby pump if high water levels are reached (at Sump B); ○ Two electric pumps on duty/standby configuration, additional diesel standby pump, level sensors (low, high, high-high), flow meter and manual shut off valves installed (at Sump C); ○ Two submersible pumps on duty/standby configuration (at Sump D); ○ Operators are required to undertake regular inspections of Sump C and D to ensure that pumps are working adequately; ○ Seepage ponds sumps to be equipped with remotely operated pumps; and ○ Sufficient standby back up pumps must be available for rapid deployment should primary sump pumps fail; ○ Inspections to be taken twice daily on the size of the decant pond, decant pumping system and seepage pond freeboard and function of the pumps; | studies/assessments, has been undertaken. Further detail in relation to emissions and discharges is provided in Section 6A.2. |



| Source / Activity | Potential Emission | Potential Pathways and Impact | Controls | Further discussion required? |
|-------------------|--|---|--|--|
| | | | <ul style="list-style-type: none"> • Captured seepage and decant is returned to the mine water circuit; • Construction of seepage collection systems (above liner drainage) and connecting to existing system; • Construction of underdrainage systems (subsoil drainage below BGM liner) including sumps; • Seepage, underdrainage and decant pumped to the mine water circuit; • Installation of vibrating wire piezometers in the embankments (minimum pressure rating of 350 kPa) <p>Additional proposed controls (these embankment lifts):</p> <ul style="list-style-type: none"> • Installation of new BGM liner along the embankment raises, to be tied into the existing liner for the embankments; • Construction elevated drainage as part of Cell 2 1275mRL and Cell 1 1277.5mRL lift to provide additional contingency to existing underdrainage. <p>Monitoring points surrounding TSF4:</p> <ul style="list-style-type: none"> • Shallow (S), intermediate (I) and deep (D) groundwater monitoring bores surrounding TSF4: MB22/01 (S/I/D), MB22/08 (S/I/D), MB20/01 (S/I/D), MB20/03 (I/D), MB22/21 (S/I/D), MB22/22 (S/I/D), MB22/23 (S/I/D), PB22/01 (S/I/D); • Annual ecological monitoring at surface water locations surrounding the site including sampling locations along Woljenu Creek; • Water balance monitoring for TSF4; and • Implementation of Seepage Management Plan | |
| | Contaminated stormwater runoff (including from | Contaminated stormwater runoff from TSF4 impacting groundwater and surface water. | <ul style="list-style-type: none"> • Rock-lined downstream toe drains will capture runoff from embankment and surrounding catchment. Toe drains flowing to southern valley will be collected and returned to mine circuit. Drains are approx. 1m wide and 1m deep; • All rainfall and runoff from TSF4 directed to CWD for re-use; • Waste rock for construction was tested for potentially acid forming materials; | No. Further discussion included in Section 6A.3 for completeness with the TSF category checklist. |



| Source / Activity | Potential Emission | Potential Pathways and Impact | Controls | Further discussion required? |
|-------------------|---|---|--|--|
| | embankment raise) | Migration of contaminated stormwater offsite causing adverse impacts to ecosystem health and human health | <ul style="list-style-type: none"> Stormwater within western catchment continued to be captured and retained within western water circuit (CWD, Southampton Dam, Austins Dam, Cowan Brook Dam); Arsenic remediation unit (ARU) and Water Treatment Plant to reduce lithium and arsenic concentrations in process water; and Temporary bank/bund established along the upstream (NW and E) of cleared areas to divert runoff away from the cleared area; if sediment containing runoff is observed, sediment control such as sumps will be implemented. <p>No modifications to the surface water management system in the 1275mRL design (GHD, 2025a) is required for 1277.5mRL embankment raise. The surface water management for TSF4 Cell 1 will remain same as there would not be a change in impacts.</p> | No change to surface water catchment areas arises from the Cell 1 2277.5mRL raise. Works proposed in this Application therefore do not increase the potential for contaminated stormwater run-off at the Premises. |
| | TSF4 decant and process water stored in onsite water storage dams | Direct infiltration through base/embankment of TSF4 and impacting groundwater and surface water. | <p>Existing controls under L4247/1991/13:</p> <ul style="list-style-type: none"> ARU and Water Treatment Plant to reduce lithium and arsenic concentrations in process water; Clear Water Dam has an underdrainage system and seepage cut off trench (with return water directed back into Clear Water Dam); and Annual ecological monitoring in surface waters surrounding the site. | No. There is no change to the TSF4 decant and process water storage (approved under W6618/2021/1, W6901/2024/1 and L4247/1991/13) proposed in this Application. |
| | Tailings or process water from pipeline rupture | Direct infiltration through base/embankment of TSF4 and impacting groundwater and surface water. | <p>Existing controls under L4247/1991/13 and W6901/2024/1 for TSF4 include:</p> <ul style="list-style-type: none"> All tailings, decant and seepage pipelines to be: <ul style="list-style-type: none"> Equipped with telemetry and pressure sensors to detect leaks and failures; Equipped with automatic cut outs in the event of a pipe failure; and Equipped with leak monitoring which triggers the related pump/s to automatically shut down in High setpoint is exceeded. Pipeline inspections at least daily and action taken to remediate; | No. There is no change to tailings and process water pipeline management (approved under W6618/2021/1, W6901/2024/1 and L4247/1991/13) proposed in this Application. |



| Source / Activity | Potential Emission | Potential Pathways and Impact | Controls | Further discussion required? |
|------------------------------------|----------------------|--|---|---|
| | | | <ul style="list-style-type: none"> Constructed according to Australian Standards AS/NZS 2033-2008, AS/NZS 4130-2018, AS 4131-2010 for installation of polyethylene pipe systems, pipes for pressure applications and polyethylene compounds for pressure and fittings; Pipes shall be placed and installed in accordance with the manufacturer's specifications; and All pipes shall be surveyed and inspected prior to placement of backfill. | |
| | Tailings overtopping | | <p>Existing controls under L4247/1991/13 and W6901/2024/1 for TSF4 include:</p> <ul style="list-style-type: none"> 0.9m freeboard (minimum of 600mm beach freeboard and 300mm embankment freeboard between the top of tailings and the embankment crest), allowing for storage of an extreme storm event (1 in 100 year, 72 hours, 217mm). | <p>No.</p> <p>No change to management of freeboard (approved under W6618/2021/1, W6901/2024/1 and L4247/1991/13) proposed in this Application.</p> |
| TSF4 operation at Cell 1 1277.5mRL | Dust | Air/windborne pathway causing impacts to health, amenity and nearby native vegetation. | <p>Existing works approval controls (W6901/2021/1):</p> <ul style="list-style-type: none"> Condition 1 – The works approval holder must manage dust generation at the premises by wetting down activities associated with construction of the tailings storage facility 4 (TSF4) embankment lift to 275 m AHD. <p>Existing licence controls (L4247/1991/13):</p> <ul style="list-style-type: none"> Condition 17 – The licence holder must proactively manage dust generating activities on the premises by: <ul style="list-style-type: none"> Ensuring that all dust suppression and dust extraction equipment used on the premises to manage dust emissions from plant, equipment and processing infrastructure is maintained in good working condition; Proactively manage visible dust emissions observed on the premises through the application of additional dust suppression to plant and equipment, or through the use of watercarts on stockpiles, exposed areas, access roads as required; and | <p>No.</p> <p>Further discussion included in Section 6A.1 for completeness with the TSF category checklist.</p> <p>No increase in dust emissions – the surface area of tailings will not change and the construction materials are unchanged. Talison expects that dust emissions from the Cell 1 1277.5mRL raise proposed in this Application can be managed under</p> |



| Source / Activity | Potential Emission | Potential Pathways and Impact | Controls | Further discussion required? |
|-------------------|--------------------|-------------------------------|--|--|
| | | | <ul style="list-style-type: none">○ Utilising weather forecasting tools to inform daily work activities and dust suppression activities to target and mitigate dust emissions from premises activities.• Conditions 37, 38, 43 and 46 – dust monitoring and management. Other: <ul style="list-style-type: none">• Implementation of the TARP as previously required by L4247/1991/13, approved on 11 December 2023; and• Implementation of the DMP. | current Licence conditions (L4247/1991/13), W6901/2024/1 conditions and implementation of the existing TARP and DMP. |



6A.1 Dust

Information regarding dust emissions from TSF4 has been previously provided to DWER and assessed under L4247/1991/13, W6618/2021/1 and W6901/2024/1. Works proposed in this Application are not expected to result in increased dust emissions and risk to the surrounding environment that is in addition to what has already been assessed by DWER and do not require changes to existing dust controls.

6A.1.1 Potential Emissions

No increase in dust emissions from the construction and operation of the TSF4 Cell 1 1277.5mRL raise are expected from what has already been assessed and approved under L4247/1991/13, W6618/2021/1 and W6901/2024/1.

6A.1.2 Proposed Controls

EP Act Part V Licence (L4247/1991/13)

The Licence contains a number of conditions that are related to air quality and dust management, as outlined in the sections below.

Air Quality and Meteorological Monitoring

An amendment to W6283/2019/1 was initiated by DWER and approved on 12 July 2023, which removed dust monitoring conditions from the existing works approval, transferring them to L4247/1991/13.

Monitoring of ambient air quality is required under Condition 29 of L4247/1991/13. Regulated dust monitors include two Continuous Australian Standard (AS) PM₁₀ Monitors (north and south) and two Osiris Monitors (north and southeast). Continuous monitoring of particulates at PM₁₀ is required under the Licence at the Continuous AS PM₁₀, with the Osiris monitors also continuously monitoring Total Suspended Particulates (TSPs). Additionally, dust composition was completed be monitored at a PM₁₀ high-volume sampler located to the north of the Premises for a period of 12 months from 1 December 2023. The requirement for dust composition modelling was removed from the Licence after the completion of 12 months of monitoring; however this monitoring is ongoing. The locations of the dust monitors are shown in Figure 23.

Talisson is also required to monitor the ambient meteorological conditions, including wind speed and direction, at the Premises under Condition 30 of the Licence. Monitoring will occur at two meteorological stations, within Greenbushes townsite and in the western portion of the premises (Figure 23). The meteorological station within the Greenbushes townsite (located at the School) was installed and is currently active (commissioned in September 2025).

Dust management controls will continue to be reviewed and updated in accordance with L4247/1991/13 as updated.

