



Application for Licence Amendment

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

Licence Number	L8464/2010/2
Licence Holder	FMG Solomon Pty Ltd
ACN	128 959 179
File Number	DER2013/001363-2
Premises	Solomon Mine E47/1011, E47/1334, E47/1532, M47/1409, M47/1410, M47/1411, M47/1413, M47/1431, M47/1453, M47/1466, M47/1473, M47/1474, M47/1475, L47/293, L47/294, L47/296, L47/301, L47/351, L47/360, L47/362, L47/363, L47/367, L47/381, E47/382, L47/391, L47/392, L47/397, L47/471, L47/472, L47/710, L47/711, L47/813, L47/814, P47/1279, P47/1286, P47/1287, P47/1304, P47/1305, P47/1735, P47/1736 and portion of E47/1319, E47/1333, E47/1398, E47/1399, E47/1447, E47/3094, E47/3464, L47/361 and L47/713 MT SHEILA WA 6751
Date of Report	29/07/2024
Decision	Revised licence granted

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1. Decision summary

Licence L8464/2010/2 is held by FMG Solomon Pty Ltd (licence holder/applicant) for the Solomon Mine (the premises), located in Mount Sheila, WA.

This Amendment Report documents the assessment of potential risks to the environment and human health and amenity from proposed changes to the emissions and discharges during the operation of the premises. As a result of this assessment, amended licence L8464/2010/2 has been granted.

2. Scope of assessment

2.1 Regulatory framework

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

2.2 Application summary

On 2 November 2023, the licence holder submitted an application to the department to amend licence L8464/2010/2 (the existing licence) under section 59 and 59B of the *Environmental Protection Act 1986* (EP Act). The following amendments to the existing licence were sought:

- Construction and operation of upgraded infrastructure at the Kings Valley Ore Processing Facility (OPF). The proposed upgrades will increase the Category 5 (ore beneficiation) maximum design capacity at the premises from 95.3 Mtpa to 115.3 Mtpa;
- Construction and operation of a new landfill facility within a cleared area on tenement M47/1546, intended to replace the existing Solomon Landfill which will reach maximum capacity within 12 months.
 - The landfill facility will include a new transfer station for temporary storage of waste and hazardous materials like hydrocarbons and batteries prior to disposal off-site. There is no proposed change to the authorised production capacity for Category 64 (Class II putrescible landfill) on the existing licence; and
- Proposed minor administrative amendment to remove the reference to *TSF1 Gravity Decant Water Storage Pond* from Condition 3, Table 2 on the licence, as this pond is no longer connected to the TSF. Rather, tailings material is diverted to Gee Pit, which is covered on the licence.

On 2 April 2024, the licence holder requested that the proposed upgrade to Kings Valley Ore Processing Facility (OPF) be removed from the application to amend licence. Only the construction and operation of a new landfill, and removal of the reference to TSF1 Gravity Decant Water Storage Pond are now proposed by the licence holder.

No changes are proposed in relation to activities regulated under other Categories on the existing licence (Categories 5, 6, 54, 57, 61 and 73).

2.2.1 New Solomon Landfill facility and waste transfer station

Overview of existing solid waste disposal

The existing premises Class II landfill (the 'Solomon landfill') is expected to reach its footprint capacity around November 2024, based on the date of this application submission. As an interim solution while the location of the new Solomon landfill was being determined, the licence holder extended the area of the existing Solomon Class II landfill within the Firetail North mining pit void by about 0.37 ha to increase the operational life. This interim proposal was authorised under works approval W6802/2023/1, issued on 31 July 2023.

Proposed landfill facility

The licence holder is proposing to construct and operate a new landfill facility at the Solomon Mine for the acceptance of waste under Category 62 and Category 64 within an existing cleared mine pit area on mining tenement M47/1546. The works will include the construction of a new waste transfer station/depot and landfill service depot.

The new proposed Solomon landfill will operate within the existing Solomon Licence throughput capacities, with no changes proposed to the existing production or design capacities of 6,000 tonnes per annum under Category 62 and 14,000 tonnes per annum under Category 64. The licence holder is proposing that the landfill be unlined due to the following factors:

- The climate has low and variable rainfall and high evaporation rates, which leads to low leachate production.
- The site geology, characterised by low permeability soils, further minimises the risk of impacts on groundwater.
- The hydrogeology of the site has a significant depth to groundwater. Groundwater tables over much of the site are significantly separated from the ground surface. In areas of elevated topography, the depth to groundwater is generally very significant, often more than 50 m below ground level (Aurora Environmental, 2023) (see section 2.2.2)

The landfill facility will only accept Class I (inert) and Class II (putrescible) waste materials generated from the premises, as defined in DWER's *Landfill Waste Classification and Waste Definitions* (December 2019) (LWCWD) document. Prior to the placement of any waste, the pit may be reformed in a bulk earthworks program, not limited to the following:

- Trim and form the existing safety bunds at the top of the pit walls. Hence, they are stable and regular and divert stormwater from areas around the landfill, preventing it from entering the landfill. These bunds will also act to discourage native fauna or stock from entering the pit.
- Create pit access roads/ramps from the Transfer Site for waste vehicles and earth-moving equipment to be used in filling activities at the eastern pit.
- Temporary stockpile areas will be created within both cells for the storage of clean cover material.
- A formal stockpile area will be created on the second pit bench south of the landfill to store excess fill generated during the bulk earthworks program. This stockpiled material will be used for daily and final cover.
- If required, temporary shallow drive-over bunds will be created across the pit floor to segregate clean water and leachate.

Filling will be conducted by the area fill method, whereby waste is initially placed on the pit floor, as depicted in Figure 1. Waste will initially be placed in the north-west corner of the pit to allow it to be pushed up and compacted against the pit walls, creating a stable waste body and minimising windblown litter.

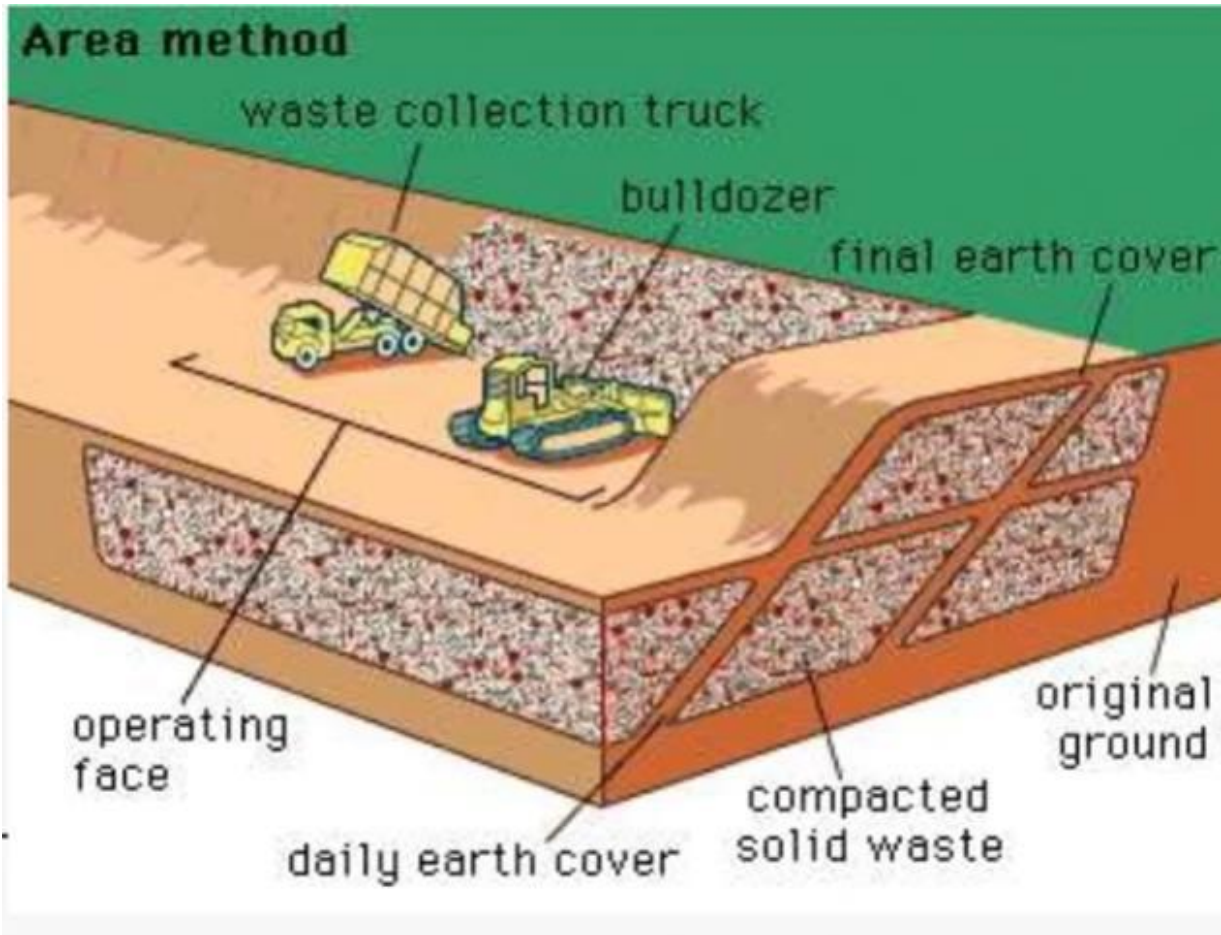


Figure 1 Conceptual illustration of area fill method.

Once a sufficient area of the pit is filled to a depth of 1.5 m to allow it to be safely trafficked by waste trucks, a temporary access ramp will be created from the pit floor on top of the filled bench. Additional clean cover will provide a stable access road for waste vehicles and the landfill earth-moving equipment. A second waste lift of 1.5 - 2 m height can then be created on top of the emplaced waste (Figure 1).

The top landfill bench will be emplaced so that at the pit walls, waste is placed at least 500 mm below the rim of the pit. The height of the bench can then be progressively increased so that at the centre line of the pit, the waste will be up to 1,500 mm above the height of the pit rim. This allows for improved drainage control once the final cover is placed on the waste cell.

Once the final filling height is achieved over an area, it will be covered with a further 500 mm of clean fill, which will be compacted to achieve a stable landform. A perimeter drain will be established at the pit wall around the edge of the pit to direct any clean runoff into the detention basin.

Clean fill, Putrescible and Type 1 and 2 inert wastes to be disposed to the landfill will meet the descriptions in Table 2b of the LWCWD. All other waste not meeting the requirements will be stored temporarily in a graded and bunded pit for collection and disposal off-site. The exception is contaminated soil, which will be disposed of at the soil bioremediation facility at the premises or removed off-site to a licensed facility for disposal. Recyclable wastes will be transported off-site to a recycling facility where practicable. Hazardous or controlled waste will be removed from the site and disposed of at an appropriately licensed facility.

An existing perimeter bund surrounding the mine pit will be retained to divert stormwater from entering the pit and act as a safety bund. However, the landfill design will incorporate a perimeter bund to exclude stormwater run-off from outside the pit from entering the pit and a stormwater

detention basin within the pit floor to store stormwater flows generated within the landfill cells.

The base of the landfill pit will be graded towards the detention basin so that water does not pool in the deposited waste. Due to the absence of a liner and the low rainfall, there will be no leachate containment system, nor is a landfill gas collection/control system proposed.

Groundwater flow is regionally from east to west and is associated with increased depth to groundwater. Two groundwater monitoring bores are proposed at the locations marked on Figure 6 of the amended licence. The licence holder advises the locations may change based on the hydrogeological formations encountered during drilling. Bore monitoring will be in accordance with the requirements set for existing bores GQ9 and GQ10, as specified in Table 16 of the existing licence.

New waste transfer station

The site transfer station will be located at the eastern end of the landfill and has been modelled based on the transfer station at the existing landfill. The licence holder advises that most of the existing infrastructure will be transferred to the new Solomon Transfer Station. Key features of the Transfer Site include:

- The site is fully fenced with a stock-proof fence.
- A combined administration office and crib room will be located on the southern boundary, incorporating shower and toilet facilities for personnel. All wastewater is transferred to a sealed storage tank, which is periodically pumped out and taken to the liquid waste facility servicing the Solomon Hub.
- A standalone enclosed battery storage container transferred from the existing site; and
- Dedicated on-ground waste storage areas.

Waste intended for deposition in the landfill will typically not be stored in the transfer station but instead directed to the active tipping face. The transfer station will typically only store hazardous materials like hydrocarbons and batteries prior to off-site disposal or inert materials such as used pipework and timber prior to on or off-site recycling.

2.2.2 Hydrogeology of the landfill site

Aurora Environmental (2023) found groundwater in the Solomon area to be typically hosted in alluvial, colluvial, and detrital deposits which overlie iron deposits.

The groundwater table over much of the site is significantly separated from the ground surface and, in areas of elevated topography, the depth to groundwater is generally very significant, often more than 50 metres (see Figure 2).

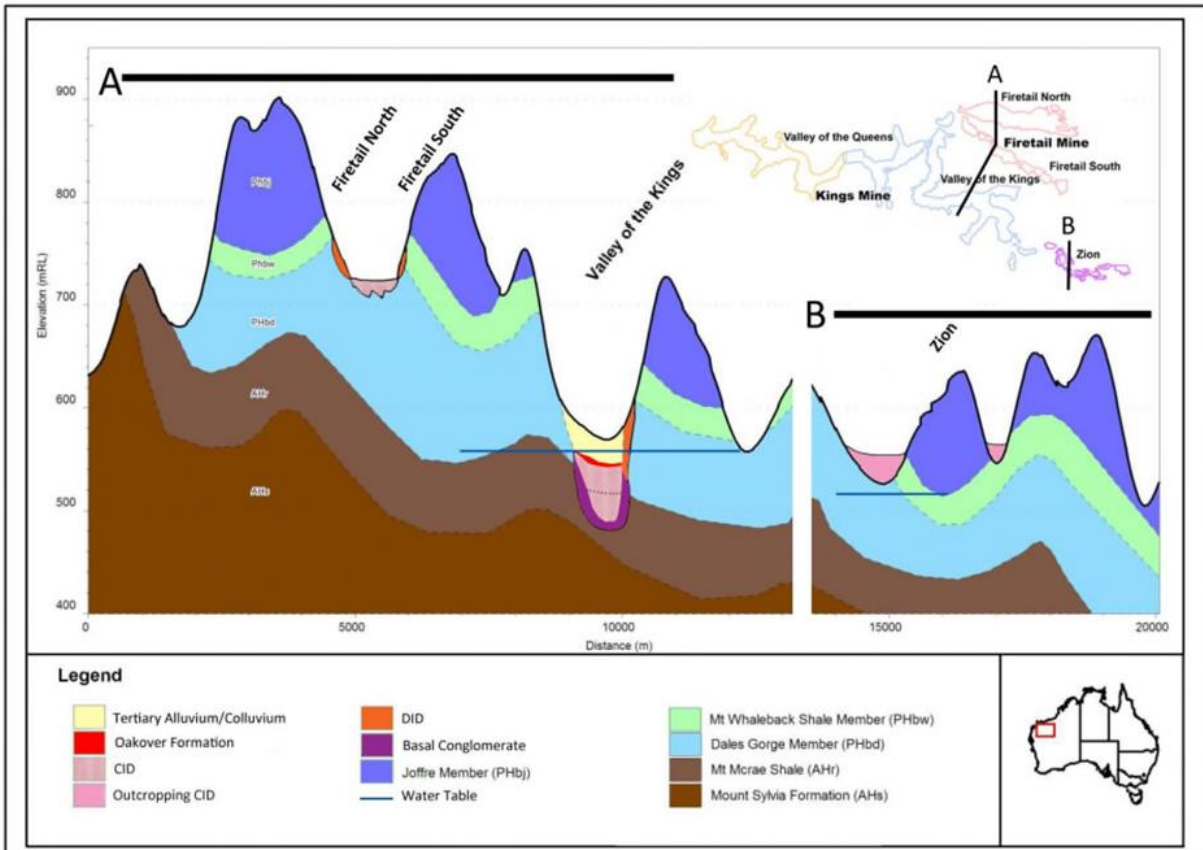


Figure 2: Schematic cross-section of mine geology and water table level

The base of the proposed landfill pit floor has been surveyed to have an elevation over 580 m AHD. As a result, the FMG hydrogeology team suggest that the depth to groundwater at the site is more than 50 m below ground surface.

The terrain in and around the disused pit is heavily disturbed due to past mining operations.

2.2.3 Minor amendment to Gravity Decant Water Storage pond

The licence holder requests a minor administrative amendment to remove the reference of the TSF1 Gravity Decant Water Storage Pond from Condition 3, Table 2 on the licence.

The TSF1 Gravity Decant Water Storage Pond is no longer connected to the TSF as tailings material is being diverted to Gee-Pit, which is covered on the licence.

3. Other approvals

3.1 Mining Act 1978

The proposed new Solomon Landfill facility is consistent with the approved Solomon Mine Consolidated (Version 1) Mining Proposal (REG ID:93518).

Department of Energy, Mines, Industry Regulation and Safety (DEMIRS) provided comment to DWER on 28 February 2024 regarding the proposed activities. A mining proposal (MP Rev 2) for new landfill is under assessment under the *Mining Act 1978*. This application was received by DEMIRS on 16 February 2024 (environmental registration ID 123182). On 15 May 2024 DEMIRS advised that the assessment was still under consideration.

3.2 Part IV of the EP Act

Two ministerial statements have been issued for the premises, MS 862 (issued 20 April 2011) and the superseding MS 1062 (issued 3 October 2017). Clearing of no more than 16,131 ha of native vegetation within the 36,602 ha mine development envelope is authorised under MS 1062. The proposed works require no additional clearing of vegetation.

The licence holder developed the *Solomon Hub Vegetation Health Monitoring and Management Plan* (SO-00000-PL-EN-0007) to address the EPA key environmental factor Flora and Vegetation objective to “*protect flora and vegetation so that biological diversity and ecological integrity are maintained*”. This Plan is specified in MS 1062 condition 7-1 and 7-2 and outlines management of conservation significant vegetation and flora at the premises.

Specific MS 1062 condition requirements captured in the Plan that are relevant to this assessment include:

- Maintain the health of populations of *Gompholobium karijini* within the Mine Development Envelope
- Maintain the health of riparian vegetation associated with permanent pools and semi-permanent pools in Kangeenarina Creek
- Minimise impacts to regionally and locally significant flora species and ecological communities within the Mine Development Envelope (not authorised to be cleared under Schedule 1), including but not limited to the Brockman Iron Cracking Clay (PEC)
- Minimise the impacts to *Triodia basitricha* to maintain the species conservation status
- Maintain the health of the Threatened Ecological Community (TEC) Themeda Grassland within the Mine Development Envelope.

Provisions are set in the Plan to address impacts to conservation significant flora and vegetation health from changes to groundwater levels and groundwater quality, changes to surface flows, dust, and weeds.

3.3 Aboriginal Heritage Act 1972

The premises intersects with the Eastern Guruma (WAD6208/1998) and the Yindjibarndi #1 Ngurra Aboriginal Corporation native title claims areas (WAD6005/2003). The Eastern Guruma people are represented by the Wintawari Guruma Aboriginal Corporation (WGAC). The Yindjibarndi people are predominantly represented by the Yindjibarndi Ngurra Aboriginal Corporation (YNAC), Yindjibarndi Aboriginal Corporation (YAC), with a third identified and separate stakeholder group being the Wiru-Murra Yindjibarndi Aboriginal Corporation (WMYAC).

DWER requested comment from WGAC, YNAC, YAC and WMYAC regarding the proposed activities. YNAC raised concerns regarding Brad TSF, and other issues more broadly relating to the site, in December 2022 and as part of stakeholder consultation for the works approval in June 2023. A summary of concerns raised, and the department’s responses are included in Appendix 2.

The proposed works are within 1 km of the following aboriginal heritage sites listed under the *Aboriginal Heritage Act 1972* (AH Act):

- Registered site - 30590 - Artefacts / Scatter, 100 m southeast of landfill
- Registered site - 31795 - Artefacts / Scatter, within proposed landfill area
- Registered site - 31796 - Artefacts / Scatter, 50 m north of landfill
- Registered site - 30014 - Artefacts / Scatter (Yindjibarndi AS02-07), within proposed landfill area
- Registered site - 33336 – Burial; Sub surface cultural material; Ritual / Ceremonial; Rock Shelter, 500 m west of landfill
- Registered site - 36839 – Artefacts / Scatter; Ochre; Rock Shelter, 500 m west of landfill
- Registered site - 28956 – Artefacts / Scatter; Rock Shelter, 500 m west of landfill
- Lodged site - HRZ-0035 – 500 m west of landfill

- Lodged site - YIN07-003 – 500 m west of landfill
- Lodged site - YIN11-080 – 750 m southeast of landfill

The Department of Planning, Lands and Heritage (DPLH) provided comments on 8 March 2024, summarised below:

- From an examination of the Licence Amendment Application (2 November 2023) the proposed licence amendment area intersects with the boundary of the following Aboriginal places:
 - ID 30014 (Yindjibarndi AS02-07), Registered Site
 - ID 31299 (YIN10-77), Lodged Place
 - ID 31795 (YIN08-24), Registered Site
 - ID 33577 (Ganyjingarringunha Ngurra), Lodged Place
- DPLH consider the removal of the reference of the TSF1 Gravity Decant Water Storage Pond from the licence as an administrative change that will not have any impact upon the Aboriginal heritage of the area.
- With reference to figures in the licence amendment application, the proposed construction and operation of the new Solomon landfill will intersect with Registered Sites ID 31795 (YIN08-24) and ID 30014 (Yindjibarndi AS02-07), however DPLH understand that these sites have already been destroyed under a previous Section 18 consent. As such, there is no additional impact to Aboriginal heritage because of the proposal.
- DPLH note the supporting document states that the licence holder (or parent company) has signed a Land Access Agreement (LAA) with Wintawari Guruma Aboriginal Corporation on behalf of the Eastern Guruma native title holders (Wintawari LAA). DPLH encourages continued communication and cooperation between licence holder and both the Wintawari Guruma Aboriginal Corporation and Eastern Guruma native title holders to ensure the conservation of Aboriginal heritage.
- DPLH state that if any of the proposed future works do reveal any previously unknown Aboriginal heritage, the licence holder will be required to apply for approvals under the AH Act.