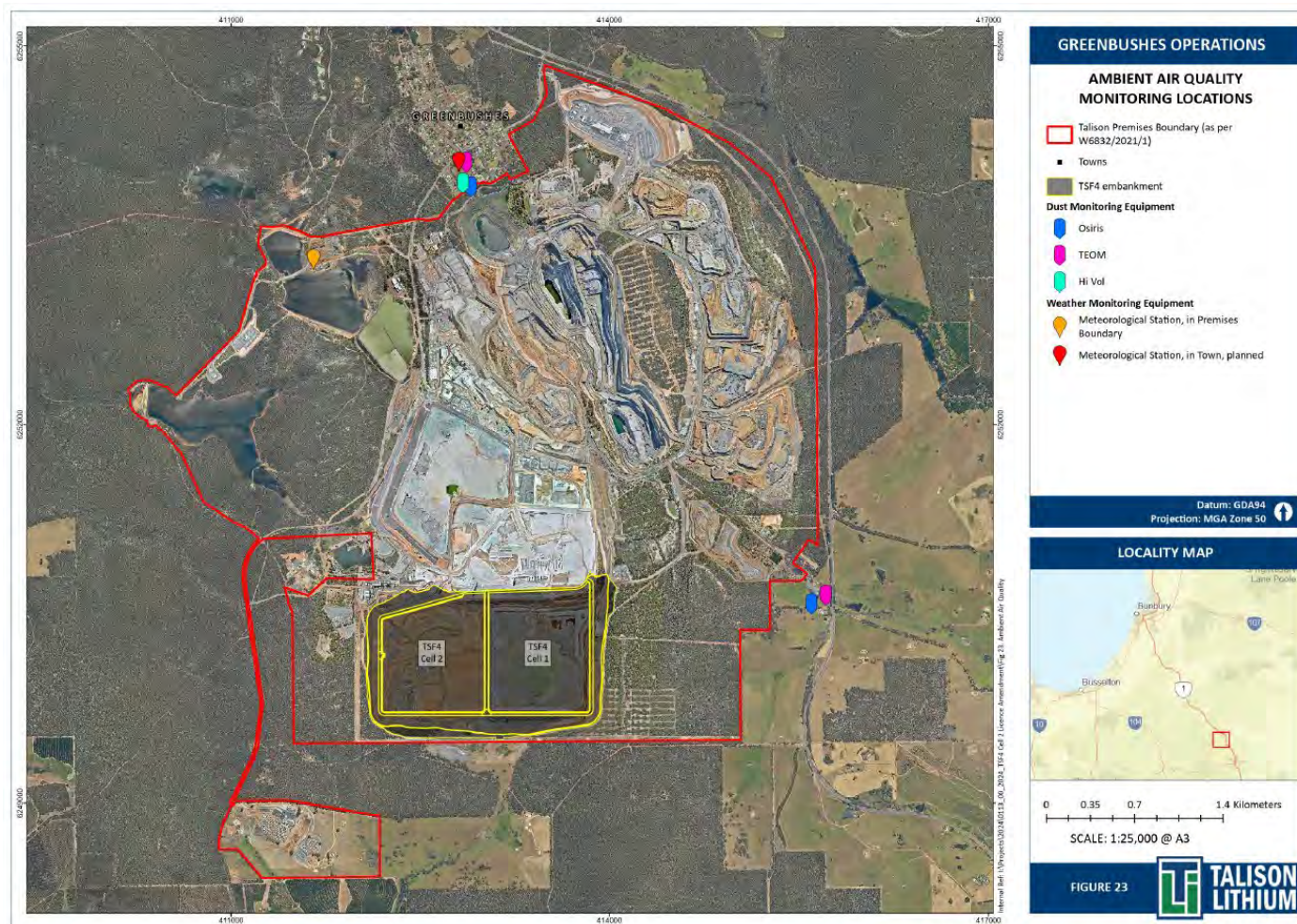


Figure 23: Dust Monitoring Locations



Air Quality/Meteorological Triggers and Limits

Ambient air quality and meteorological trigger and limit values are provided in Table 17 of Condition 31 of L4247/1991/13. In the case of exceedances of the trigger values or limit, Talison is required to notify the CEO of DWER. If a parameter reaches a trigger value, Talison is required to undertake corresponding management actions to deal with the exceedance, outlined in Table 21 of Condition 37 (duplicated in Table 7). Under Condition 38, Talison is required to submit to DWER a review of the implementation of the actions specified within Table 21 of Condition 37 within the 2024-2025 Annual Environmental Report, and for each annual period thereafter.

Table 7: Management actions required in the event of trigger value exceedance (Table 19 from the Licence)

| Item | Monitoring location (Figure 5 of Schedule 1) | Trigger value | Management action | Timeframe |
|------|--|---|---|---|
| 1 | Continuous AS PM ₁₀ Monitor South | ≥100ug/m ³ PM ₁₀ 15-minute rolling average, as calculated with reference to Figure 13 | (a) Conduct an investigation to determine any potential causes of the trigger value exceedance; and (b) If dust source is identified following the investigation under part (a), implement immediate dust abatement measures, including but limited to the application of additional dust suppression methods at the dust source. | Management actions to commence immediately upon the licence holder being notified of exceedance and be continued for the duration of the trigger event. |
| 2 | Continuous AS PM ₁₀ Monitor North | | | |
| 3 | Continuous AS PM ₁₀ Monitor South | ≥50µg/m ³ PM ₁₀ (averaging period of 5 minutes) and wind direction within 225° to 360° for more than a 3-hour period. | (a) Conduct an investigation to determine any potential causes of the trigger value exceedance; and (b) If dust source is identified following the investigation under part (a), implement immediate dust abatement measures, including but limited to: <ul style="list-style-type: none"> i. the application of additional dust suppression methods at the dust source; and ii. Moving or modifying activity to reduce dust emissions or distance from nearest receptors. | Management actions to commence immediately upon the licence holder being notified of exceedance and be continued for the duration of the trigger event. |
| 4 | | ≥50µg/m ³ PM ₁₀ (averaging period of 5 minutes) and wind direction | (a) Continue the implementation of management actions as specified in row 3 above; and (b) If the event that dust emissions continue, implement additional dust | |



| Item | Monitoring location (Figure 5 of Schedule 1) | Trigger value | Management action | Timeframe |
|------|--|--|--|-------------------------|
| | | within 225° to 360° for more than a 6-hour period. | control actions including but not limited to ceasing activities at the source of dust until emission are controlled. | |
| 5 | | Wind direction within 225° to 360° and wind speeds less than 1.0m/s with an inversion or greater than 6.0m/s, for more than a 3-hour period. | <p>(a) Ensure water trucks are available;</p> <p>(b) Direct water trucks to key dust source areas;</p> <p>(c) Ensure water trucks wet down haul routes immediately ahead of trucks using the routes;</p> <p>(d) Inspect all dust suppression equipment and ensure all key components are fully functional;</p> <p>(e) Arrange for faulty dust suppression equipment to be made operational (prior to event where practicable);</p> <p>(f) Alert all operators;</p> <p>(g) Wet down crushed ore stockpile;</p> <p>(h) Clean spillage and traffic areas prone to dusting;</p> <p>(i) Arrange tailings spigotting to maximise wet areas prior to event; and</p> <p>(j) Apply dust control product to untreated exposed areas as practicable</p> | As soon as practicable. |
| 6 | Continuous AS PM ₁₀ Monitor North | ≥50µg/m ³ PM ₁₀ (averaging period of 5 minutes) and wind direction within 90° to 225° for more than a 3-hour period. | <p>(a) Conduct an investigation to determine any potential causes of the trigger value exceedance; and</p> <p>(b) If dust source is identified following the investigation under part (a), implement immediate dust abatement measures, including but limited to:</p> <p>iii. the application of additional dust suppression methods at the dust source; Moving or modifying activity to reduce dust emissions or distance from nearest receptors.</p> | |



| Item | Monitoring location (Figure 5 of Schedule 1) | Trigger value | Management action | Timeframe |
|------|--|--|--|------------------------|
| 7 | | ≥50µg/m ³ PM ₁₀ (averaging period of 5 minutes) and wind direction within 90° to 225° for more than a 6-hour period. | <p>(a) Continue the implementation of management actions as specified in row 5 above; and</p> <p>(b) If the event that dust emissions continue, implement additional dust control actions including but not limited to ceasing activities at the source of dust until emission are controlled.</p> | |
| 8 | | Wind direction within 90° to 225° and wind speeds less than 1.0m/s with an inversion or greater than 6.0 m/s, for more than a 3-hour period. | <p>(a) Ensure water trucks are available;</p> <p>(b) Direct water trucks to key dust source areas;</p> <p>(c) Ensure water trucks wet down haul routes immediately ahead of trucks using the routes;</p> <p>(d) Inspect all dust suppression equipment and ensure all key components are fully functional;</p> <p>(e) Arrange for faulty dust suppression equipment to be made operational (prior to event where practicable);</p> <p>(f) Alert all operators;</p> <p>(g) Wet down crushed ore stockpile;</p> <p>(h) Clean spillage and traffic areas prone to dusting;</p> <p>(i) Arrange tailings spigots to maximise wet areas prior to event; and</p> <p>(j) Apply dust control product to untreated exposed areas as practicable.</p> | As soon as practicable |

Dust Management

Condition 17 of the Licence outlines the management actions that Talison must proactively manage dust generating activities on the premises by:

- Ensuring that all dust suppression and dust extraction equipment used on the premises to manage dust emissions from plant, equipment and processing infrastructure is maintained in good working order;



- Proactively manage visible dust emissions observed on the premises through the application of additional dust suppression to plant and equipment, or through the use of watercarts on stockpiles, exposed areas, access roads as required; and
- Utilising weather forecasting tools to inform daily work activities and dust suppression activities to target and mitigate dust emissions from premises activities.

Trigger Action Response Plan

Previous Licence conditions required Talison to develop an Air Quality TARP. The TARP was approved on 11 December 2023. The objectives of the TARP are to:

- Avoid exceedance of the prescribed dust limit; and
- Reduce dust emissions from the Operation.

The TARP is being implemented to assist in anticipating and responding to dust-inducing conditions, ensuring that lower-level triggers are used to avoid potential exceedances. The TARP specifies triggers, actions and responses for particular forecast events and actual observations.

Under Condition 38, Talison is required to submit to DWER a review of the implementation of the actions specified within Table 21 of Condition 37 within the 2024-2025 Annual Environmental Report, and for each annual period thereafter. The requirement of this review includes (but is not limited to):

- A review of the specified wind arcs and wind speeds (as drawn from the TARP) to ensure they remain valid and representative of site environmental conditions with respect to identifying and mitigating dust emissions from the premises;
- A review of the specified trigger values, and specified time periods to ensure that they set at an appropriate level to mitigate dust impacts to residential receptors;
- Documentation regarding the implementation of this plan and the efficiency of the specified management actions to prevent exceedances of limits as specified in Table 15 of Condition 29; and
- All data recorded from Table 15 (Condition 29) and Table 16 (Condition 30) when a management trigger specified in Table 21 (Condition 37) for Australian Standard monitor was exceeded.

The TARP acts as the key instrument for management of dust at the Premises.

Summary

Talison expects that dust emissions from the construction and operation of TSF4 the Cell 1 1277.5mRL embankment raise can be managed under current Licence conditions and the implementation of the TARP.

6A.2 Contaminated Seepage

Information regarding contaminated seepage from TSF4 has been provided to DWER through a previous amendment to the Licence (submitted in December 2023) and assessed under W6618/2021/1 and W6901/2024/1. Groundwater quality monitoring results are included in the



Licence Annual Environmental Report (Attachment 8F). Works proposed in this Application do not include changes to existing seepage collection and are not expected to result in increased seepage or risk to the surrounding environment that is in addition to what has already been assessed by DWER. Thus, the information provided in this section is only related to the TSF4 embankment raise relevant to this Application.

Results from TLO of TSF4 Cell 1a (to 261mAHD), i.e. the initial Cell 1 embankment, were provided in and assessed as part of the 1275mRL Works Approval Amendment Application (Attachment 8E) to verify predicted outcomes.