DWER reiterates the above, that the licence holder is required to meet its obligations under the AH Act which is a separate regulatory process to that of applying for a licence amendment under Part V of the EP Act. The granting of the licence amendment does not remove the licence holder's obligations to comply with the AH Act. DWER also recommends that the licence holder consults with all applicable Traditional Owner groups for ongoing approvals for this premises.

4. Risk assessment

The department assesses the risks of emissions from prescribed premises and identifies the potential source, pathway, and impact to receptors in accordance with the *Guideline: Risk assessments* (DWER 2020).

To establish a Risk Event there must be an emission, a receptor which may be exposed to that emission through an identified actual or likely pathway, and a potential adverse effect to the receptor from exposure to that emission.

4.1 Source-pathways and receptors

4.1.1 Emissions and controls

The key emissions and associated actual or likely pathway during premises operation which have been considered in this Amendment Report are detailed in

Table 1 below, in addition to control measures the licence holder has proposed to assist in controlling these emissions, where necessary.

Table 1: Licence holder controls

Emission	Sources	Potential pathways	Proposed controls
Construction			
Dust	Construction of landfill facility	Air/windborne pathway	<ul style="list-style-type: none"> Implement additional measures for dust suppression including the use of water carts, application of a dust suppression agent(s) in high traffic areas and changes to the material handling process. Undertake visual inspections, as required and at an appropriate frequency during high dust risk works, particularly in the vicinity of areas with known environmental or social surrounds values.
Noise			No controls proposed due to separation distance to nearest receptors.
Operation			
Dust	Operation of landfill facility	Air/windborne pathway	<ul style="list-style-type: none"> Implement additional measures for dust suppression including the use of water carts, application of a dust suppression agent(s) in high traffic areas and changes to the material handling process.
Noise	Operation of landfill facility		No controls proposed due to separation distance to nearest receptors.
Sediment laden stormwater	Operation of landfill facility and waste transfer station	Runoff / infiltration	<ul style="list-style-type: none"> An existing perimeter bund surrounding the mine pit will be retained to divert stormwater from entering the pit and act as a safety bund. Construction of a stormwater detention basin to store stormwater flows generated within the landfill cells. The base of the landfill cell will be graded towards the detention basin so that water does not pool in the deposited waste.

Emission	Sources	Potential pathways	Proposed controls
<p>Odour</p> <p>Windblown waste</p>	<p>Operation of landfill facility and waste transfer station</p>	<p>Air/windborne pathway</p>	<ul style="list-style-type: none"> • The maximum open area of tipping will not exceed a 30 m length at any time (notionally one week of operation), and each tipping bench will not exceed a maximum height of 2 m. • The active tipping bench will be covered weekly with a minimum of 300 mm of clean soil. • If odour complaints are received because of stored waste that does not meet the requirements for a Class II Landfill, the licence holder may increase the frequency of this waste being removed from the site, and investigate possibilities to improve waste container handling (lids, cleaning, etc.) • Existing licence condition 4 requires waste to be placed in a defined trench or within an area enclosed by earthen bunds. This assists in reducing the generation of windblown waste as waste is contained within a designated area. • Existing licence condition 6 specifies regular cover requirements of waste which assists in preventing windblown waste from escaping the designated trench area and reduces the generation of odours as waste is not exposed to the air for long periods of time.
<p>Fire and smoke/air emissions</p>			<ul style="list-style-type: none"> • Fire extinguishers will be maintained at the landfill area. • No burning of waste will occur within the landfill. • The active tipping bench will be covered weekly with a minimum of 300 mm of clean soil. • Existing licence condition 4 specifies a maximum amount of 2,500 tyres to be stored onsite at any one time, and for tyre stacks to be separated by at least 6m from each other. This helps to reduce the size and spread of fires if one results onsite. • Existing licence condition 6 specifies regular cover requirements of waste, reducing the risk of exposed waste being subject to ignition or combustion.
<p>Leachate</p>		<p>Infiltration</p>	<ul style="list-style-type: none"> • Construction of two groundwater monitoring bores (one up-gradient and one down-gradient) to monitor impacts of any leachate generation. • Existing licence condition 4 specifies a minimum separation distance of 2 m between the base of the landfill and the highest groundwater levels. This reduces the generation of leachate and assists in reducing the risk of impacts to groundwater from landfilling activities. • The licence holder is authorised to receive a maximum of 14,000 tonnes of waste per annual period. Condition 21 requires monitoring of inputs and outputs to confirm compliance. This tracking ensures waste limits are not exceeded and helps manage leachate generation by identifying waste types and quantities.

Emission	Sources	Potential pathways	Proposed controls
			The proposed landfill will replace an existing one, with similar infrastructure expected to produce comparable leachate levels. Effective monitoring supports appropriate leachate management and mitigates the risk of groundwater contamination.
Hazardous chemicals including hydrocarbons	Storage of hazardous waste including batteries at waste transfer station	Direct discharge to ground	<ul style="list-style-type: none"> • Hazardous or controlled waste will be removed from the site and disposed of at an appropriately licensed facility. • Waste not meeting the requirements for a Class II Landfill will be stored temporarily for collection and disposal off-site. • The transfer station will include a hardstand for IBC's and skip bins. • Contaminated soil will be disposed of at Fortescue's on-site soil bioremediation facility or removed off-site to a licensed facility for disposal. • Batteries to be stored in a standalone enclosed battery storage container.

4.1.2 Receptors

In accordance with the *Guideline: Risk assessments* (DWER 2020), the Delegated Officer has excluded employees, visitors, and contractors of the licence holders from its assessment. Protection of these parties often involves different exposure risks and prevention strategies and is provided for under other state legislation.

Table 2 below provides a summary of potential environmental receptors that may be impacted because of activities upon or emission and discharges from the prescribed premises (*Guideline: Environmental siting* (DWER 2020)).

Table 2: Sensitive environmental receptors and distance from prescribed activity

Human receptors	Distance from prescribed activity
Yindjibarndi use of exclusive Determined Native Title land (camping, ceremonial)	<p>Within premises boundary.</p> <p>Proposed activities are within YNAC Native Title area (exclusive) and about 580 m from the proposed landfill.</p>
Environmental receptors	Distance from prescribed activity
<i>Rights in Water and Irrigation Act 1914 – Groundwater Areas</i>	<p>The premises is within the Pilbara Groundwater Area.</p> <p>Groundwater flow is regionally from east to west and the water table varies from about 5 to 30 m below ground level.</p> <p>Groundwater quality: Mostly fresh, with total dissolved solids (TDS) ranging between 340 – 1000 mg/L.</p>
<i>Rights in Water and Irrigation Act 1914 – Surface Water Areas</i>	The premises is within the Pilbara Surface Water Area.

<p>Surface water bodies including ephemeral creeks and Kangeenarina Creek (and associated permanent pools)</p> <p>YNAC have previously advised that this creek is used as a source of drinking water for the Yindjibarndi people.</p> <p>Under MS1062 condition 10-1 (3) and (4) FMG is required to:</p> <ul style="list-style-type: none"> maintain water levels in permanent pools in Kangeenarina Creek, which are not authorised to be removed by Schedule 1, consistent with pre-mining surveys; and maintain the health of riparian vegetation associated with permanent pools and semipermanent pools in Kangeenarina Creek that are not authorised to be removed by Schedule 1 consistent with pre-mining surveys. <p>The ministerial statement relates to water level management for the creeklines rather than potential impacts to water quality.</p>	<p>Ephemeral creeks run adjacent to proposed landfill facility (beyond highly disturbed landfill area).</p> <p>Kangeenarina Creek 7 km west (down hydraulic gradient) of the proposed landfill site.</p>
<p>Country Areas Water Supply Act 1947 – Public Drinking Water Source Area (PDWSA)</p> <p>Receptor screened out due to distance.</p>	<p>The Millstream Water Reserve Priority 2 PDWSA is about 14 km southwest (down hydraulic gradient) of the proposed landfill site.</p>
<p>Threatened/Priority flora and native vegetation.</p> <p><i>Note: Potential impacts to vegetation from dust and changes to groundwater quality are managed under Part IV of the EP Act (Ministerial Statement (MS) 1062 - October 2017) and has been screened out of this assessment.</i></p>	<p><i>Gompholobium Karijini</i> (P2) has been recorded on border of proposed landfill area.</p>
<p>Habitat for conservation significant fauna species:</p> <p>The licence holder is required under MS1062 condition 12-1(1) to minimise direct and indirect impacts on conservation significant fauna species and their habitat.</p> <p><i>Note: Receptor managed under Part IV of the EP Act and has been screened out of this assessment.</i></p>	<p>Potential habitat for Pilbara Olive Python Northern Quoll within proposed landfill area (noting area is already disturbed).</p>
<p>Aboriginal Heritage sites identified on AHIS database</p>	<p>Sites within 1 km of proposed activities are listed in Section 3.3.</p>

<p>Subterranean fauna</p> <p>The licence holder is required to maintain the biodiversity and ecological integrity of troglofauna identified through baseline surveys under conditions within MS1062 and the Subterranean Fauna Management Plan.</p> <p><i>Note: Receptor managed under Part IV of the EP Act and has been screened out of this assessment.</i></p>	<p>No survey data provided.</p>
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4.2 Risk ratings

Risk ratings have been assessed in accordance with the *Guideline: Risk Assessments* (DWER 2020) for those emission sources which are proposed to change and considers potential source-pathway and receptor linkages as identified in Section 4.1. Where linkages are in-complete they have not been considered further in the risk assessment.

Where the licence holder has proposed mitigation measures/controls (as detailed in Section 4.1), these have been considered when determining the final risk rating. Where the Delegated Officer considers the licence holder's proposed controls to be critical to maintaining an acceptable level of risk, these will be incorporated into the licence as regulatory controls.

Additional regulatory controls may be imposed where the licence holder's controls are not deemed sufficient. Where this is the case the need for additional controls will be documented and justified in Table 3.

The amended licence L8464/2010/2 that accompanies this Amendment Report authorises emissions associated with the operation of the proposed Category 64 activities. The conditions in the amended licence have been determined in accordance with *Guidance Statement: Setting Conditions* (DER 2015).

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

Risk Event					Risk rating ¹	Licence holder's controls sufficient?	Conditions ² of Licence	Justification for regulatory controls
Source/Activities	Potential emission	Potential pathways and impact	Receptors	Licence holder controls	C = consequence L = likelihood			
Construction								
Landfill earthworks	Dust	Air / windborne pathway causing impacts to health and amenity	Vegetation and fauna within the vicinity of the landfill facility YNAC Native Title area accessible to Traditional Owners for camping, use of water, perform ceremony etc. 580 m to the west of proposed landfill boundary.	Refer to Section 4.1	C = Moderate L = Unlikely Medium Risk	Y	Condition 7 Management of waste Condition 16 Emissions to land	N/A
	Noise			Refer to Section 4.1	C = Slight L = Unlikely Low Risk	Y	Condition 30 Complaints management and recordkeeping	N/A
Operation								
Operation of unlined landfill facility, including: <ul style="list-style-type: none"> • Landfill pit. • Vehicle movements. • Loading activities Waste Transfer Depot including storage of hydrocarbons, solid waste, batteries	Leachate	Seepage through base and embankments to soil and groundwater causing vegetation poor health/death and groundwater contamination	Soils Groundwater Adjacent native vegetation	Refer to Section 4.1	C = Minor L = Unlikely Medium Risk	Y	Condition 3 Infrastructure requirements for landfill and groundwater monitoring bores Condition 7 Management of waste disposal (groundwater separation distance) Condition 24 Monitoring of inputs and outputs Condition 26 Monitoring of ambient groundwater quality	Condition in licence L8464 specifies a minimum separation distance of 2 m from base of the landfill to groundwater. Quarterly monitoring for two new wells near the proposed landfill is also included in L8464/2010/2.
	Contaminated / sediment laden stormwater	Runoff / infiltration causing impacts to vegetation health	Adjacent native vegetation	Refer to Section 4.1	C = Slight L = Unlikely Low Risk	Y	Condition 3 Containment and waste treatment infrastructure	An existing perimeter bund surrounds the mine pit and will be retained to divert stormwater. The landfill will incorporate a perimeter bund to exclude stormwater run-off from outside the pit from entering the pit and a stormwater detention basin within the pit to store stormwater flows generated within the landfill cells.
	Dust	Air / windborne pathway causing impacts to health and amenity	YNAC Native Title area accessible to Traditional Owners for camping, use of water, perform ceremony etc. 580 m to the west of proposed landfill boundary.	Refer to Section 4.1	C = Minor L = Unlikely Medium Risk	Y	Condition 7 Management of waste Condition 16 Emissions to land	Conditions exist within L8464 to allow the use of not more than 360 kL/day of Reverse Osmosis (RO) Reject Stream water for dust suppression.
	Odour	Air / windborne pathway causing	YNAC Native Title area accessible to Traditional Owners	Refer to Section 4.1	C = Minor	Y	Condition 3 Containment and waste	Conditions in the licence specify that landfill waste be covered and that no waste is left

Risk Event					Risk rating ¹	Licence holder's controls sufficient?	Conditions ² of Licence	Justification for regulatory controls
Source/Activities	Potential emission	Potential pathways and impact	Receptors	Licence holder controls	C = consequence L = likelihood			
		impacts to amenity	for camping, use of water, perform ceremony etc. 580 m to the west of proposed landfill boundary.		L = Unlikely Medium Risk		treatment infrastructure Condition 9 Cover requirements	exposed. Stormwater will be diverted to minimise erosion of water cover and waste cover will be graded so that water does not pool in deposited waste.
	Noise	Air / windborne pathway causing impacts to amenity	Fauna within the vicinity of the landfill facility. YNAC Native Title area accessible to Traditional Owners for camping, use of water, perform ceremony etc. 580 m to the west of proposed landfill boundary.	Refer to Section 4.1	C = Slight L = Unlikely Low Risk	Y	N/A	N/A
	Fire / smoke	Air emissions associated with potential combustion of tyres may include VOCs, PAHs, dioxins, ash, NOx, and CO2 Overland migration of fire causing severe risk to human health, flora and fauna	Vegetation and fauna within the vicinity of the landfill facility YNAC Native Title area accessible to Traditional Owners for camping, use of water, perform ceremony etc. 580 m to the west of proposed landfill boundary.	Refer to Section 4.1	C = Severe L = Rare High Risk	Y	Condition 7 Management of waste Condition 9 Cover requirements	The licence holder does not propose any burning of waste. Waste will be managed and covered when buried to reduce the risk of fire. Firefighting equipment will be placed in proximity of the landfill.
	Windblown waste	Air / windborne pathway causing impacts to amenity and detriment to vegetation and fauna habitats	Adjacent native vegetation and fauna species YNAC Native Title area accessible to Traditional Owners for camping, use of water, perform ceremony etc. 580 m to the west of proposed landfill boundary.	Refer to Section 4.1	C = Slight L = Possible Low Risk	Y	Condition 9 Cover requirements	The licence holder has proposed controls for landfill management for the new landfill pit that reflect the current conditions of licence L8464/2010/2. Inert waste type 2 and putrescible waste will be covered proactively to ensure no waste is left exposed, or up to 1,000 mm (depending on waste type).

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

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

5. Consultation

A summary of the consultation undertaken by the department is provided in Appendix 1 and a summary of the licence holder's comments on the risk assessment and draft conditions is provided in Appendix 2. The licence holder

6. Conclusion

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

6.1 Summary of amendments

Table 4 provides a summary of the proposed amendments and will act as record of implemented changes. All proposed changes have been incorporated into the amended licence as part of the amendment process.

Table 4: Summary of licence amendments

Condition	Condition summary	Revised licence condition
Premises history	N/A	Amended to the construction and operation of the replacement Solomon landfill
1	Table 1: production or design capacity limits	Production/design capacities for categories 54, 57 and 64 have been added to this table.
New condition 3	Construction/installation of infrastructure	New condition 3 and new Table 2 added to authorise the construction of the new Solomon Landfill, waste transfer station and the two new groundwater monitoring bores. Note all condition and table numbers have been renumbered following this insertion.
New condition 4	Environmental compliance reporting	New conditions 4 and 5 have been added to the licence requiring the provision of an Environmental Compliance Report to confirm that the new landfill, waste transfer station and new groundwater monitoring bores have been constructed in accordance with the conditions of the licence.
New condition 5		
6	Table 3: Containment infrastructure requirements	Removed 'TSF1 Gravity Decant Water Storage Pond' from the licence. Amended to include Category 64 Solomon in-pit landfill material and requirements.

Condition	Condition summary	Revised licence condition
7	Table 4: Management of waste	<p>Amended to clearly state what material can be added to landfill and that no waste is to be burned within the Solomon Landfill.</p> <p>Amended to clearly state that 'clean fill' waste be disposed of by landfilling.</p> <p>Total tonnage of authorised waste to be disposed of has been removed from this table. The requirement is now included in Table 1.</p> <p>Minor additional amendments added to this table to provide clarity to disposal locations and waste types.</p> <p>Removed 'Decant Pond' from the licence.</p>
16	Table 10: Emissions to land	L12 emissions point reference updated from referencing Figure 14 to Figure 15.
26	Table 17: Monitoring of ambient groundwater quality	Amended to include Groundwater Bore #1 and #2 to 'Landfill monitoring bore' reference and location.
Definitions	N/A	Insertion of a definition of Environmental Compliance Report
Schedule 1: Maps	Figure(s)	<p>Updated Figure 1 with new landfill location.</p> <p>Updated Figure 3 to remove reference of the TSF1 Gravity Decant Water Storage Pond.</p> <p>Updated Figure 4 to include Kings Waste Dump and Solomon Landfill, and to clarify these disposal points are intended for clean fill, Inert type 1 and 2, and putrescible waste types.</p> <p>Added Figure 6 of new Solomon in-pit landfill.</p> <p>Updated Figure 11 to clearly depict the location of the L4 (Stockyard TK901 Storage Tank)</p>
Cross references	N/A	Amended instances of broken cross-references (Condition 0) in licence.

References

1. Aurora Environmental 2023, *Solomon Mine Proposed Landfill Operational Management Plan*. Perth, Western Australia: Unpublished report prepared for Fortescue Metals Group Ltd.
2. Department of Environment Regulation (DER) 2015, *Guidance Statement: Setting Conditions*, Perth, Western Australia.
3. Department of Water and Environmental Regulation (DWER) 2020, *Guideline: Environmental Siting*, Perth, Western Australia.
4. DWER 2020, *Guideline: Risk Assessments*, Perth, Western Australia.
5. Fortescue 2023, Licence Amendment Application – Supporting Document for Licence Amendment L8464/2010/2, East Perth 6004

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Appendix 1: Summary of consultation undertaken by the department

Stakeholder	Summary of stakeholder comments	Department's response
<p>Department of Energy, Mines, Industry Regulation and Safety (DEMIRS) advised of proposal 9 February 2024</p>	<p>Comments received 28 February 2024. DEMIRS confirmed it has received and is currently assessing a Mining Proposal (MP) Reg ID 123182, dated 16 February 2024 (Rev 2).</p> <p>The MP Rev 2 does mention a new landfill within the Firetail pit and this licence amendment process.</p> <p>DEMIRS provided some comment on the OPF expansion, but the proposed changes to Kings Valley OPF are no longer being assessed under this licence amendment.</p> <p>Updated comment from DEMIRS received 15 May 2024, that the assessment of MP Rev 2 is still current, with the status, 'On hold - Requested further information from proponent'. DEMIRS clarified this is due to a request for further information regarding mine closure aspects of the proposal. Once a response from the proponent is received by DEMIRS, the assessment for MP Rev 2 will continue.</p>	<p>DWER noted the comments.</p>
<p>Department of Planning, Lands and Heritage (DPLH) advised of proposal 9 February 2024</p>	<p>Comments received 8 March 2024 and are summarised in section 3.3.</p>	<p>DWER restates that the licence holder is required to meet its obligations under the <i>Aboriginal Heritage Act 1972</i> (AH Act) which is a separate regulatory process to that of applying for a licence amendment under Part V of the EP Act. The granting of the licence amendment does not remove the licence holder's obligations to comply with the AH Act.</p>
<p>Yindjibarndi Ngurra Aboriginal Corporation (YNAC) advised of proposal 9 February 2024</p>	<p>Comments received 4 April 2024.</p> <p>YNAC were notified on 2 April 2024 by the Department of Water and Environmental Regulation that the proponent has withdrawn the Kings Valley Ore Processing Facility upgrades (and associated throughput increase), as the works have been postponed.</p> <p>YNAC would like to raise broad matters relating to operation of the Solomon Mine, to highlight concerns about potential material or serious environmental harm, as defined in s3(A) of the WA <i>Environmental Protection Act 1986</i> (EP Act 1986). The EP Act 1986 makes note in Part 1 – Preliminary, 3 Terms Used:</p> <p>(1B) "A reference in this Act to the effect of a Proposal on the environment, includes a reference to the cumulative effect of impacts of the proposal on the environment."</p> <p>(2) "In the case of humans, the reference to social surroundings in the definition of environment in subsection (1) is a reference to aesthetic, cultural, economic and other social surroundings to the extent to which they directly affect or are affected by physical or biological surroundings."</p> <p>It is in this context, that YNAC have considered not just the Application for Licence Amendment but have reviewed supporting and ancillary documentation from the Proponent, and the broader range of Native Title, Heritage and Environmental approvals applicable to the Solomon Mine, and the impacts of the mine operations.</p> <p>The Yindjibarndi People are the Registered Native Title Party contained within the Register of Native Title Claims for this area. The Yindjibarndi Nation considers that the Solomon Iron Ore Project was commenced and implemented without the free, prior, and informed consent of Yindjibarndi People, and therefore, object in principle, to the project continuing without our consent.</p> <p>Since the Solomon Iron Ore Project commenced without meaningful consultation or consent of Yindjibarndi People, the project has had significant and substantial impacts on Yindjibarndi cultural heritage. In addition to the destruction of numerous sites of cultural significance, the project has significantly impacted cultural traditions and recognised Native Title rights of Yindjibarndi people; not only inside the approved footprint of the project, but in Yindjibarndi lands and waters adjacent to and surrounding the site.</p> <p>These impacts have included:</p> <ul style="list-style-type: none"> excluding Yindjibarndi people from access to significant parts of country, including areas over which we hold recognised exclusive Native Title rights. 	<p>DWER is not able to assess matters related to heritage or native title under Part V EP Act assessments, as these matters are assessed under other legislative frameworks.</p> <p>Under Part V of the EP Act, the department has undertaken an assessment of the licence amendment application consistent with its published Regulatory Framework, <i>Guideline: Risk Assessments (2020)</i> which provides for consideration of the risk of impacts from emissions and discharges to the environment and human health from prescribed activities under Schedule 1 of the <i>Environmental Protection Regulations</i></p> <p>Although not within the scope of this Part V EP Act assessment, information received regarding this application, including information received from DPLH, indicates that no sites of cultural heritage will be physically impacted by this proposal.</p> <p>Access to the mine is typically managed through liaison with the licence holder and captured in land use agreements. The Department acknowledges YNAC's concerns around land access however this does not fall within the assessment scope of this application.</p> <p>Dust emissions from Category 64 landfill activities have been assessed and discussed in Sections 4.1 and 4.2. The Delegated Officer considers that dust emissions from the construction and operation of the landfill will only pose a medium risk and will not increase beyond current emissions associated by these activities authorised under the existing licence. Conditions related to dust are included in the existing licence and at this stage, no additional controls related to dust emissions are deemed necessary.</p> <p>Noise emissions were considered as part of this licence amendment in Sections 4.1 and 4.2. The Delegated Officer notes that landfill activities are to be undertaken in a mine pit, which is surrounded</p>