6A.2.1 Potential Emissions

Emissions could occur from pipeline spillage in the transfer of tailings from the processing plants to TSF4. As these are not proposed to change, were assessed and approved in previous Works Approvals and spillage control requirements are documented in L4247/1991/13, they are not addressed further herein.

Seepage from TSF4 has the potential to cause groundwater mounding, which can occur as a result of saturation of the unsaturated zone beneath the tailings storage infrastructure. The consequences of groundwater mounding include localised inundation and water logging of surrounding vegetation. TSF4 seepage also has the potential to change groundwater quality, which can affect downstream users of groundwater as well as interact with surface water. Seepage into surface water flow could alter water quality at fauna habitats that immediately surround the Premises and contaminate surface water receptors to the south of TSF4 such as Woljenup Creek.

A seepage assessment was undertaken to estimate seepage flows and determine drainage infrastructure that will be required to collect all seepage flows from the operation of TSF4 at final height (1295mRL). The findings of this assessment are detailed the 2021 GHD TSF4 Detailed Design Report (Attachment 8A), the addendum to the TSF4 detailed design report (GHD, 2024a; Attachment 8B) and the TSF4 1275mAHD raise detailed design report (Attachment 8C). This information was provided previously in the Cell 1a Licence Amendment (submitted in December 2023) and during the assessment of W6618/2021/1 and therefore has not been included in this application.

A TSF4 Seepage Assessment, consisting of a series of additional geological and hydrogeological studies/assessments, was undertaken by GHD in response to conditions and commitments for W6618/2021/1 and approval of TSF4 under the Mining Act (Reg ID 102901). They are not discussed further in this application as they have:

- Addressed seepage for lifts of TSF4 up to 1295mRL;
- Not changed as a result of the 1277.55mRL lift of Cell 1; and
- Been provided to DWER for assessment via Licences and Works Approvals.

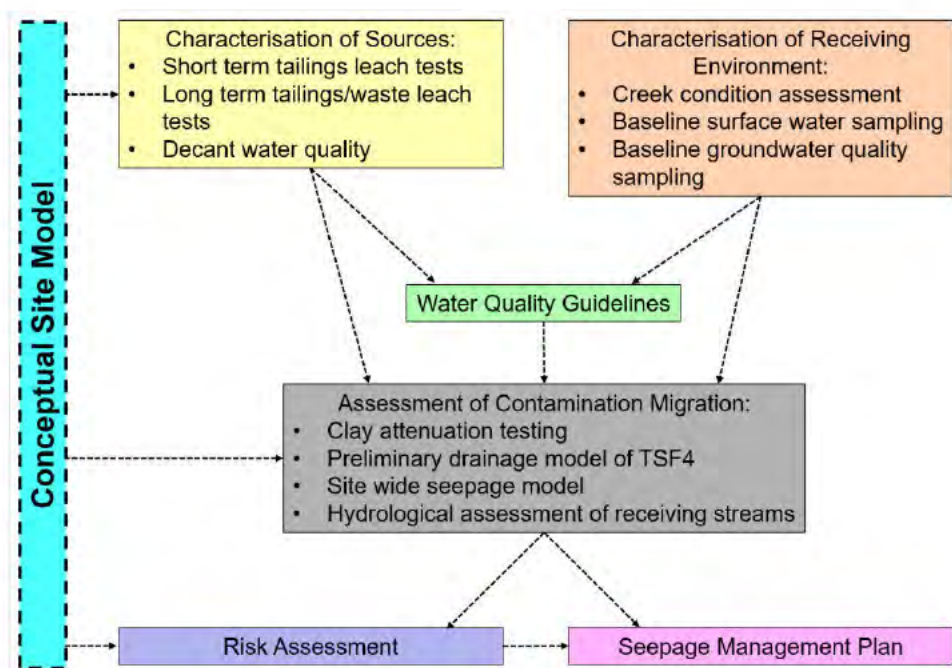


Figure 24: TSF4 Seepage Assessment supporting reports

GHD (2026) has undertaken seepage modelling to estimate the phreatic surface through the Cell 1 embankment raise to 1277.5mRL and proposed no changes from the original 1275mRL design (GHD, 2025) to the following:

- Underdrainage – it is existing and sized for the RL 1295 m raise. No changes to the previously reported flow are expected due to the interim raise height change (RL 1277.5 m instead of RL 1275 m);
- Elevated underdrain objectives, elevation and details – as starting tailings elevation for this raise remains unchanged (RL 1270 m). Only the positioning of the drains has been shifted adjacent the northern wall, to accommodate northern embankment geometry changes; and
- Material parameters or BGM permeability. Parameters of BGM permeability have remained unchanged.

6A.2.2 Proposed controls

Infrastructure Design

A number of seepage control elements have been included in the design of TSF4 and reviewed under Part V of the EP Act. These include:

- Lining of the embankment and floor of TSF4 (engineered clay and BGM liner);
- Underdrainage system;
- Seepage collection sumps; and
- Decant return.



As noted above, seepage assessments for the 1277.5mRL Cell 1 raise identified that no change was required to approved seepage controls. Further details relating to the design of TSF4, including specific seepage control elements, are provided in Attachments 8A, 8B, 8C, 8D and 8G.

Current Licence Conditions for Seepage Control

Conditions 26 and 27 within the Licence are in place to manage potential seepage at the Premises, relevant to existing infrastructure at the site.

Under condition 26 of the Licence, Talison are required to undertake monthly monitoring of the water balance for TSF4 to confirm assumptions of the preliminary water balance. As a minimum, the following parameters are to be monitored:

- The volume of tailings deposited in each cell of TSF4;
- Site rainfall;
- Site evaporation;
- Decant water recovery volumes;
- Volume of recovery from seepage sumps; and
- Estimate of seepage losses.

Condition 27 of the Licence outlines that Talison are to ensure that evaporation rate measurements (required under condition 25) are undertaken in a with method that includes, as a minimum, measurement of wind direction, air temperature and humidity and calculation of open water evaporation, using an on-site weather station and evaporation pan.

More broadly, the Licence conditions address facilities that support for the operation of TSF4. Monitoring requirements under the Licence include the volumes of seepage water recovered, water quality within CWD and ambient groundwater quality downstream of CWD around Norilup Dam.

Seepage Management Plan

Talison will continue to implement a Seepage Management Plan (Talison, 2025; **SMP**) at the Premises. The revised SMP is provided as Attachment 8G.

Key objectives for managing seepage and/or drainage from TSF4 that are incorporated into the SMP include:

- Maintain the groundwater quality attributable to TSF4 seepage below the Water Quality Guideline (WQGs) at the mine premises boundary (i.e., background/baseline may be higher, such as Li for potable WQG of 0.007 mg/L); and
- Maintain the surface water quality in Woljenup Creek attributable to TSF4 seepage and/or drainage below a defined baseline quality threshold.



The overarching strategy to manage seepage and drainage to meet these objectives is to monitor and provide a contingency framework for action should monitoring and assessment indicate that:

- The distribution of TSF4 seepage impacts within the subsurface varies significantly from the modelled predictions;
- Groundwater triggers are activated (i.e., concentrations nearing or exceeding modelled predictions);
- Groundwater limits are exceeded (i.e., concentrations nearing or exceeding WQGs);
- Changes in quality in Woljenup Creek attributed to TSF4 seepage/discharge and/or where surface water triggers are exceeded (i.e., concentrations nearing or exceeding baseline quality threshold); and
- Seepage/drainage from TSF4 poses unacceptable risks to receptors and where surface water limits are exceeded (i.e., concentrations nearing or exceeding WQGs).

Where monitoring indicates that groundwater triggers are exceeded, the key seepage management practices incorporated into the SMP include:

- Assess source(s) of impacts to groundwater (e.g., diffuse seepage, spillage, pipe failure event, etc.) and remediate the source (if possible);
- Confirm extent and magnitude of the TSF4 impacts to groundwater via:
 - Increasing the frequency of monitoring along seepage pathway;
 - Installing additional monitoring bores positioned downgradient of the impacted monitoring bores (if required/possible);
 - Refining the modelling based on monitoring data and updating the predictions (if required);
- Update risk assessment (source-pathway-receptor) based on monitoring and modelling outcomes, which should include:
 - Comparing the Contaminants of Potential Concern (**CoPC**) concentrations in groundwater against the WQGs;
 - Presenting the pathway(s) for migration of impacts and beneficial groundwater uses which may be impacted;
 - Characterising the fate of impacted groundwater (including an understanding of attenuation in the subsurface); and
 - Adjusting the monitoring program further to characterise/confirm extent of impacts.

Where CoPC concentrations in Woljenup Creek can be attributed to TSF4 and exceed the baseline quality threshold (i.e., triggers), the following works should be undertaken:

- Identify the TSF4 source (e.g., spills, leakage from pipe work/sumps, uncontrolled seepage discharge, etc.) and monitor the source;
- Increase the monitoring frequency in Woljenup creek;
- Assess the dilution/attenuation effects which may occur as TSF4 impacted waters migrate down Woljenup Creek;



- Identify specific receptors which may be impacted; and
- Present an understanding of risks to the receptors (human health and the environment).

Where the groundwater risk assessment and CoPC concentrations in Woljenup Creek can be attributed to TSF4 and indicates unacceptable risk to human health and/or the environment, or where groundwater WQG limits are exceeded upgradient of receptors (i.e., concentrations upgradient of receptors nearing or exceeding WQGs), undertake remedial works, which could include:

- Remediation of source of seepage;
- TSF4 source/discharge mitigation;
- Installation of groundwater abstraction bores positioned in areas to intersect and capture impacted groundwater;
- Optimisation of TSF4 tailings deposition to reduce duration, extent, and storage of decant;
- Early closure and capping of the facility; and
- Seepage capture through interception trenches/schemes and pumping back to the MWC.

Summary

No change to TSF4 seepage controls as approved under W6618/2021/1 and W6901/2024/1 are proposed as part of this Application.

Talisson expects that potential residual seepage from the Cell 1 1277.5mRL embankment raise at TSF4 will be managed through the seepage control infrastructure incorporated into the TSF4 design, the current licence conditions and implementation of the SMP.

6A.3 Contaminated Stormwater

6A.3.1 Potential emissions

The following information has been provided previously in the Cell 1a Licence Amendment (submitted in December 2023) and has also previously been assessed under W6618/2021/1. Surface water quality monitoring results are included in the Licence Annual Environmental Report (Attachment 8F). The Cell 1 1277.5mRL embankment raise is not expected to result in seepage or risk to the surrounding environment that is additional to what has already been assessed. Thus, the information is provided for completeness in this application (in compliance with the checklist) rather than as new information.

No further potential emissions are expected as a result of implementing the Cell 1 1277.5mRL TSF4 embankment raise as the footprint has no surface water drainage changes from those already considered in TSF4 design.