Stakeholder	Summary of stakeholder comments	Department's response
	<ul style="list-style-type: none"> emissions of dust which Yindjibarndi people attest have affected the quality of surface waters from which Yindjibarndi take water in accordance with our traditional rights; and noise and vibration emissions from mining operations which have impacted on the capacity of Yindjibarndi people to utilise traditional camping grounds such as those at Kangeenarina Creek. 	<p>by existing windrows and various bunds that assists in reducing noise emissions. Existing site infrastructure and distance to sensitive receptors has been assessed as suitable to manage noise emissions from Category 64 activities.</p> <p>Dust and noise impacts from the wider mining activities are not within the scope of this proposal.</p> <p>Vibration emissions were not considered as part of this assessment as vibrations are not an emission associated with the construction and operation of the landfill.</p>
	<p>These impacts have been the subject of ongoing discussions between the Yindjibarndi Nation and the Department of Water and Environmental Regulation (DWER).</p> <p>In December 2023 (letter dated 31 December 2023, addressed to the Hon. Reece Whitby MLA) YNAC submitted a request to the Minister for Environment for a review of the implementation conditions of the Solomon Iron Ore Project (MS1062) as the current conditions fail to adequately control impacts to the environment and social sensitive receptors near the mine operations, noting that in MS 1062:</p> <ul style="list-style-type: none"> There are no conditions for the prevention of impacts on Aboriginal Cultural Heritage (as social surroundings). The project has officially destroyed or damaged Yindjibarndi heritage 249 sites, and likely many more sites without approval, as part of the project's 915 square kilometre approved development footprint. These impacts have occurred without the consent of YNAC, which holds exclusive native title rights over the area. The recent changes in Aboriginal Cultural Heritage legislation mean that the current Aboriginal Cultural Heritage laws are still inadequate for the proper protection of Aboriginal Cultural Heritage; There are no conditions for the prevention of impacts on traditional Yindjibarndi land uses and the exercise of recognised Yindjibarndi Native Title rights, including the right to enter land, camp, collect food and water, carry out ceremonial activity and care for Country. Since implementation began the project has excluded Yindjibarndi people from accessing areas of country and has impacted on the exercise of Yindjibarndi traditional lands uses through the generation of excessive dust, noise, light, vibration and impacts on water courses. 	<p>The department acknowledges Yindjibarndi's role, significant cultural knowledge and connection to Country and living waters such as rivers, springs, soaks, jilas, and saltwater. DWER is committed to listening to, learning from, and building stronger partnerships with Traditional Owners in the management of our precious environment and water resources.</p> <p>Our Reconciliation Action Plan is a journey and a collaborative partnership with Reconciliation Australia. It provides a framework for us to continuously develop and strengthen our reconciliation commitments and ensure we are genuinely inclusive, supporting and advocating for generational change. Other strategies and government priority reforms and targets that drive our work include our Aboriginal Empowerment Strategy, cultural heritage, Native Title settlements and our long-term strategic workforce and diversity planning.</p> <p>Please note that a review of MS 1062 or amendment of Ministerial Conditions is not in the scope of this assessment.</p> <p>Access to the mine is typically managed through liaison with the licence holder and captured in land use agreements and this does not fall within the assessment scope of this application.</p> <p>Impacts to the environment and human health that may occur from the construction and operation of the landfill activity have been discussed in Sections 4.1 and 4.2 and controlled through conditions in the licence.</p>
	<p>EPBC 2014/7275 and MS1062 Annual Compliance Report (FMG, 2023) – Flora and Vegetation Condition 1062:M8.1 Flora and Vegetation – Conservation significant flora species and vegetation, requires the Proponent to:</p> <ul style="list-style-type: none"> Maintain the health of populations of <i>Gompholobium karjini</i> within the Mine Development Envelope, and the Lower Fortescue Borefield development envelope that are not authorised to be cleared; Minimise impacts to regionally and locally significant flora species and ecological communities within the Mine Development Envelope and the Lower Fortescue Borefield development envelope not authorised to be cleared under Schedule 1, including but not limited to the Brockman Iron Cracking Clay (PEC) Minimise the impacts to <i>Triodia basitricha</i> to maintain the species conservation status; and Maintain the health of the Threatened Ecological Community (TEC) Themeda Grassland within the Mine Development Envelope; <p>The Proponent has reported that:</p> <p><i>(2) Regionally and locally significant flora species: there is no monitoring results to suggest that Fortescue's activities have resulted in significant impacts to any of the Gompholobium karjini monitoring sites. While a statistically significant difference in plant health was recorded in 2023, most stressed plants were observed to be only 'slightly stressed' with no obvious signs of anthropogenic disturbance. The difference is considered unlikely to be a direct impact by Fortescue's activities, and rather representative of the plant's natural lifecycle.</i></p> <p>YNAC note that this species is regionally and locally significant, and poorly described in scientific research, and was found extensively across the site. No studies have been conducted on the growth habit, lifecycle and distribution of this species, or its response to environmental impacts like dust, fire and water scarcity. Based on the absence of scientific information, and applying the Precautionary Principle, it should be assumed the operations are likely having a direct impact on the species. Further</p>	<p>No clearing is proposed under this licence amendment application and the licence holder proposes that Category 64 landfill activities are to be undertaken in already disturbed areas of the prescribed premises.</p> <p>Environmental receptors have been identified by DWER (see Table 2) and a risk-based approach to assessment of potential source, and pathway of emissions from the proposed Category 64 landfill activities has been undertaken.</p> <p>Dust emissions from Category 64 landfill activities impacting flora/native vegetation have been assessed and conditions related to dust are included in the licence. Potential impacts to vegetation from dust and changes to groundwater quality are managed under Part IV of the EP Act (Ministerial Statement (MS) 1062 - October 2017. Part V EP Act approvals are not intended to duplicate existing requirements under Part IV approvals.</p> <p>While the licence holder does not propose any burning of waste, fire and smoke emissions have been identified as potential emissions from Category 64 activities. The licence holder has proposed controls related to these potential emissions and conditions are already included in the licence to manage this risk to acceptable levels.</p>

Stakeholder	Summary of stakeholder comments	Department's response
	<p>studies on the species, more frequent monitoring and additional management and protection protocols should be implemented to prevent the continued decline of the species.</p>	
	<p>YNAC are concerned that the current management strategies and approved plans do not adequately mitigate the impacts to the groundwater and hydrology in the area. The trigger levels are in place to protect the environment and the ecosystem, ongoing non-compliance should not be dismissed. Furthermore, the Weelumurra well was noted by the Proponent as being 'near to breach,' just before the end of the reporting period. We referred to Figure 21 of the report FMG 2023 Compliance Report (FMG, 2023), and the graph shows there was a non-compliance in 2023, corresponding with a significant increase in salinity.</p> <p>YNAC are concerned that the monitoring non-compliances indicated in Table 10, Page 66 of the 2023 Compliance Report (FMG, 2023) along with the frequency of monitoring and quality of reporting may not adequately capture the behaviour of the water table at the site and monitoring events are being missed creating incomplete data sets which is, in some cases, being extrapolated by the Proponent.</p> <p>We were informed that DWER intends to carry out a compliance audit of the Solomon Project, and DWER has foreshadowed the possibility of an effectiveness audit. We note the original plan for the compliance audit was postponed due to staff illness and look forward to the reinstatement of the planned audit, which we understand is scheduled for mid-March 2024.</p>	<p>The department considered leachate as a potential emission as part of this licence amendment. Management of waste disposal (groundwater separation distance) and monitoring of inputs and outputs are existing conditions in the licence which assist in managing leachate generation. The licence also includes requirements for ongoing groundwater monitoring which allows DWER to review the data to identify any trends or changes in the contaminants being detected.</p> <p>If a rising trend is identified for a contaminant concentration in groundwater, the licence holder must investigate the cause and commence appropriate corrective action. Failing that the department has powers under the EP Act to initiate amendments to address any change to the premises' risk profile identified in provided monitoring data, as well as require necessary actions are taken to rectify the root cause and prevent harm to the environment.</p> <p>A compliance inspection was undertaken in March 2024 by the department's Assurance team. If any non-compliances were identified, these will be considered in accordance with DWER's Compliance and Enforcement Policy (May 2021).</p>
	<p>The Proponent has proposed the construction and operation of a new Solomon landfill, located within the existing Firetail Pit. They propose to operate the site using the area fill methodology within the former mine pit and include the construction of a new waste transfer station/depot and landfill service depot. They state <i>"In keeping with the construction of the existing Solomon Landfill will be... unlined due to low rainfall and high evaporation rates, geology being characterised by low permeability soils, and depth to groundwater being in excess of 50m."</i></p> <p>Evidence of hydrogeological or geotechnical bore logs that support this assertion has not been included in the licence amendment application Supporting Document (FMG, 2023).</p> <p>We note that the Solomon Project Mine Closure Plan [SO-PL-EN-0002] (MCP, [FMG, 2012]) does not specify management of any landfill facilities. Section 9.6 of the MCP states <i>"The risk of ongoing contamination resulting from incomplete rehabilitation has been minimised by the fact there are currently no landfill waste disposal sites proposed within the Solomon Project and waste will be transported off site shortly after it has been generated."</i></p> <p>We note that the existing licence and the proposed new landfill contradict the contamination risk management in the MCP (FMG, 2012). The MCP does not currently specify any requirements for decommissioning or ongoing monitoring and management of active or inactive landfill sites. The potential contamination risk of not just one, but a proposed second landfill facility have significant long-term implications that impinge on our Native Title Rights into the future, long after mine closure.</p>	<p>The Delegated Officer notes that the cited Mine Closure Plan (MCP) is not associated with any conditions specified on the Part V licence and is therefore not within the scope of this assessment.</p> <p>DEMIRS was consulted as part of this assessment process and comments received have confirmed that DEMIRS has received and is currently assessing a Mining Proposal (MP) Reg ID 123182, dated 16 February 2024 (Rev 2). The MP Rev 2 does mention a new landfill within the Firetail pit and this licence amendment process.</p> <p>DWER has previously obtained the Solomon Mine Landfill Operational Management Plan which provides some additional information on hydrogeology in the Solomon landfill area. Condition in licence L8464 specifies a minimum separation distance of 2 m from base of the landfill to groundwater and quarterly monitoring for two new bores near the proposed landfill is also included in L8464/2010/2.</p> <p>Although mine closure is not associated with this assessment, if there are gaps in the management of mine (and landfill) closure, these gaps can be addressed through the <i>Mining Act 1978</i>, EP Act, such as the issuance of Closure Notices, or other legislation such as the <i>Contaminated Sites Act 2003</i>.</p>
	<p>Section 1.4 of the Supporting Document addresses stakeholder consultation, and states that stakeholders <i>"were initially engaged during the planning phases of the Solomon Project. Firstly, during the assessment of MS 862 (approved April 2011) and then subsequently during MS 1062 (approved October 2017), which superseded the earlier proposal. The Ministerial Statements were subject to two separate Public Environmental Reviews under the EP Act, where stakeholders were identified and invited to comment on the Proposal. This consultation included government agencies, Native Title parties and community members."</i></p> <p>Section 1.4 goes on to state that <i>"Fortescue conducts heritage surveys with the Yindjibarndi People, which allows Fortescue to facilitate exploration and mining activities within the Native Title Claim area"</i>. Since 2010, FMG and the Yindjibarndi Aboriginal Corporation (YAC) and Yindjibarndi Ngurra Aboriginal Corporation's (YNAC) have been in dispute and have not been able to come to an agreement on the use of the land and waters. The YAC and YNAC are profoundly concerned that FMG continue to mine, operate and propose to expand within the Yindjibarndi country, including 'exclusive' native title determined areas, while disregarding the Yindjibarndi people's rights and interests.</p> <p>FMG have never settled an Indigenous Land Use Agreement (ILUA) with the Yindjibarndi people, a YNAC/FMG Heritage Agreement, a YNAC/FMG Cultural Heritage Management Plan (CHMP), a YNAC/FMG Social Surrounds Policy, and/or a YNAC/FMG Environmental Impact Plan. These</p>	<p>The licence holder is required to meet its obligations under the <i>Aboriginal Heritage Act 1972</i> (AH Act). This is a separate regulatory process to that of applying for a licence amendment under Part V of the EP Act. The granting of the licence amendment does not remove the obligation which FMG has under the Aboriginal Heritage laws.</p> <p>At this time, DWER does not have any legislative authority to require FMG to consult directly with YA and YNAC. The Delegated Officer recommends and encourages that FMG engage with any and all relevant stakeholders for Part V approvals at the Solomon Mine.</p> <p>DWER is aware of a matter before the Federal Court between Yindjibarndi, FMG and the State Government around Native Title. These matters are currently outside the scope of this licence amendment assessment.</p>

Stakeholder	Summary of stakeholder comments	Department's response
	<p>agreements and administrative tools are fundamental to managing the impact on Yindjibarndi cultural heritage and the environment. The Yindjibarndi people continue to reserve and advocate their legislated right to manage their traditional country which has been recognised within the Australian Government's native title determination decision titled, Warrie (formerly TJ) (on behalf of the Yindjibarndi People) v State of Western Australia, [2017] FCA 803.</p> <p>FMG's use of these land and waters, which are the subject of this application made by FMG, to which, via the YAC and YNAC, the Yindjibarndi people object, are the basis for a compensation claim currently being conducted in the Federal Court between the parties titled, YINDJIBARNDI NGURRA ABORIGINAL CORPORATION RNTBC (ICN 8721) AND STATE OF WESTERN AUSTRALIA & ORS FCA (2023) WAD37/2022.</p>	
	<p>It is noted that the TSF1 Gravity Decant Water Storage Pond is no longer connected to the TSF as tailings material is being diverted to the Gee-Pit Creek. We note that the requirements for the original storage/overflow arrangement included:</p> <ul style="list-style-type: none"> • the maintenance of a HDPE liner; and • requirement to maintain vertical freeboard of 300 m, and we are concerned that Gee-Pit Creek may not have the necessary containment and contaminant protections in place, resulting in potential spread of contamination on Country during high rainfall events. 	<p>This comment, while noted, is not within the scope of this assessment.</p> <p>Gee-Pit is listed on the licence as a contingency discharge containment infrastructure for TSF decant water and stormwater during high rainfall events.</p> <p>Gee-Pit was assessed 14 June 2022 and the department found that Gee-Pit has a storage capacity of 1.4 million m³ and the water can be reused. The decant water is not expected to contain elevated levels of sediment, as the sediment will have opportunity to settle out while the water is ponding within the TSF. The Solomon mine operates at a water deficit and under most operating circumstances any decant water is stored in the Decant Pond and reused in the ore processing facility (OPF). Only under significant rainfall events will water need to be dissipated off the surface of the TSF to Kangeenarina Creek and/or Gee-Pit. Decant water discharged under these conditions will be similar quality to stormwater.</p> <p>Conditions related to monitoring of emissions to land includes recording discharge volume to Gee-Pit.</p> <p>If monitoring data identified that the risk profile associated with this contingency activity has increased, DWER can undertake a department-initiated amendment to reassess risk and require alternative controls on the licence.</p>

Stakeholder	Summary of stakeholder comments	Department's response
	<p>We note the leachate management system is not confirmed, and monitoring, decommissioning and rehabilitation plans have not been provided in the MCP (FMG 2012), or the Supporting Document (FMG, 2023) for the current or the proposed landfill site.</p>	<p>The department considered leachate as a potential emission as part of this licence amendment. Management of waste disposal (groundwater separation distance) and monitoring of inputs and outputs are existing conditions in the licence to assist in the management of leachate.</p> <p>The licence holder proposes to construct two groundwater monitoring bores (one up-gradient and one down-gradient) in proximity of the landfill, and quarterly monitoring requirements for the two new bores are included in L8464/2010/2. If monitoring data indicates an increase in the risk profile for leachate generation and management, this may be reassessed by the department with modified controls applied to the licence.</p> <p>A request for information was sent to the licence holder to provide details on closure/commissioning of the existing landfill. Response (below) received 24 July 2024.</p> <p>“Fortescue notes that the current Mine Closure Plan (MCP) being referred to by YNAC is a document from 2012. This document has been superseded by the Solomon MCP (SO-PL-EN-0002, Rev 12) submitted on 16 February 2024 and approved on 30 May 2024. This document is the most current MCP and should be referred to in this instance.</p> <p>Section 5.8.9 (Non-mineral waste) of the Solomon MCP states the following information regarding the Closure/Decommissioning of the landfill facility.</p> <p><i>“Disposal of waste materials on site can result in land degradation if not managed appropriately. Leachate from waste materials can generate due to pooling from rainwater within the landfill facility and seep into below groundwater aquifers causing contamination.</i></p> <p><i>Waste disposed and left uncovered could result in windblown rubbish and dust which can affect the visual amenity of the surrounding environment and may indirectly affect native fauna.</i></p> <p><i>Fortescue employs a waste management program throughout operations and closure to minimise the volume of waste materials generated. The waste minimisation approach will consider:</i></p> <ul style="list-style-type: none"> • <i>Procurement of materials, aimed at minimising the generation of waste from the use of these materials;</i> • <i>Re-use and recycling of materials to be undertaken wherever practicable and feasible; and</i> • <i>Handling and treatment of waste prior to re-use and/or disposal to landfill or hazardous waste receptors.</i> <p><i>Management actions are expected to include:</i></p> <ul style="list-style-type: none"> • <i>Designing, operating and closing on-site landfill in accordance with the Environmental Protection (Rural Landfill) Regulations 2002 or other approval issued by the regulator(s). Ensuring storage, handling, collection and/or transport of controlled complies with</i> • <i>Environmental Protection (Controlled Waste) Regulations 2004.</i> • <i>Where practicable, recycling and/or re-using viable materials and make recycling facilities readily available. Providing designated bins for general putrescible waste (fitted with secure lids), including food scraps, within all office, workshop and camp areas.</i> • <i>Appropriate signage to direct segregation of waste into bins/receptacles. Ensuring employee and contractor inductions include the waste management hierarchy.</i> <p><i>Landfill and inert waste facilities will be decommissioned and rehabilitated in accordance with the relevant EP Act instruments and requirements during operations and via the closure monitoring network. Monitoring of closed facilities will be completed through the closure monitoring framework”.</i></p> <p>Therefore, Fortescue has noted YNACs concerns and considers that the Closure/Decommissioning of the existing landfill is sufficiently addressed in the Solomon MCP.</p>
	<p>Section 6.1 Sensitive Land Uses Supporting Document (FMG, 2023) states that there are no known sensitive land uses within “<i>the immediate area of the prescribed premises boundary (PPB)</i>” and that</p>	<p>The department sought advice on Registered heritage sites from the Department of Planning, Lands and Heritage (DPLH) and comments received are summarised in section 3.3</p>