6A.3.2 Proposed Controls

Proposed controls to manage the potential emission of contaminated stormwater into the environment are the same as for the previous embankment and include:

- Installation of rock-lined downstream toe drains (1m wide x 1m deep) to capture runoff from the TSF4 embankment and surrounding catchment;
- Water from the toe drains flowing to the southern valley will be collected and returned to the MWC;
- Rainfall and runoff from TSF4 to be direct to CWD for re-use;
- Stormwater within the western catchment will continue to be captured and retained within the MWC;
- The ARU and Water Treatment Plant will operate to reduce lithium and arsenic concentrations in process water;
- Temporary bank/bund to be established along the upstream (NW and E) of cleared areas to divert runoff away from cleared areas; sediment controls such as sumps will be implemented if runoff containing sediment is observed;
- Site specific water quality guidelines will be adhered to (as outlined in GHD, 2023d);
- Surface water sampling of Woljenup Creek will be continued during operation of TSF4 (monitoring includes metals, metalloids, pH and salinity); and
- Surface water from the Emergency Dump Pond catchment will be captured by the Emergency Dump Pond, infiltrate to the underdrainage, and report to SS3.

Summary

Based on the hydrogeological setting, through implementation of existing controls conditioned by L4247/1991/13, W6618/2021/1 and W6901/2024/1 and the implementation of the Water Management Plan (WMP), Talison expects to adequately manage potential contaminated stormwater at the Premises. No changes are expected as a result of the Cell 1 1277.5mRL embankment raise.



ATTACHMENT 7: SITING AND LOCATION

The Greenbushes Mine is situated on the top part of the southern section of the Darling Scarp, approximately 250km south of Perth and 80km south-east of Bunbury. The main ore body is orientated north-northwest to south-southeast and lies along a ridgeline that rises to approximately 320mAHD.

A detailed description of the biological and physical environment of the Project is contained within the Environmental Review Document prepared for the EPA’s assessment of the expansion Project (the scope including the establishment of TSF4) (GHD, 2018). Additionally, detailed information on the siting and location of the Project has been provided in the Cell 1a Licence Amendment (submitted in December 2023) and was also provided during the assessment of W6618/2021/1. This Application does not change the siting or location information, and no changes to potential emissions and discharges are proposed. Further information has therefore not been included in this Application.

7.1 Sensitive Receptors

Sensitive receptors and their distance from the prescribed activity were identified in the W6618/2021/1 and W6901/2024/1 Decision Reports and Amendment Reports. In addition to managing emissions and discharges, adopting continuous improvement actions and communicating with the community, Talison continues to purchase nearby residences or reach agreement with landholders. The most recent assessment of sensitive receptors for TSF4 was completed in the W6901/2024/1 decision report, with the sensitive receptors and distance from the prescribed activity summarised in Table 9 remaining unchanged.

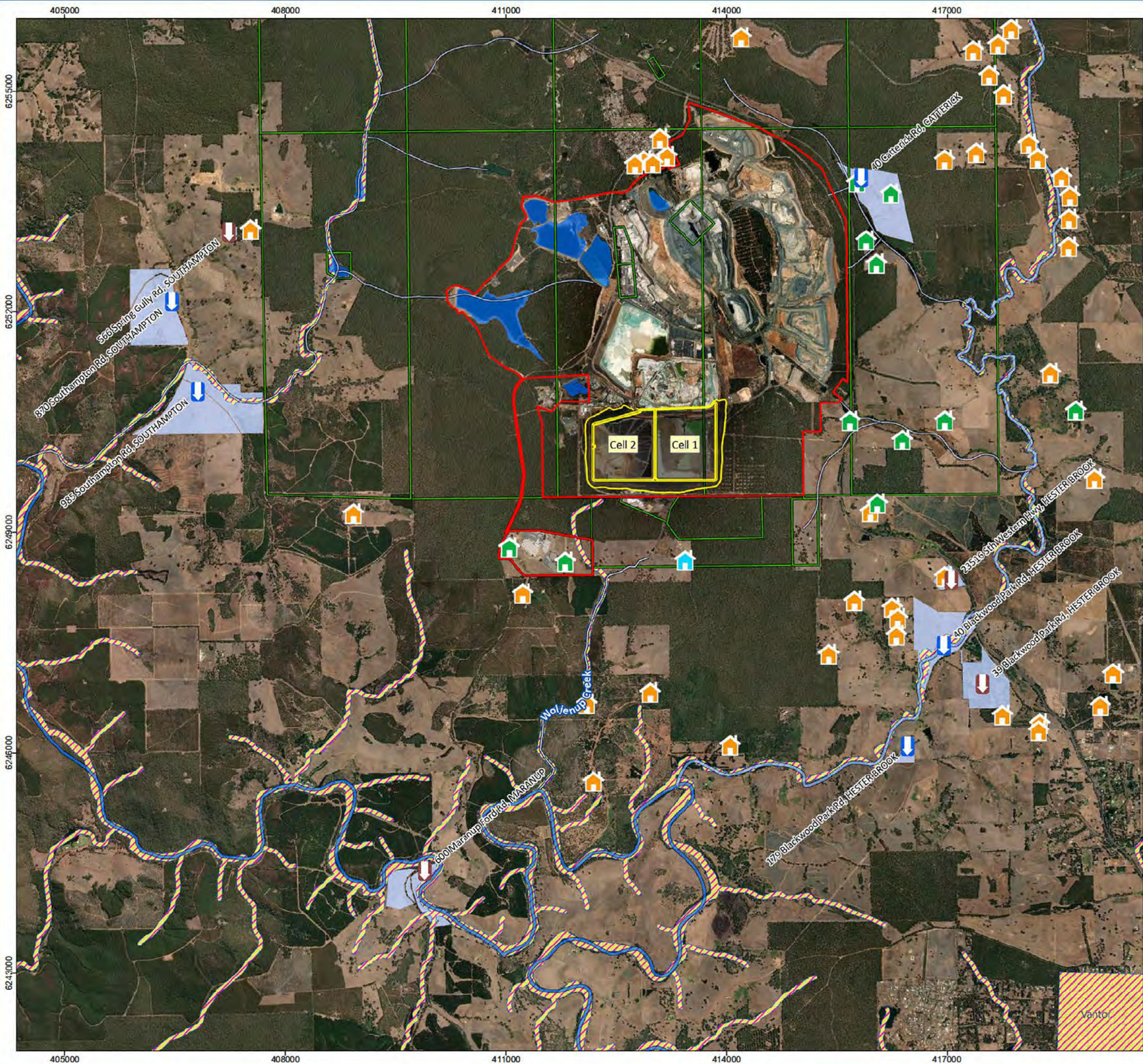
Sensitive receptors around the mining operations are shown in Figure 25. Surface water and groundwater users in the vicinity of the Premises are shown in Figure 26.

Table 9: Sensitive human and environmental receptors and distance from prescribed activity

| Receptors | Distance from prescribed activity |
|-------------------------------------|--|
| Human Receptors | |
| Residential dwellings south of TSF4 | Greenbushes townsite is ~3.2km north of TSF4 The closest residential dwellings to TSF4 are: <ul style="list-style-type: none"> • K: Lot 504 on Plan 73712 (Talisson owned) - ~1.3km south-west of TSF4 • J: Lot 11888 on Plan 162545 (Talisson owned) - ~1.1km south of TSF4 • I: Lot 5220 on Plan 136672 - ~1.0km south of TSF4 |
| Downstream surface water users | Figure 26 shows the location of the surface water users downstream from TSF4. The results of a water survey carried out by Talison in 2021 indicates that downstream users access surface |



| Receptors | Distance from prescribed activity |
|--|--|
| | water from Woljenup Creek for purposes including drinking water, domestic uses such as showering, laundry, water for gardens, recreational activities (including swimming), aquaculture activities, irrigation for crops and stock water. |
| Groundwater users | Whilst the groundwater underlying the site is not recognised as a strategic resource area (not listed as a proclaimed area) there are several groundwater users surrounding the site. Figure 26 shows the location of the groundwater users near TSF4. The distance to closest down hydraulic gradient groundwater user is 3.2km southeast for stock/irrigation and 3.6km southeast for domestic purposes. |
| Environmental receptors | |
| <u>Surface Water receptors:</u> Woljenup Creek, Blackwood River and associated tributaries. | Woljenup creek immediately south and down-gradient of TSF4. |
| Cowan Brook, Norilup Dam and Norilup Brook (water quality and ecology) | At the western edge of the premises boundary (offsite). Seepage from Cowan Brook Dam flows into Cowan Brook and into Norilup dam. |
| <u>Aboriginal Heritage</u> The drainage line, Woljenup Creek and Blackwood River are listed under the <i>Aboriginal Heritage Act 1972</i> | Woljenup creek immediately south and down-gradient of TSF4. |
| Groundwater | Shallow and deep aquifer below and around TSF4 footprint. |
| Nearby native vegetation | Immediately adjacent to TSF4. |
| <u>DBCA legislated tenure</u> Greenbushes State Forest | <i>These receptors have been addressed in the EPA Report and is regulated under Part IV. Therefore, these environmental receptors were not considered.</i> |
| Hester State Forest | |
| Threatened/priority flora and fauna | |



GREENBUSHES OPERATIONS

SENSITIVE RECEPTORS

- Talison Tenements
- Talison Premises Boundary
- Dams
- TSF4 footprint

Water Course

- Blackwood River
- Hester Brook
- Minor

DPLH Aboriginal Heritage Places_001

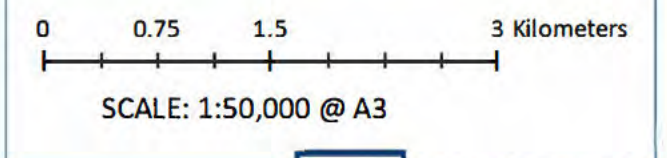
Groundwater Users

- Domestic Groundwater Use Bore
- Stock & Irrigation Groundwater Use Bore
- Bore on Property

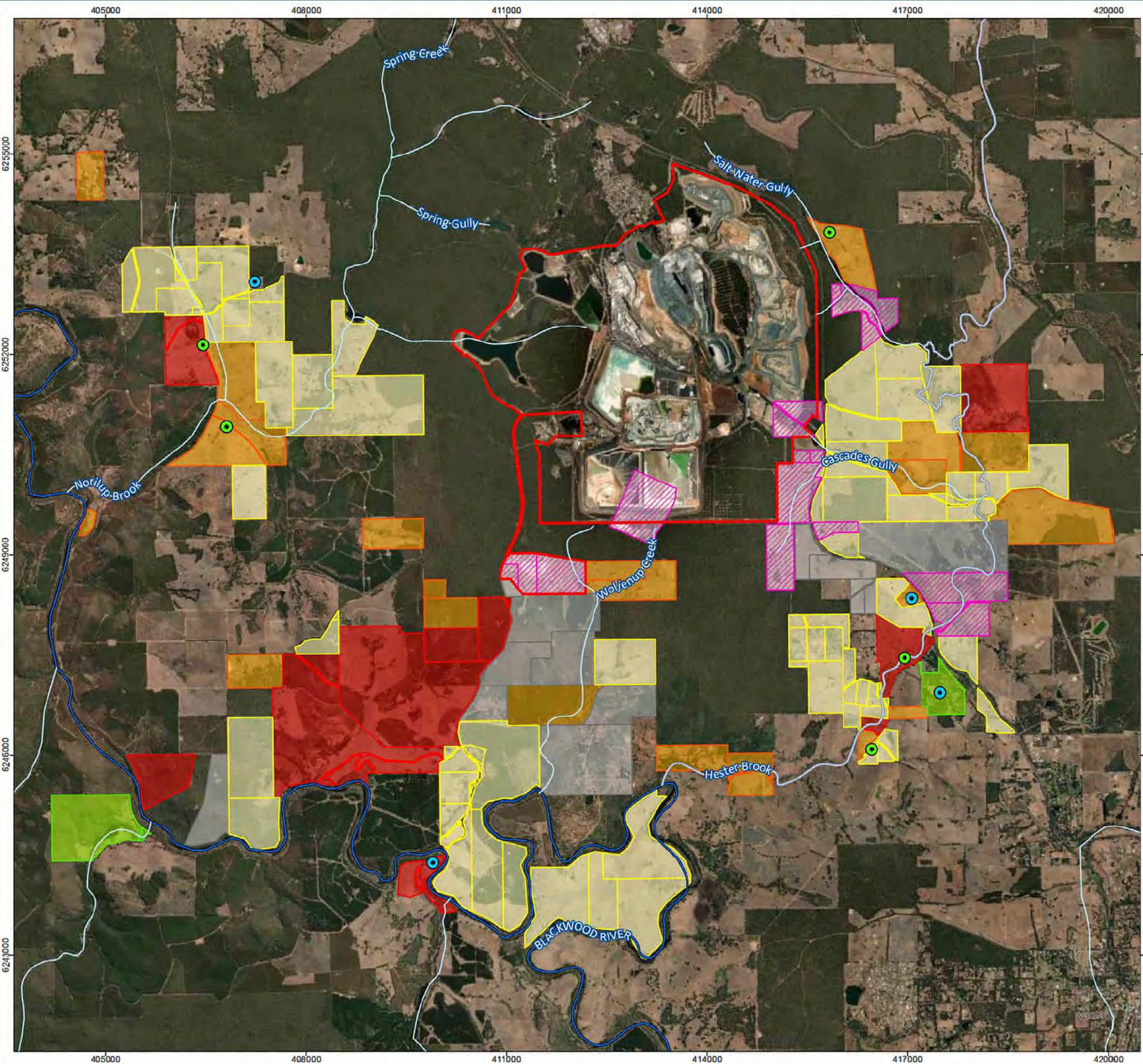
Receptors

- Sensitive Receptor
- Talison Owned
- Under Agreement

Datum: GDA2020
Projection: MGA Zone 50



Internal Ref: I:\Projects\2026\0032_00_2026 TSF4 Embankment Raise Works Approval\Sensitive Receptors



GREENBUSHES OPERATIONS

SURFACE WATER & GROUNDWATER USERS

- Premise Boundary
- Respondent Use**
- Domestic
- Drinking Water
- Irrigation
- No Current Use
- Stock
- Tallson
- Respondent Use**
- Groundwater Groundwater Use Bore
- Stock & Irrigation Groundwater Use Bore
- Water Course**
- BLACKWOOD RIVER
- Hester Brook
- Minor

Datum: GDA2020
Projection: MGA Zone 50

LOCALITY MAP

0 0.75 1.5 3 Kilometers

SCALE: 1:55,000 @ A3

FIGURE 26

Internal Ref: I:\Projects\2026\0031_00_2026 Surface Water and Groundwater Users\Surface Water and Groundwater Users



ATTACHMENT 8: ADDITIONAL INFORMATION

The following documents have been included as additional information / for reference for this Application as Attachments to this document:

- 8A.** TSF4 Detailed design report (GHD, 2021);
- 8B.** TSF4 Addendum to detailed design report (GHD, 2024a);
- 8C.** TSF4 275mAHD raise detailed design report (GHD, 2025);
- 8D.** TSF4 Cell 1 Design to RL 1277.5m – Addendum to RL 1275m Detailed Design Report (GHD, 2026)
- 8E.** Greenbushes Lithium Operation Part V Works Approval Amendment Application – TSF4 275mAHD Raise Works Approval Supporting Document
- 8F.** Annual Environmental Report L4247/1991/13: 01 July 2024 to 30 June 2025; and
- 8G.** TSF4 Seepage Management Plan.



ATTACHMENT 9: CATEGORY-SPECIFIC CHECKLIST

The Category specific checklist for this Application was prepared using the *IR-F28 Application form annex: Category checklist (tailings storage facilities)* (DWER, 2023) and has been attached to the Application form for submission with this Application.

Application form annex: Category checklist (tailings storage facilities)

This checklist outlines additional information requirements for applications under Part V Division 3 of the *Environmental Protection Act 1986* (EP Act) to:

- construct or operate a tailing storage facility (TSF), or
- amend an instrument to change the conditions or characteristics related to an existing TSF (e.g. new TSFs or wall rises or lifts, or changes to delivery process or material characteristics).

'TSF' includes containment cells or dams and the retaining embankment, delivery system, water return system and ancillary structures required to support operations, including spillways and decant facilities.

The information in this checklist is needed to allow the Department of Water and Environmental Regulation (the department) to assess environmental and public health risks from discharges and emissions from TSFs. The required information is consistent with the department's [Guideline: Risk assessments](#) and with the Australian national [Leading Practice Handbook on Tailings Management](#).

Notes included throughout this checklist must be read in conjunction with the instructions and requirements of the relevant application form. The information requirements outlined in this checklist are not exhaustive. Applicants are advised to provide additional supporting information and environmental investigations as required to support the application and assessment process. Information requirements and attachments can be combined and submitted as one or more consolidated documents if desired, provided it is clear to which section of the application checklist the information/attachments relate.

Before you submit this checklist, please check you have correctly completed all the fields and included relevant supporting documents (including maps etc.). If an application form and checklist has been submitted and are incomplete the Chief Executive Officer (CEO) of the department may request further information which may result in protracted assessment timeframes, or the CEO may decline to deal with incomplete or incorrectly completed applications.

Part 1 – Applicability of checklist

The table below indicates the sections of this checklist required to be completed for different types of TSF applications, as described within Schedule 1 Part 1 of the Environmental Protection Regulations 1987 (EP Regulations):

Category 5(c) – “Processing or beneficiation of metallic or non-metallic ore: premises on which - (c) tailings or residue from metallic or non-metallic ore are discharged into a containment cell or dam.”

| Scenario | Application type | Parts / sections of checklist to be completed |
|----------|--|--|
| 1 | <p>Applications involving:</p> <ul style="list-style-type: none"> • a new above ground (including valley) or in pit TSF • a new cell to an existing TSF • a change to the TSF location, proposed liner, type of construction or staging of an approved TSF. | <p>Complete to the extent required or (if amendment) changed Part 2; part 8.1 and 8.3, part 9.2</p> <p>Must be completed: All other parts Attachments 1 to 9</p> |
| 2 | <p>Wall raise/lift to existing TSF (in-pit or above-ground, including valley TSF)</p> | <p>Complete to the extent required or (if amendment) changed Part 2 Part 7.1, 7.2 Part 8.1, 8.3 Part 9.1 (if any change to layout), Part 9.2 and 9.3 Attachment 9</p> <p>Must be completed: All other parts Attachments 1 to 8</p> |
| 3 | <p>Significant change to tailings delivery process (i.e. cyclone, thickener, etc) which will change the physical characteristics of tailings.</p> | <p>Must be completed: Part 3, Part 7.4, Attachment 1 to 4</p> <p>Complete to the extent required or (if amendment) changed All other parts Attachments 5 to 9</p> |
| 4 | <p>Change to the tailings material characteristics (e.g. change in geochemical character, ore body, ore type, ore material character, etc) or the reprocessing of tailings.</p> | <p>Must be completed: Part 3, Part 6 Attachments 1 to 4</p> <p>Complete to the extent relevant for the change: All other parts. Attachments 5 to 7; Attachment 9</p> |

Part 2 – Other approvals

| | Yes | N/A | Document name or section name |
|--|-------------------------------------|-------------------------------------|---|
| <p>Is the proposal subject to a state agreement act?</p> <p>If yes, specify:</p> <ul style="list-style-type: none"> the title of the state agreement act any relevant considerations relating to the TSF and associated activities or infrastructure any consultation with the Department of Jobs, Tourism, Science, and Innovation (DJTSI) about the TSF whether the state agreement act addresses closure. | <input type="checkbox"/> | <input checked="" type="checkbox"/> | |
| <p>Are the TSF related activities to be undertaken on tenements granted under the <i>Mining Act 1978</i> (Mining Act)?</p> <p>If yes, provide tenement numbers and a description of:</p> <ul style="list-style-type: none"> any consultation with the Department of Energy, Mines, Industry Regulation and Safety (DEMIRS) about the TSF and the status of the associated mining proposal (include registration ID if available) and mine closure plan. | <input checked="" type="checkbox"/> | <input type="checkbox"/> | Refer to Section 5.4 of the Supporting Document. |
| <p>If any TSF activities are outside of Mining Act tenure, provide details of the proposed closure and rehabilitation aspects pertaining to the TSF (i.e. research, investigations, trials, progressive rehabilitation, early closure, closure outcomes and completion criteria).</p> <p>Refer to the DEMIRS guidance on mine closure plans, particularly Mine Closure Plan Guidance - How to Prepare in Accordance with the Statutory Guidelines</p> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | |
| <p>Has the proposal been referred to the EPA under Part IV of the EP Act?</p> <p>If yes, provide a description (where relevant) of:</p> <ul style="list-style-type: none"> what has been referred or assessed under Part IV any changes made or proposed to the TSF since Part IV referral or approval Part IV EP Act ministerial statement conditions (if any) relating to the existing TSF or proposed changes to the TSF Whether the ministerial statement addresses closure. | <input checked="" type="checkbox"/> | <input type="checkbox"/> | Refer to Sections 5.2 and 5.3 of the Supporting Document. |
| <p>Has the proposal been referred under the <i>Environment Protection and Biodiversity Conservation Act 1999</i> (EPBC Act)?</p> <p>If yes, provide:</p> <ul style="list-style-type: none"> any consultation with the Department of Climate Change, Energy, Environment and Water about the TSF the EPBC approval number and copy of the TSF related approval conditions a description of any changes made to the TSF since submission or approval (if any) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | Refer to Section 5.1 of the Supporting Document. |

Part 3 – Conceptual Site Model

| | Yes | N/A | Document name or section |
|---|-------------------------------------|-------------------------------------|---|
| <p>3.1 Conceptual Site Model (CSM) Table</p> <p>Provide a site-specific conceptual site model (CSM)¹ that clearly identifies all potential Source-Pathway-Receptor (SPR) linkages for identified environmental and public health receptors (refer to Section 3.3 and Appendix 1 of this checklist). If this is for an existing facility that was previously approved under Part V Division 3 of the EP Act, only identify the changes to the model resulting from the proposed modification(s).</p> <p>The complexity of the CSM corresponds to the scale and complexity of the TSF activities and should be devised to assist in the TSF design process to identify appropriate design and operational measures as well as environmental monitoring requirements.</p> <p>A site-specific SPR assessment² for seepage must be undertaken as part of the CSM. Refer to Section 7.4 for seepage requirements.</p> <p>Note 1: Guidance on developing CSMs is provided in the department's Assessment and management of contaminated sites guidelines.</p> <p>Note 2: Assessment should be conducted as part of and be consistent with the requirements outlined in the emissions and discharges section of the relevant application form.</p> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <p>No changes to the model are expected to result from the proposed raise.</p> <p>Refer to Section 6A of the Supporting Document and Attachment 8E.</p> |
| Attachments | | | |
| <p>3.2 Attachment 1: Locality map(s)</p> <p>An aerial photograph, map, and/or site plan of sufficient scale showing the proposed premises and locality of the TSF and supporting infrastructure in respect to nearby sensitive receptors and surrounding land uses.</p> <p>Multiple maps at different scales can be provided if required.</p> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <p>Locality: Refer to Attachment 2 of the Supporting Document.</p> <p>Sensitive Receptors: Refer to Section 7.1 of the Supporting Document.</p> |
| <p>3.3 Attachment 2: CSM table</p> <p>In accordance with Part 3.1 above, provide a site-specific CSM in table format. The CSM table should clearly summarise the identified SPR linkages for construction and operation. An example CSM table is provided in Appendix 1 to this checklist.</p> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <p>Refer to Section 6A of the Supporting Document and Attachment 8E.</p> |

Part 4 – Design concept

You must provide a detailed overview of the design concept including all related infrastructure, such as seepage collection and management infrastructure.