Stakeholder	Summary of stakeholder comments	Department's response
	<p>the nearest sensitive receptor to the Solomon Mine area is Hamersley Station, located 33 km southwest. This is incorrect.</p> <p>The proposed landfill site intersects multiple Registered heritage sites including ACH-00030014, Yindjibarndi AS02-07 Artefacts/Scatter ACH-00031795, YIN08-24, Artefacts/ Scatter and are located within: 50 m of ACH-00031796, YIN08-25, Artefacts/Scatter, and 100 m of ACH-00030590, YIN09-04, Artefacts/Scatter, and 5 km of Kangeenarina Creek, Open Flats, Open Flat country between Yandanyirra (Fortescue Reiver) and Gambulanha (Hamersley Ranges), Hunting and Food Source</p> <p>As stated previously, the Yindjibarndi People were not consulted during the project proposal, approvals or ongoing operations phases. These sites do not represent all locations of significance physically or ethnographically and some sites have been destroyed because they have not been included in previous Heritage Surveys. Kangeenarina Creek, and other locations are located in and immediately adjacent to the Solomon Mine area. These locations are traditional camping and ceremony grounds for Yindjibarndi people that have been utilised for millennia and continue to be utilised today, consistently with Yindjibarndi's determined Native Title rights.</p>	<p>From the licence amendment application and figures 9a and 9b of the supporting information, DPLH believe the proposed construction and operation of the new Solomon landfill will intersect with Registered Sites ID 31795 (YIN08-24) and ID 30014 (Yindjibarndi AS02-07), however DPLH understand that these sites have already been destroyed under a previous section 18 consent.</p> <p>DPLH state that if any of the proposed future works do reveal any previously unknown Aboriginal heritage, the licence holder will be required to apply for approvals under the <i>Aboriginal Heritage Act 1972</i> (AHA).</p> <p>This risk assessment has considered Kangeenarina Creek and other areas used by the Yindjibarndi people outside the premises boundary as sensitive receptors.</p> <p>The licence holder is required to meet its obligations under Aboriginal Heritage laws and the granting of this licence amendment does not remove FMG's obligations under it.</p>
	<p>The licence amendment application currently states that there are <i>"no environmentally sensitive receptors or localities within or adjacent to the prescribed premises boundary and the proposed activities are considered controlled, low risk and remote regarding the proximity to sensitive receptors."</i></p> <p>For reasons provided above, this statement is disingenuous, the proposed landfill site is located on and immediately adjacent to heritage sites and is located within a Native Title Determination footprint for the Yindjibarndi People. The Native Title Determination is not included in Table 19. A number of sites around the Solomon mine are ancient ceremonial and camping sites that have and are currently continually utilised by the Yindjibarndi People, as per their Native Title Rights. During the planning, approvals and operations of the Solomon mine, there has been no assessment of the impact of noise, dust, and visual impact on the Native Title Rights of the Yindjibarndi People.</p> <p>As can be seen in an isometric perspective of the site, the mine site is very visible from the surrounding Country, impacting significantly on the view, function and access to significant sites around the mine, particularly to the east and north. The Mining Lease only suppresses Native Title rights, it does not remove them, so all lands outside the lease include the rights determined in the 2017 Federal Court decision. It is also important to again note that the Registered Native Title Party have not been consulted on the MCP (FMG 2012), and no assessment has been conducted to address impacts to Native Title land use now or at mine closure. The proposed end-of-life landform is inconsistent with the surrounding landform and will visually impact the use and amenity of the landscape.</p>	<p>DWER does not solely rely on information on sensitive receptors provided by the applicant. Information is obtained via the department's Geocortex mapping data and from other agencies such as DPLH. Environmental receptors have been identified by DWER (see Table 2) and a risk-based approach to assessment of potential source, and pathway of emissions from the proposed Category 64 landfill activities has been undertaken.</p> <p>No additional assessment of mine site operations has been undertaken as part of the licence amendment application as these activities are not within scope of this landfill assessment.</p> <p>The licence holder provided additional information on nearby environmentally sensitive receptors to support the risk assessment of potential impacts from landfill operations. FMG consider that the proposed activities on the Yindjibarndi people are considered low risk and controlled due to their locations being within approved disturbance areas not limited to the Solomon Iron Ore Project – Sustaining Production approved under the EP Act Part IV and the Solomon Consolidated Mining Proposal approved under the <i>Mining Act 1978</i>.</p> <p>The licence holder further stated that <i>"the Solomon Mine remains accessible to the Yindjibarndi people for the purposes of hunting, camping, performing ceremony and water use within the premises boundary and in accordance with the Mining Act 1978."</i></p> <p>Land access issues and the MCP are outside the scope of this assessment.</p>
	<p>In addition to this, Figure 7 in the Supporting Information Document (FMG 2023) shows that there are a significant number of occurrences of <i>Gompholobium karjini</i> and Pilbara Leaf-nosed bat roosting and habitat sites in close proximity to the proposed landfill site. Under section 51B of the Environmental Protection (Environmentally Sensitive Areas) Notice 2005, ESAs are declared by the Minister in <i>"area covered by vegetation within 50 metres of rare flora, to the extent to which the vegetation is continuous with the vegetation in which rare flora is located."</i> These includes areas on and around the mapped locations of <i>G. karjini</i>, and habitats associated with the Pilbara Leaf-nosed bat.</p> <p>The existing licence and Supporting Document provided do not include a detailed assessment of the impact of the existing or proposed landfill and landfill operations on all known Sensitive Environmental Receptors in proximity to the site. The risk of noise, dust, blown waste and potential contamination do not appear to have been examined and no additional management strategies have been provided. In a letter to Michelle Andrews, dated 23 November 2023, we provided photographic evidence of dust plumes from the Solomon site, these plumes impact surround heritage sites, amenity and condition, vegetation, air quality and water quality surrounding the Solomon Mine, and negatively impact our Native Title Rights.</p> <p>The scientific literature and the Department of Water and Environment now have a significant amount of research and documented impacts of dust on heritage sites, particularly where rock-art is present (e.g. the Burrup Peninsula). These same considerations should be taken into account when considering the impacts of Yindjibarndi use of water, hunting, camping and ceremonial lands adjacent to the mine. We are concerned about the existing and additional noise, light, dust, visual impact, contamination, and waste impacts, are not adequately managing pollution and impacts from the mine, and do not feel they</p>	<p>Under Part V of the Act, the department has undertaken an assessment of the licence amendment application consistent with its published Regulatory Framework, <i>Guideline: Risk Assessments (2020)</i> which provides for consideration of the risk of impacts from emissions and discharges to the environment and human health from prescribed activities under Schedule 1 of the <i>Environmental Protection Regulations</i>.</p> <p>Potential dust, noise, fire, leachate, smoke and windblown waste emissions from the proposed construction works and operation of the proposed new landfill have been considered in the assessment of potential impacts to human health and the environment, with conditions included in the licence to manage impacts to acceptable levels.</p> <p>Mining activities at Solomon Mine are predominantly regulated by DEMIRS, with DWER regulating the ore processing and tailings associated with those activities. Ore processing and tailings are not within the scope of this assessment.</p> <p>It is recommended that any concerns around breaches of ministerial statements or the Part V EP Act licence are reported directly to DWER via pollution.watch@dwer.wa.gov.au.</p> <p>Previous concerns around dust, noise and vibration issues have been referred to the department's Assurance team (compliance and enforcement). If any non-compliances are identified, these will be considered in accordance with DWER's Compliance and Enforcement Policy (May 2021).</p> <p>Part V approvals (excluding amendments from Minister determined appeals) are subject to appeal rights.</p>

Stakeholder	Summary of stakeholder comments	Department's response
	<p>have been adequately risk assessed within publicly available Proponent documentation and Department Assessment Reports.</p> <p>In accordance with our concerns above, we feel the Supporting Documentation (FMG, 2023) has not identified all Sensitive Land Uses or Sensitive Environmental Receptors, and the risk assessment of the landfill does not consider all necessary factors.</p> <p>As stated in the letter to Michelle Andrews dated 23 November 2023, further, spatial analysis undertaken by the federal government indicates that implementation of the Solomon Hub has caused appreciable degradation in the environment downstream of the development envelope (DCCEEW, 2022, Figure 1). The significant loss of forest cover along Kangeenarina Creek in particular (a highly important ACH site) appears to be a direct result of the proponent's operations. It is unclear whether this represents a breach of compliance with the implementation conditions, or whether this significant impact was considered as part of the 2010/2011 and 2014-2016 environmental reviews, or subsequent section 45C amendments. 2</p> <p>However, we do note that condition 10-1 of MS1062 requires the proponent to meet objectives including to maintain the health of riparian vegetation associated with permanent and semi-permanent pools in Kangeenarina Creek. We are therefore concerned that the proponent may be in breach of condition 10-1 or may otherwise be in breach of s49, 50A or 50B of the <i>Environmental Protection Act 1986</i> (WA) (causing pollution or environmental harm).</p>	<p>DWER undertakes its own identification of sensitive receptors likely to be impacted from a proposal. Kangeenarina Creek was identified as a receptor but as it flows 7 km west of the proposed landfill it is unlikely to be impacted by potential emissions from Category 64 activities.</p> <p>Groundwater monitoring has been specified in the licence as a key control to mitigate potential impacts near and down-hydraulic gradient to proposed activity.</p> <p>If monitoring of groundwater indicates an increase in contaminants that is causing harm to the environment, DWER has authorisations under the EP Act to take further action as required to reduce those impacts.</p> <p>Requirements of any applicable ministerial statements are not within the scope of this licence amendment.</p> <p>If any non-compliances with the licence conditions or general provisions of the EP Act are identified, these will be considered in accordance with DWER's Compliance and Enforcement Policy (May 2021).</p>
	<p>In addition to this, and of particular concern is the licensed 2,500 tyres (and additional end-of-life conveyor belts) per annum being landfilled. The ecotoxicological effects of tyres are well documented in scientific literature (Wik & Dave, 2009) including aluminum and manganese elevated above all relevant water quality standards (GHD, 2006).</p> <p>Tyres and rubber do not compact, they can flex back to the surface after a burial. Stored in large quantities they present a fire hazard and seep toxins into the soil (SA Environmental Protection Authority, 2010). The 2006 Review of Management of Used Tyres at Landfill Sites (SSS, 2006) commissioned by the WA Department of Environment and Conservation on behalf of the Waste Management Board of WA, highlighted that 'a reassessment of how used tyres are disposed at landfill is required,' with the aim to manage used tyres in a way that, potentially, will provide for maximum recovery and reuse in the future. This future potential landuse liability, has not been negotiated with the Registered Native Title Party, and there is no mention of the management of these areas in the MCP (FMG, 2012), the existing licence or supporting documentation for the proposed licence amendment.</p> <p>It is noted that the Solomon Project Mine Closure Plan [SO-PL-EN-0002] (MCP) does not specify management of any landfill facilities across the site. Section 9.6 of the MCP states "<i>The risk of ongoing contamination resulting from incomplete rehabilitation has been minimised by the fact there are currently no landfill waste disposal sites proposed within the Solomon Project and waste will be transported off site shortly after it has been generated.</i>" The granting of this license in the first place has immediately contradicted the contamination risk management strategy applied by the Proponent. The creation of multiple landfill sites across the Solomon Project area increases the risk of contamination that impacts both our Native Title Rights, existing heritage sites and areas of heritage value, future land use at the end of the lease and ecosystem health now and into the future.</p> <p>It is unclear how the previous licensed landfill site is being decommissioned and the risk of contamination eliminated. The existing MCP, publicly available Management Documentation and Department Assessment Reports do not account for flex-back, landfill gas, sinking, or monitoring of contamination in the long term. We are concerned that the long-term impact of these sites will negatively affect our Native Title Rights and limit future land use options on this and surrounding areas.</p>	<p>The disposal of tyres and end-of-life conveyor belts at the premises is an existing authorised activity under prescribed premises Category 64, following historical assessment of the risks associated with this activity. The licence holder has not requested any change to total number of tyres being stored or disposed of on site.</p> <p>Requirements for landfilling tyres are set out in Part 6 of the <i>Environmental Protection Regulations 1987</i>, and additional requirements for the acceptance and landfilling of controlled waste (including asbestos and tyres) are set out in the <i>Environmental Protection (Controlled Waste) Regulations 2004</i>.</p> <p>Fire risks have been considered in this risk assessment and detailed in Section 4.2. Conditions are on the licence to ensure the risk level associated with landfill fires is managed to acceptable levels.</p> <p>The Delegated Officer notes that the cited Mine Closure Plan is not associated with any conditions specified on the Part V licence and is therefore not within the scope of this assessment.</p> <p>A request for information was sent to the licence holder to provide details on closure/commissioning of the existing landfill. Response (below) received 24 July 2024.</p> <p>Fortescue notes that the current Mine Closure Plan (MCP) being referred to by YNAC is a document from 2012. This document has been superseded by the Solomon MCP (SO-PL-EN-0002, Rev 12), submitted on 16 February 2024 and approved on 30 May 2024. This document is the most current MCP and should be referred to in this instance.</p> <p>Section 5.8.9 (Non-mineral waste) of the Solomon MCP states the following information regarding the Closure/Decommissioning of the landfill facility ... "<i>Disposal of waste materials on site can result in land degradation if not managed appropriately. Leachate from waste materials can generate due to pooling from rainwater within the landfill facility and seep into below groundwater aquifers causing contamination.</i></p> <p><i>Waste disposed and left uncovered could result in windblown rubbish and dust which can affect the visual amenity of the surrounding environment and may indirectly affect native fauna.</i></p> <p><i>Fortescue employs a waste management program throughout operations and closure to minimise the volume of waste materials generated. The waste minimisation approach will consider:</i></p> <ul style="list-style-type: none"> • <i>Procurement of materials, aimed at minimising the generation of waste from the use of these materials;</i> • <i>Re-use and recycling of materials to be undertaken wherever practicable and feasible; and</i>