The proposed design should take into consideration the environmental setting, adjacent current and future land uses, available materials and infrastructure, and materials characteristics of the tailings to be received.

| | Yes | N/A | Document name or section |
|---|-------------------------------------|--------------------------|--|
| <p>4.1 Design overview</p> <p>Provide an overview of the TSF design (e.g. TSF footprint, cells and division embankments etc.). Specified design detail must be provided for each proposed cell of the TSF.</p> <p>Will the facility be lined? What material will be used for the liner (clay, geotextile, other)? What is the expected permeability of the liner?</p> <p>If a change is being applied for (i.e. not a new facility) clearly define only:</p> <ul style="list-style-type: none"> • changes proposed and • how they differ from the existing as built design and facility management measures. | <input checked="" type="checkbox"/> | <input type="checkbox"/> | Refer to Section 3B.1 of the Supporting Document. |
| <p>4.2 Staging and storage capacity</p> <p>Provide details on proposed staging and storage capacity. As a minimum, include the:</p> <ul style="list-style-type: none"> • expected crest elevation/pit depth • tailings storage area (m²) • tailings storage volume (m³) • cumulative storage volume (m³) for the starter embankment(s) and raise(s) • expected tailings density used to determine the required storage capacity (refer to water balance calculations section 7.3). | <input checked="" type="checkbox"/> | <input type="checkbox"/> | Refer to Section 3B and Attachment 8E. |
| <p>4.3 Starter embankments and raises</p> <p>Provide details on the proposed starter embankments and raises including:</p> <ul style="list-style-type: none"> • general approach (upstream, centreline, downstream) • maximum height • materials properties, and availability. | <input checked="" type="checkbox"/> | <input type="checkbox"/> | Refer to Attachment 3B of the Supporting Document and Attachment 8A, 8B, 8C, 8D, and 8E. |

| Attachments | Yes | N/A | Document name or section |
|---|-----|-----|--|
| <p>4.4 Attachment 3: Premises map and site layout plan(s) Provide a premises map and site layout plan(s) and include:</p> <ul style="list-style-type: none"> • premises boundary and relevant tenure • TSF cell(s), proposed staged build (if required) and final landform • construction borrow source • seepage and groundwater monitoring bores • dewatering bores • roads (including haulage) and access tracks • topsoil stockpiles • pipelines, including connectivity (e.g. processing plant to the TSF) and scour pits if relevant • key environmental aspects or features (e.g. watercourses, groundwater) • other key site infrastructure (e.g. pits, plant, accommodation village, administration offices) • topographical contours on and around the TSF • scale, north arrow, GPS coordinates and legend. | ☒ | ☐ | <p>Refer to Attachment 2, Attachment 3B of the Supporting Document for relevant maps.</p> <p>Refer to Attachment 3B of the Supporting Document for information on the TSF4 (Cell 1 1,277.5mRL raise)</p> |
| <p>4.5 Attachment 4: Design figures Provide design figures that include the following:</p> <ul style="list-style-type: none"> • TSF layout depicting all TSF-related infrastructure (existing and proposed) including, but not limited to: <ul style="list-style-type: none"> - TSF cell(s) - embankments - supernatant pond(s) - stormwater infrastructure - tailings and water pipelines, including decant lines and pump locations, and related tanks and/or ponds - tailings discharge location(s) - seepage management and/or underdrainage design. • schematic cross-sections of the TSF cell(s) and or embankments, including related geology. <p>For amendments, clearly highlight/identify the proposed changes.</p> | ☒ | ☐ | <p>Refer to Attachment 3B of the Supporting Document.</p> |

Part 5 – Construction overview

You must provide a detailed overview of the proposed construction works including all related infrastructure that are proposed under this application to clarify the scope of assessment.

| | Yes | N/A | Document name or section |
|--|-------------------------------------|-------------------------------------|--|
| <p>5.1 Scope of construction works</p> <p>Provide details of construction works including, but not limited to:</p> <ul style="list-style-type: none"> • general site preparation works • infrastructure to be constructed • construction phases • timing of works – including all lifts being applied for if applicable (within the next five years) • summary of management measures and controls to be adopted for key environmental factors including: <ul style="list-style-type: none"> - noise - dust - stormwater/surface water - erosion and sediment - hydrocarbon management (fuel spills). <p>Information must be consistent with the requirements outlined in the emissions and discharges section of the application form.</p> <ul style="list-style-type: none"> • for all TSFs not on Mining Act tenure, information on construction quality assurance (CQA) measures and procedures to be employed. Provide information consistent with DEMIRS published guidance, particularly Code of Practice for TSFs in WA and Guide to the Preparation of a Design Report for TSFs. | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <p>Refer to Section 3B of the Supporting Document and Attachment 8E.</p> <p>Refer to Attachment 6A of the Supporting Document for a summary of management measures and controls.</p> |
| | <input type="checkbox"/> | <input checked="" type="checkbox"/> | |

Part 6 – Materials characterisation

You must provide a detailed overview of the physical and geochemical characteristics of the tailings and embankment materials.

Geochemical characteristics of representative material (tailings or other) must be defined so that the geochemical risks are understood at least to a high level. The sampling program must sufficiently consider the different type(s) of materials, such that the variability/heterogeneity is represented. Altered weathering zone(s) should be considered in the sampling program where applicable.

Representative samples of tailings/process residues should be obtained from metallurgical test work conducted during the feasibility and development stages of the project.

For existing sites, sampling should cover the full lateral and vertical extent from existing facilities/stockpiles, where possible.

| | Yes | N/A | Document name or section |
|---|--------------------------|-------------------------------------|--|
| <p>6.1 Materials characterisation</p> <p>Provide materials characterisation for tailings material including, but not limited to:</p> <ul style="list-style-type: none"> • where each tailings type is coming from • details of any planned blending and ratios • number of samples taken relative to the volume/throughput • process chemicals used • water used and any additional inputs to the process (e.g. wastewater, decant recycled) • deposition methodology • physical details of each tailings type (i.e. material characterisation, wet/dry material, moisture content, dispersion characteristics, attenuation properties, modelled/actual consolidation) • geochemical performance of each tailings type (i.e. composition, contaminants of concern) • assessment of acidic and/or metalliferous drainage (AMD) potential, inclusive of: <ul style="list-style-type: none"> - risk of AMD, neutral mine drainage (NMD), saline drainage, and acidic drainage of the tailings - risk of metalliferous drainage (encompassing all metals and metalloids, regardless of whether the conditions are acidic) - where there is risk of AMD, results of static and kinetic testing consistent with the international Global Acid Rock Drainage (GARD) Guide (particularly Chapter 4) - naturally occurring radioactive material (NORM) and technologically enhanced naturally occurring radioactive materials (TENORM). • erosive, sodic and/or dispersive materials • Fibrous materials (asbestiform materials, respirable crystalline silica); or mica • leachability of contaminants with environmental significance from the tailings • water quality of tailings decant and seepage • continuity and variability of the geochemical characteristics of tailings. <p>Where a new tailings material (including new pit) is proposed, a comparison against existing tailings should be provided.</p> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <p>Materials Characterisation was completed for the entire TSF4 in W6618/2021/1.</p> |

| | Yes | N/A | Document name or section |
|---|--------------------------|-------------------------------------|---|
| <p>6.2 Embankment materials characterisation</p> <p>Provide materials characterisation for all embankment materials including, but not limited to:</p> <ul style="list-style-type: none"> • where each material type is coming from • number of samples taken relative to the volume • geochemical composition (highlighting contaminants of concern) • assessment of acidic and/or metalliferous drainage (AMD) potential, inclusive of: <ul style="list-style-type: none"> - risk of AMD, neutral mine drainage (NMD), saline drainage, and acidic drainage - risk of metalliferous drainage (encompassing all metals and metalloids, regardless of whether the conditions are acidic) - where there is risk of AMD, results of static and kinetic testing consistent with the international Global Acid Rock Drainage (GARD) Guide (particularly Chapter 4). - naturally occurring radioactive material (NORM) and technologically enhanced naturally occurring radioactive materials (TENORM). • erosive, sodic and/or dispersive materials • Fibrous materials (asbestiform materials, respirable crystalline silica); or mica • continuity and variability of the geochemical characteristics. | <input type="checkbox"/> | <input checked="" type="checkbox"/> | Materials Characterisation was completed for the entire TSF4 in W6618/2021/1. |

Part 7 – Seepage and water management

You must provide a detailed overview of seepage and water management. This includes seepage minimisation measures and the proposed seepage management system, including seepage recovery requirements.

The premises must be designed and constructed so that stormwater is diverted away from the TSF (including individual cells). This may be achieved through surface grade changes, bunding, interceptor drains, piping and other drainage systems. Stormwater that has come into contact with the surface of the TSF (including embankments) must be collected and managed as decant in the decant management system.

| | Yes | N/A | Document name or section |
|---|-------------------------------------|-------------------------------------|---|
| <p>7.1 Hydrogeology</p> <p>Provide a detailed overview on the following in relation to the TSF:</p> <ul style="list-style-type: none"> • local geology • topography • shallow geology under the TSF • hydrogeology including surface waterways and drainage plans, depth to groundwater, groundwater quality (including salinity) and direction of groundwater flow • for in-pit TSFs, include known preferential and fracture pathways and blasting history to allow risk assessment of potential environmental risks from blasting residues. <p>Aerial overview and geological cross-section drawings must be provided (refer also to requirements under section 7.5).</p> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | Hydrogeology was completed for the entire TSF4 in W6618/2021/1. |
| <p>7.2 Stormwater management</p> <p>Provide details on the proposed stormwater management and controls for the TSF including, but not limited to:</p> <ul style="list-style-type: none"> • diversion of stormwater away from the TSF using drainage features, bunds, interceptor drains or other drainage systems • details (including design specifications and an overview of construction works) of clean stormwater holding ponds to be constructed (if required) • details of any proposed controlled releases of clean stormwater into the environment and/or proposed reuse options on site, including worst case contingencies • erosion and sediment control along drainage lines and discharge points (e.g. stormwater flow control, vegetation, detention ponds, minimising land disturbance and other temporary and permanent erosion protection measures). <p>Guidance on stormwater management can be found in the department's Stormwater management manual of Western Australia.</p> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | Stormwater management was completed for the entire TSF4 in W6618/2021/1. Refer to Section 6A of the Supporting Document. |

| | Yes | N/A | Document name or section |
|---|-------------------------------------|--------------------------|---|
| <p>7.3 TSF water management</p> <p>Provide details on the proposed TSF water management and controls including, but not limited to details of the:</p> <ul style="list-style-type: none"> • operational water balance assessment, including approach, assumptions, and estimates • proposed tailings delivery and decant/reclaim system • proposed cut-off trenches/toes and underdrainage system • operational freeboard assessment of storm storage capacity of the TSF (for each cell) at the proposed final height, relevant to its consequence category • proposed decant/reclaim system, including: <ul style="list-style-type: none"> - inlet/outlet locations - pumps and contingencies for failures, rain events, shut downs - incidental rainfall collection on the TSF - pipelines, including location and specifications - access causeway construction - emergency spillway(s) - decant ponds (i.e. size, capacity, freeboard requirements, elevations, locations, etc). <p>For existing facilities, provide information on existing water and seepage management. Include details such as updated water modelling. Data should be provided in Excel format to demonstrate trends over time.</p> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <p>Refer to Sections 3B of the Supporting Document.</p> |

| | | |
|--|-------------------------------------|---|
| <p>7.4 TSF seepage management</p> <p>Has a seepage assessment been carried out?</p> <p>Provide details on seepage including, but not limited to:</p> <ul style="list-style-type: none"> • where seepage is expected to occur (include a figure or map of plume modelling or estimated groundwater flow rates over time) • seepage rate and flow direction – including within pit walls if applicable • estimated seepage migration timeframes in relation to receptors • seepage water quality and known contaminants of concern • consideration of existing seepage (including adjacent TSFs if applicable) as cumulative emissions in water balance calculations • seepage management measures. <p>A site-specific self-assessment⁴ based on the SPR model and risk-rating matrix outlined in the department's Guideline: Risk assessments must be undertaken for seepage as part of the CSM:</p> <ul style="list-style-type: none"> • The self-assessment should be conducted as part of and be consistent with the requirements outlined in the emissions and discharges section of the application form. • The CSM must be completed as outlined in Part 3 of this form. • Proposed mitigation measures, triggers and timeframes, along with any residual risks must be clearly identified. • Self-assessment should include identifying any SPR linkage of seepage to near surface (i.e. land or soils), surface water and/or groundwater receptors. If the department's risk assessment (conducted as part of the assessment of this application) results in a residual risk the following further information may be required: <ul style="list-style-type: none"> ○ a time-dependent model including sensitivity of key parameters ○ relevant cross-sections of the pore pressure conditions for key time steps in the TSF's life. At a minimum this should include pre-mining conditions, year 1, mid-life, final year and post-operational drain-down ○ seepage management measures, including plan location, depth and expected efficiency. <p>It is recommended that the above information is provided with the application up-front if the self-assessment identifies a 'high' or 'extreme' risk to avoid delays in the application process.⁵</p> <p>Note 4: The risk assessment must be undertaken in accordance with the department's Guideline: Risk assessments.</p> <p>Note 5: Risk ratings are to be in accordance with the risk rating matrix outlined in the department's Guideline: Risk assessments.</p> | <input checked="" type="checkbox"/> | <p>Seepage has been assessed to 1,295mRL.</p> <p>Refer to W6618/2021/1 and W6901/2024/1. Also see Sections 3B, Attachment 7 and Attachment 8E of the Supporting Document.</p> |
|--|-------------------------------------|---|

| | Yes | N/A | Document name or section |
|---|-------------------------------------|-------------------------------------|---|
| Attachments | | | |
| <p>7.5 Attachment 5: Topography, geology and hydrogeological plan(s)</p> <p>An aerial overview and cross-section drawings of topographical, geological, and hydrogeological features related to the TSF, including existing monitoring bores and other monitoring instrumentation.</p> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | Completed for the entire TSF4 in W6618/2021/1 and the 1,270mRL raise in W6901/2024/1. |
| <p>7.6 Attachment 6: Layout of seepage management system</p> <p>Provide a layout plan of the proposed seepage management system that clearly depicts all associated infrastructure and equipment. Multiple plans can be provided.</p> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | Refer to Attachment 3B and 6A of the Supporting Document. |
| <p>7.7 Attachment 7: Stormwater / Surface Water Management Infrastructure</p> <p>Provide design drawings and layout figure(s) of the proposed stormwater / surface water management infrastructure.</p> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | Refer to Section 3B and Attachment 6A of the Supporting Document. |

Part 8 – Other operational and management aspects

This section outlines the operational management aspects of the TSF that must be addressed as part of an application. Focus on the day-to-day activities undertaken at the TSF and the practices to be implemented to minimise environmental impacts.

| | Yes | N/A | Document name or section |
|---|-------------------------------------|--------------------------|---|
| <p>8.1 Dust management</p> <p>Where risk assessment concludes there may be impacts to sensitive environmental receptors or risk of amenity or public health impacts, provide details on the proposed dust mitigation measures to control dust emissions from the TSF.</p> <p>Where saline water is used for dust suppression, all reasonable measures must be taken to avoid detrimental impacts to surrounding environmental receptors including native vegetation. These measures must be documented in the application.</p> <p>'Dust' includes dried tailings lift-off from the surface of the TSF.</p> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | Refer to Section 6A of the Supporting Document. |

| | Yes | N/A | Document name or section |
|--|-------------------------------------|-------------------------------------|---|
| <p>8.2 Tailings delivery and return water pipelines</p> <p>Provide details on the proposed tailings delivery and return water pipelines including, but not limited to:</p> <ul style="list-style-type: none"> • location/route • design specifications • connectivity (i.e. processing plant to TSF) • decant and reclaim system • supernatant ponds (location, size, etc). <p>Provide details of the proposed management measures for tailings delivery and return water pipelines including, but not limited to:</p> <ul style="list-style-type: none"> • trenches and diversion bunds • flow meters • telemetry / process monitoring • leak detection/monitoring system • shut-off valves • inspections schedule and responsible officers • deposition strategy • contingency measures in event of pipeline spills or ruptures. | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <p>Refer to Attachment 3B and Attachment 8E of the Supporting Document for information on tailings delivery and water pipelines.</p> <p>Refer to Section 6A of the Supporting Document for information on potential contaminated seepage emissions and proposed controls.</p> |
| <p>8.3 Impacts to birds and bats from contact with tailings or tailings water</p> <p>For gold or silver mining operations, is the applicant a signatory to the International Cyanide Code ?</p> <p>If not a signatory, provide details of proposed monitoring and management to mitigate risk of cyanide poisoning of birds or bats consistent with the Australian national Leading Practice Handbook on Cyanide Management (particularly Appendices 1-3).¹</p> <p>For all mining operations (whether targeting gold or other substances) is there a risk to birds or bats from other toxic materials in tailings or tailings water (e.g. arsenic, cadmium, lead, selenium, thallium)? If so, provide details of proposed management to mitigate this risk.</p> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | |
| | <input type="checkbox"/> | <input checked="" type="checkbox"/> | |
| | <input type="checkbox"/> | <input checked="" type="checkbox"/> | |

¹ Note this does not apply where water is hypersaline as salinity of 50 000 mg/L TDS or above is protective since wildlife cannot consume such high salinity water and will likely avoid its ingestion during foraging activities [Adams MD et al 2013 Hypersaline-Induced Reduction in Cyanide Ecotoxicity at Gold Operations](#)

| Attachments | | | |
|--|-------------------------------------|--------------------------|---|
| 8.4 Attachment 8: Layout of tailings delivery and return water pipelines Design drawings and layout figure(s) of the proposed tailings delivery and return water pipeline infrastructure must be provided. | <input checked="" type="checkbox"/> | <input type="checkbox"/> | Refer to Section 3B and Attachment 8E of the Supporting Document. |

Part 9 – TSF monitoring and inspections

You must provide an overview of the proposed monitoring and inspection aspects of the TSF operation.

A comprehensive monitoring program is required to support the ongoing operation of the TSF. Aspects that should be included in the monitoring program (as a minimum) include seepage, surface water and groundwater, relevant to the risks identified.

The operator must continually review the quality of data obtained and the positioning of monitoring points during the regular review of monitoring data.

Typical monitoring aspects are outlined further below. Where an operator elects not to commit to certain monitoring programs, they must provide clear justification and rationale for this decision.

| | Yes | N/A | Document name or section |
|--|-------------------------------------|--------------------------|---|
| 9.1 Groundwater, surface water and seepage monitoring Provide details on the proposed groundwater and surface water monitoring program including, but not limited to: <ul style="list-style-type: none"> • groundwater, surface water, and seepage sampling / monitoring locations (including monitoring and recovery bores) • bore construction specifications • nearest stock bore(s) • nearest supply bore(s) • sampling methodology • analysis suite • sampling frequency. For a new TSF, the operator should seek to demonstrate baseline groundwater and surface water conditions before construction works and to feed the results of this monitoring into the initial CSM development. The monitoring program should as a minimum seek to establish: <ul style="list-style-type: none"> • background groundwater quality, groundwater levels (in mAHD and mBGL), flow rates, and flow directions • background surface water quality, levels, flow rates and flow direction • local aquifers, and groundwater flow direction and rates of | <input checked="" type="checkbox"/> | <input type="checkbox"/> | Refer to Section 6A of the Supporting Document for information on potential seepage emissions and controls. Refer to Section 6A of the Supporting Document for information on potential contaminated stormwater and controls. Refer to Attachment 8D for details on modelling updates for this application. Refer to Attachment 8F Annual Environmental Report L4247/1991/13: 01 July 2024 to 30 June 2025 for monitoring results. |

| | Yes | N/A | Document name or section |
|---|-------------------------------------|--------------------------|--|
| <p>each aquifer (if available)</p> <ul style="list-style-type: none"> a monitoring network that acts as an early indicator of seepage contamination in groundwater or surface water prior to offsite migration. Monitoring bores need to be designed and installed to detect seepage at expected depths based on local geology and soil characteristics (before receptors are impacted). <p>For amendments to established TSFs, the operator should:</p> <ul style="list-style-type: none"> explain whether any models/assumptions provided in original approval applications are still applicable. provide a summary of at least the past five years of groundwater monitoring data, identifying and discussing any trends or impacts to receptors, and provide details on model calibration with real data and management actions to be implemented with timeframes (if applicable). <p>A sampling and analysis quality plan (SAQP) should be prepared to ensure that the data collected are valid, representative, and sufficient to address critical gaps and uncertainties identified in the CSM so that the information obtained provides a reliable basis for continually reviewing site operations and meeting compliance requirements of the operating licence.</p> <p>Further guidance on developing a groundwater and surface water monitoring program, including the development of a SAQP, can be sourced from the Victorian EPA Groundwater Sampling Guidelines and from Schedule B2 of the National Environment Protection (Assessment of Site Contamination) Measure 1999 (ASC NEPM).</p> | | | |
| <p>9.2 Dust monitoring</p> <p>Where dust is identified as a potential risk to sensitive receptors (see section 8.1), provide details on the proposed TSF dust monitoring plan including, but not limited to:</p> <ul style="list-style-type: none"> locations of residences / other sensitive receptors monitoring locations monitoring methodology (i.e. visual, monitoring stations, DustTrak etc.) monitoring frequency and duration dust management triggers contingency measures. | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <p>Refer to Section 6A of the Supporting Document.</p> <p>No change due to TSF4 Cell 1 raise to 1,277.5mRL.</p> |
| <p>9.3 TSF inspections</p> <p>Provide details on the proposed TSF inspections including, but not limited to:</p> <ul style="list-style-type: none"> timing and frequency | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <p>Refer to Attachment 6A of the Supporting Document.</p> <p>No change due to TSF4 Cell 1 raise to 1,277.5mRL.</p> |