Stakeholder	Summary of stakeholder comments	Department's response
		<ul style="list-style-type: none"> • <i>Handling and treatment of waste prior to re-use and/or disposal to landfill or hazardous waste receptors.</i> <p><i>Management actions are expected to include:</i></p> <ul style="list-style-type: none"> • <i>Designing, operating and closing on-site landfill in accordance with the Environmental Protection (Rural Landfill) Regulations 2002 or other approval issued by the regulator(s). Ensuring storage, handling, collection and/or transport of controlled complies with Environmental Protection (Controlled Waste) Regulations 2004.</i> • <i>Where practicable, recycling and/or re-using viable materials and make recycling facilities readily available. Providing designated bins for general putrescible waste (fitted with secure lids), including food scraps, within all office, workshop and camp areas.</i> • <i>Appropriate signage to direct segregation of waste into bins/receptacles. Ensuring employee and contractor inductions include the waste management hierarchy.</i> <p><i>Landfill and inert waste facilities will be decommissioned and rehabilitated in accordance with the relevant EP Act instruments and requirements during operations and via the closure monitoring network. Monitoring of closed facilities will be completed through the closure monitoring framework”.</i></p>
	<p>As you are aware, the Office of the Auditor General reviewed compliance and enforcement activities between 2017 to 2022 of the Department of Water and Environmental Regulation and the Department of Mines, Industry Regulation and Safety. They found that both entities were not fully effective in ensuring mining projects complied with their environmental conditions to limit environmental harm. They also found that neither entity consistently and adequately enforced conditions, and therefore operators may be less deterred from breaching their conditions, which may result in damage to the environment, impacts to heritage and Native Title rights, and financial liabilities to the State. We note that despite non-compliances having been reported under the Ministerial Statement, EPBC 2014/7275, missed water monitoring events and water level non-compliances, some of the Proponents reporting requirements were reduced as part of the Streamline WA government project.</p> <p>YAC and YNAC appreciate DWER's intention to carry out a compliance audit and we urge the Department to take heed of the Auditor General's findings and to take a robust approach to ensuring that the proponent complies with its obligations under environmental law, including strong enforcement action to rectify non-compliance.</p>	<p>The department takes its role as an environmental regulator seriously and recognises the importance of a partnership approach with First Nations people to protect and manage Western Australia's environment and water resources.</p> <p>The Delegated Officer notes this comment but overall review of Ministerial Statements, requirements under the EPBC Act and possible changes to compliance reporting due to Streamline WA are not considered as part of this licence amendment application.</p> <p>If any non-compliances with the licence conditions are identified, these will be considered in accordance with DWER's Compliance and Enforcement Policy (May 2021).</p>
Wintawari Guruma Aboriginal Corporation advised on 9 February 2024	Response from Wintawari Guruma Aboriginal Corporation requesting future correspondence from DWER be sent to alternate email addresses. No additional comment was received on the application.	Change of stakeholder email addresses has been noted by DWER.
Wirru-Murra Yindjibarndi Aboriginal Corporation (WMYAC) advised on 9 February 2024	Automatic response from WMYAC to please allow 24-48 for processing. No additional comment was received on the application.	N/A

Appendix 2: Summary of the licence holder's comments on risk assessment and draft conditions

Condition	Summary of licence holder's comment	Department's response
<p>Condition 3, Table 2</p> <p>Groundwater monitoring bores</p>	<p>Fortescue acknowledges the department's new requirement to design and construct wells in accordance with the ASTM D5092/D5092M-16: <i>Standard practice for design and installation of groundwater monitoring bores</i>. However, this new requirement is inconsistent with other Fortescue Ltd operational licences and is likely to lead to possible non-compliances due to the ambiguous construction methodology.</p> <p>Fortescue is not seeking permission to construct bores, as this is managed and regulated under the RIWI Act.</p> <p>To prevent dual regulation between the two different acts (EP Act 1986 and <i>Rights in Water and Irrigation Act (RIWI) Act 1914</i>) and to remove any ambiguity, Fortescue notes that the guideline for the construction of wells in Australia is the Minimum Construction Requirements for Water Bores in Australia (4th Edition, 2020), as referred on the DWER website. The licence holder proposes to change in Item 2 of Table 2 to remove the reference to the ASTM and include reference to the "minimum construction requirements".</p> <p>The logging of hydrogeological bores will be conducted in accordance with the Hydrogeological Bore Logging Procedure (45-00000-PR-GY-000).</p> <p>Fortescue requests for the revision of the wording in the design, construction, and installation requirements to align with the minimum construction standards for water bores in Australia, which is separately managed under the RIWI Act, through the licence to construct a well (26D licence) instrument.</p> <p>Therefore, Fortescue requests for the rephrasing of the condition to align and ensure compliance with the RIWI Act, whilst still meeting the intended outcome of the condition.</p>	<p>The Delegated Officer considers the request to be reasonable and does not believe the proposed changes will impact the functionality of the proposed bores, noting that other key construction requirements still apply including specifications for well screen position and bore nesting where required. The Delegated Officers acknowledges that the proposed phrasing is consistent with other Fortescue Ltd licences.</p>

Condition	Summary of licence holder's comment	Department's response
<p>Condition 3, Table 2</p> <p>Waste transfer station/depot</p>	<p>The existing wording on the draft licence states that the entire area encompassing the waste transfer station/depot is to be graded, bunded and constructed of a hardstand surface.</p> <p>The licence holder notes that this hardstand requirement is operationally challenging due to the scale and size of the waste transfer station/depot. This requirement is inconsistent with other existing Fortescue Ltd operational licences.</p> <p>Fortescue requests for the revision of the wording to provide operational flexibility whilst still meeting the intended outcomes of this condition.</p>	<p>The Delegated Officer considers the proposed changes will not increase the emissions risk profile during operation of the transfer station, noting that other key construction requirements still apply including specifications for grading, bunding and placement of IBCs and skip bins to store and separate waste.</p> <p>The Delegated Officers acknowledges that the proposed phrasing is consistent with other Fortescue Ltd licences.</p>
	<p>The new Solomon Landfill will be constructed in an existing and cleared mine pit. The licence holder comment that the requirement for installing stock-proof fencing is only a necessity if there is a risk of livestock coming into the area.</p> <p>The licence holder requests the reference to 'stock proof fencing' be removed from the licence.</p>	<p>The Delegated Officer notes that the waste transfer/depot area is heavily disturbed within a mine pit, and that it is unlikely the waste and hazardous materials being stored prior to disposal off-site will be considered as a food source for livestock, not will livestock likely be present in the area.</p>
	<p>Based on the advice from the department to show the location of the waste transfer station, Fortescue has updated the map (Figure 6) to clearly depict the location of the Landfill and Waste Transfer Station.</p>	<p>The Delegated Officer has updated Figure 6 in the revised licence.</p>
<p>Condition 7, Table 4</p> <p>Burning of waste</p>	<p>The condition related to "no burning of waste" is a new requirement is not consistent with existing Fortescue Ltd operational licences and presents operational compliance risks such as in the event of a regional fire due to natural causes. Therefore, Fortescue requests for the removal of this requirement.</p> <p>Fortescue confirms that no burning of waste will be occurring at the proposed new Solomon landfill.</p>	<p>A restriction on the burning of waste was proposed by the applicant in the application and is a common condition across prescribed premises regulated under Part V of the EP Act. A natural bushfire would be an unforeseen event and can be documented for the departments consideration, should a bushfire result in non-compliance event.</p> <p>The Delegated Officer has determined to keep this requirement on the licence, but amended to specify that burning is not permitted within the</p>

Condition	Summary of licence holder's comment	Department's response
		Solomon Landfill.
Condition 7, Table 4 Tailings decant water	<p>As part of the amendment application, Fortescue requested that the reference of the TSF1 Gravity Decant Water Storage Pond in Condition 6, Table 3 be removed from the licence.</p> <p>The licence holder noted that in the draft revised licence the Decant Pond is also referenced in condition 7, Table 4.</p> <p>This storage vessel or compound is no longer required and is to be removed from the licence.</p>	<p>The Delegated Officer notes that the TSF1 Gravity Decant Water Storage Pond is no longer connected to the TSF as tailings material is being diverted to Gee-Pit, which is covered on the licence.</p> <p>The Delegated Officer has removed extraneous reference to 'Decant Pond' from Table 4.</p>
Condition 6 - 35	<p>The licence holder noted cross-referencing errors through the draft licence. This has subsequently distorted and affected the numbering on the rest of the conditions.</p> <p>Due to the errors noted within the draft licence (condition text missing and numbering sequence of conditions), the licence holder requests for another opportunity to review the draft licence (once the changes have been conducted) to ensure that the approval conditions are accurate.</p>	The Delegated Officer has corrected all cross-referencing errors and has provided the licence holder another opportunity to review the instrument.
Figure 3	<p>Fortescue requests for an update to Figure 3 of the draft licence to remove the reference of the TSF1 Gravity Decant Water Storage Pond.</p> <p>The TSF1 Gravity Decant Water Storage Pond is no longer connected to the TSF as tailings material is being diverted to Gee-Pit, which is covered on the licence.</p> <p>Therefore, Fortescue has updated Figure 3 by removing the TSF1 Gravity Decant Water Storage Pond from the map.</p>	The Delegated Officer has updated Figure 3 in the revised licence.
Figure 11	<p>Fortescue requests for an update to Figure 11 of the draft licence to clearly depict the location of the L4 (Stockyard TK901 Storage Tank).</p> <p>Fortescue notes that the existing Figure 11 of the draft licence is not clear. Therefore, to remove any ambiguity in the depiction of L4, Fortescue has updated the map.</p>	The Delegated Officer has updated Figure 11 in the revised licence.