| | Yes | N/A | Document name or section |
|---|-----|-----|--------------------------|
| <ul style="list-style-type: none"> erosion and sediment monitoring (including locations, methodology, frequency) inspection locations / TSF components (i.e. drainage, freeboard, pipelines, vegetation etc.) DEMIRS inspection requirements outlined in the TSF Operating Manual relevant tenement requirements imposed by DEMIRS. | | | |

| Attachments | | | |
|--|-------------------------------------|--------------------------|---|
| <p>9.4 Attachment 9: Monitoring locations</p> <p>Provide layout figure(s) of the proposed monitoring locations (with GPS coordinates) including, but not limited to:</p> <ul style="list-style-type: none"> monitoring bore locations (including groundwater, seepage and recovery bores) clearly numbered / labelled surface water monitoring locations dust monitoring locations vegetation monitoring locations (where justified based on risk). | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <p>Refer to Section 6A of the Supporting Document for dust monitoring locations.</p> <p>Refer to Sections 3B and Attachment 7 of the Supporting Document for surface and groundwater monitoring locations.</p> <p>Refer to Attachment 8G TSF4 Seepage Management Plan.</p> <p>No change due to TSF4 Cell 1 raise to 1,277.5mRL.</p> |

Appendix 1 - Example Conceptual Site Model (CSM) table

| Source / Activities | Potential emissions, pollutants, or contaminants of concern | Potential pathway | Potential receptors | Potential impacts | Proposed controls and contingencies |
|---|---|--|--|---|---|
| TSF-Cell 1 (deposition of tailings) | TSF-Cell 1 supernatant potentially containing concentrations of substances with environmental significance such as cyanide, or arsenic. | Seepage / infiltration. Groundwater mounding, seepage expression. | Underlying groundwater (20 mBGL) low salinity (potable) | Groundwater contamination | Groundwater modelling, underdrainage, monitoring bores and recovery bores, specified management triggers and contingency actions. |
| | | | Groundwater users located at Green Town, 500 metres away | Public health impacts | |
| Decant pipeline and/or tailings delivery pipeline failure. | Decant water potentially containing concentrations of substances with environmental significance such as cyanide. | Direct discharge Infiltration into soil or groundwater | Surface water (specifically Blue Creek located 200 m south of the southern embankment of the TSF-Cell 1. | Reduced surface water quality, and ecosystem disturbance. | Telemetry, auto cut-offs, visual monitoring. Clean up response, reporting, spill containment measures |
| | | | Native vegetation adjacent to TSF and beside Blue Creek | Reduced vegetation health, and potential loss of vegetation in some areas. | |
| Stormwater | Sediment-laden runoff. Potentially contaminated stormwater. | Overland runoff. | Surface water (specifically Blue Creek located 200 m south of the southern embankment of the TSF-Cell 1. | Reduced surface water quality, and ecosystem disturbance. | Stormwater infrastructure, diversion drains, trenches, monitoring |
| | | | Native vegetation adjacent to TSF and beside Blue Creek | Reduced vegetation health. | |
| Overtopping of TSF-Cell 1 due to insufficient freeboard capacity. | Tailings potentially containing cyanide or other toxic materials. | Unplanned direct discharge of tailings into the environment. | Underlying groundwater (20 mBGL). | Reduced groundwater quality and impacts to downgradient groundwater users. | Managing water balance, maintaining adequate freeboard, water recovery measures |
| | | | Surface water (Specifically Blue Creek located 200 m south of the southern embankment of the TSF-Cell 1 | Reduced surface water quality, and ecosystem disturbance / wildlife / aquatic life poisoning. | |

| <i>Source / Activities</i> | <i>Potential emissions, pollutants, or contaminants of concern</i> | <i>Potential pathway</i> | <i>Potential receptors</i> | <i>Potential impacts</i> | <i>Proposed controls and contingencies</i> |
|--|---|--|---|---|---|
| | | | <i>Native vegetation adjacent to TSF and beside Blue Creek.</i> | <i>Reduced vegetation health, and potential loss of vegetation in some areas.</i> | |
| <i>Tailings water</i> | <i>WAD Cyanide in tailings water (Tailings water is less than 50,000 TDS and company is not a signatory to the Cyanide Code)</i> | <i>Birds, or bats coming in contact with tailings water</i> | <i>Birds or bats</i> | <i>Poisoning of birds or bats</i> | <i>WAD cyanide monitoring and management consistent with Australian national Leading Practice Handbook on Cyanide Management (Appendices 1-3)</i> |
| <i>Dust (dried tailings) lift-off from the surface of the TSF-Cell 1, or embankments</i> | <i>Dust (dried tailings) potentially containing toxic materials.</i> | <i>Windblown dust transport through air then deposition.</i> | <i>Native vegetation adjacent to TSF</i> | <i>Potential impact to health of native vegetation from dust deposition and / or dust containing toxic material deposited on soil</i> | <i>Dust monitoring program with predetermined trigger value Contingency measures (dust suppression, ceasing dust generating activities where required)</i> |
| | | <i>Air/wind dispersion, dust inhalation, Contamination of drinking water (roof runoff into rainwater tanks used for water supply). Contamination of home-grown food (from contamination of soil in residents' vegetable gardens, chickens feeding on ground in residents' properties). Amenity impacts from dust soiling surfaces around residents' properties</i> | <i>Nearby residents (500 m away)</i> | <i>Public health / amenity impacts</i> | <i>Ambient air quality monitor in Greentown Sampling for contaminants (dust speciation) and monitoring of rainwater tanks / soil contamination</i> |



ATTACHMENT 10: PROPOSED FEE CALCULATION

The proposed fee for the works approval amendment application [REDACTED] and was determined using the DWER's industry licencing system *Works approval and licence amendment fee calculator* (<https://www.wa.gov.au/government/publications/works-approval-and-licence-amendment-fee-calculator>).

The fee was determined using the following inputs:

- Prescribed Premises Category: Category 5: Processing or beneficiation of metallic or non-metallic ore; and
- Capacity range: More than 5,000,000 tonnes per year.



GLOSSARY

| Term | Meaning |
|-------------|--|
| AHD | Australian Height Datum |
| ANCOLD | Australian National Committee on Large Dams |
| Application | Works Approval Amendment Application |
| ARU | Arsenic Remediation Unit |
| AS | Australian Standard |
| BGM | Bituminous Geomembrane Material |
| BoD | Basis of Design |
| CCIR | Critical Containment Infrastructure Reports |
| CGP | Chemical Grade Plant |
| CGP3 | Chemical Grade Plant 3 |
| CGP4 | Chemical Grade Plant 4 |
| Cell 1a | Cell 1 – Stage 1a |
| Cell 1b | Cell 1 – Stage 1b |
| CoPC | Contaminants of Potential Concern |
| Cth | Commonwealth |
| CTPS | Centralised Tailings Pumping Facility |
| CWD | Clear Water Dam |
| DE | Development Envelope |
| DEMIRS | Department of Energy, Mines, Industry Regulation and Safety |
| DWER | Department of Water and Environmental Regulation |
| DMP | Dust Management Plan |
| DMPE | Department of Mines, Petroleum and Exploration |
| DrainCoil | Perforated drainage pipe for subsoil drainage |
| EP Act | <i>Environmental Protection Act 1986 (WA)</i> |
| EPA | Environmental Protection Authority |
| EPBC Act | <i>Environment Protection and Biodiversity Conservation Act 1999 (Cth)</i> |
| GHD | GHD Pty Ltd |
| ha | hectares |
| km | kilometre |



| Term | Meaning |
|----------------------|---|
| L4247/1991/13 | Licence 4247/1991/13 |
| m ³ | Cubic metres |
| m ³ /year | Cubic metres per year |
| m | Metre |
| mg/L | milligrams per litre |
| m/s | Metres per second |
| Mining Act | <i>Mining Act 1978</i> |
| mm | Millimetre |
| mRL | metres Reduced Level |
| MS | Ministerial Statement |
| MS 1111 | Ministerial Statement 1111 |
| MSA | Mine Services Area |
| Mt | Million tonnes |
| Mtpa | Million tonnes per annum |
| MWC | Mine Water Circuit |
| OBE | Operational Basis Earthquake |
| PM ₁₀ | Particulate matter less than 10 micrometres in diameter |
| Premises | Greenbushes Lithium Operation |
| Project | The expansion at Greenbushes Lithium Operation |
| RoM | Run of Mine |
| SEE | Safety Evaluation Earthquake |
| SMP | Seepage Management Plan |
| t | Tonne |
| Talison | Talison Lithium Australia Pty Ltd |
| TLO | Time Limited Operations |
| TARP | Trigger Action Response Plan |
| t/m ³ | Tonnes per cubic metre |
| TRP | Tailings Retreatment Plant |
| TSF | Tailings Storage Facility |
| TSF1 | Tailings Storage Facility #1 |



| Term | Meaning |
|--------------|---|
| TSF2 | Tailing Storage Facility #2 |
| TSF4 | Tailings Storage Facility #4 |
| TSP | Total Suspended Particulates |
| VWPs | Vibrating wire piezometers |
| W6618/2021/1 | Works Approval 6618/2021/1 |
| W6901/2024/1 | Works Approval 6901/2024/1 |
| WA | Western Australia |
| WAA | Works Approval Application |
| WMP | Water Management Plan |
| WQG | Water Quality Guideline |
| WRL | Waste Rock Landform |
| WWL | Water, Waste & Land Consulting Engineers and Scientists |
| WWTP | Waste Water Treatment Plant |



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Attachment 8A

TSF4 Detailed Design Report (GHD, 2021)



Attachment 8B

TSF4 Addendum to detailed design report (GHD, 2024a)



Attachment 8C

TSF4 275mAHD raise detailed design report (GHD, 2025)



Attachment 8D

TSF4 Cell 1 Design to RL 1277.5m – Addendum to RL 1275m Raise Detailed Design Report (GHD, 2026)



Attachment 8E

Greenbushes Lithium Operation Part V

Works Approval Amendment Application –

TSF4 275mAHD Raise Works Approval

Supporting Document



Attachment 8F

Annual Environmental Report

L4247/1991/13: 01 July 2024 to 30 June 2025



Attachment 8G

Seepage Management Plan