



Application for Licence Amendment

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

Licence Number	L9221/2019/1
Licence Holder	Fortescue Metals Group Ltd
ACN	002 594 872
File Number	DER2019/000542
Premises	<p>Eliwana Iron Ore Mine</p> <p>Tenements M47/1509, and part of tenements M47/1522, M47/1523, M47/1524, M47/1525, M47/1526 and M47/1537</p> <p>HAMERSLEY RANGE WA 6716</p> <p>As defined by the Premises maps attached to the Revised Licence</p>
Date of Report	30/03/2023
Decision	Revised licence granted

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MANAGER, RESOURCES INDUSTRIES

an officer delegated under section 20 of the *Environmental Protection Act 1986* (WA)

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1. Decision summary

Licence L9221/2019/1 is held by Fortescue Metals Group Ltd (Licence Holder) for the Eliwana Iron Ore Mine (the Premises), located at Mining Tenements M47/1509, and part of tenements M47/1522, M47/1523, M47/1524, M47/1525, M47/1526 and M47/1537, HAMERSLEY RANGE, WA 6716.

This Amendment Report documents the assessment of potential risks to the environment and public health from proposed changes to the emissions and discharges during the operation of the Premises. As a result of this assessment, Revised Licence L9221/2019/1 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 8 November 2022, the Licence Holder submitted an application to the department to amend Licence L9221/2019/1 under section 59 and 59B of the *Environmental Protection Act 1986* (EP Act). The following amendments are being sought:

- Include new categories 62 and 64 assessed under works approval W6478/2029/1 (W6478). These works have now been completed and compliance was demonstrated on 3 June 2022. The Applicant has requested the Time Limited Operation conditions from W6478 are carried over into the Licence as new operational conditions.
- Include new category 63 for the disposal of concrete, rubber and untreated timber. The inert materials will be buried within disused mined voids and waste rock dumps.
- Increase the used tyre storage at the Premises prior to burial and include additional burial locations (disused mined pits and waste rock dumps).
- Administrative changes (correction) for the Oily Water Separator (OWS) discharge points (incorrect image provided in Licence) and to remove the requirement to discharge during heavy rainfall events.
- Administrative changes to upgrade maps in Schedule 1.
- Increase the volume of bulk storage of chemicals (category 73) from 4,500 m³ to 6,500 m³ to support mining and additional infrastructure requirements. The additional chemical (hydrocarbons) will be stored in self-bunded tanks.
- Extension of the approved Shooting Star Managed Aquifer Recharge (MAR) borefield and injection network to include the new Apollo injection borefield (consisting of an additional 6 new injection bores and approximately 5 km of injection pipeline) with an additional approximate 15 km of pipeline required for Flying Fish dewatering to be connected to Apollo. The current approved discharge capacity will remain unchanged. The Premises is subject to conditions of Ministerial Statement 1109 (14 August 2019) which includes regulating the MAR program.

Table 1 below outlines the proposed changes to the existing Licence.

Table 1: Proposed design or throughput capacity changes

Category	Current design or throughput capacity	Proposed design or throughput capacity	Description of proposed amendment
5	35,000,000 tonnes per annum	No change	N/A
6	Volume as specified under Ministerial Statement 1109	No change	Include an additional 6 new injection bores and associated pipeline.
12	1,000,000 tonnes per annum	No change	N/A
52	30.4 MW in aggregate	No change	N/A
54	350 m3 per day	No change	N/A
57	2,500 tyres	5,000 tyres	Proposed change to increase the number of used tyres stored and buried from 2,500 to 5,000 tyres per annum and include new inert waste disposal areas.
62	6,000 tonnes per annum	New category	Operation of a new solid waste depot constructed under W6478.
63	7,000 tonnes per annum	New category	Burial of concrete, rubber and untreated timber waste within mined voids and waste rock dumps.
64	10,000 tonnes per annum	New category	Operation of a new Class II putrescible landfill constructed under W6478.
73	4,500m3 in aggregate	6,500m ³ in aggregate	Proposed increased chemical storage capacity.

2.3 Part IV of the EP Act

2.3.1 Background

On 7 July 2017, the Licence Holder referred the proposed development and operation of the Eliwana Iron Ore Mine and associated infrastructure (the proposal) to the Environmental Protection Authority (EPA). The EPA conducted an Environmental Impact Assessment on the proposal resulting in the EPA's report 1641, dated June 2019. On 14 August 2019, the West Australian Minister for Environment approved the proposal subject to the implementation of conditions and procedures as detailed in Ministerial Statement No: 1109 (MS1109).

2.3.2 Ministerial Statement 1109

Conditions of MS1109 which are relevant to the assessment of this Licence amendment are summarised below.

- Prepare and submit Environmental Plans that meet the following environmental objectives:

Flora and Vegetation Environmental Plan – MS1109 condition 7

Avoid where possible, or minimise direct and indirect impacts to priority flora, riparian vegetation and groundwater dependent vegetation. See Table 4 below for priority flora at the Premises. The Plan must include provisions to address impacts to vegetation including, but not limited to: changes to surface water regimes and quality, changes to groundwater regimes and quality, clearing, fragmentation, dust, and weeds.

Inland Waters Environmental Plan – MS1109 condition 9

Avoid or minimise direct and indirect impacts of the proposal on:

- surface water regimes and surface water quality inside and within 10 km of the Premises.
- groundwater regimes and groundwater quality inside and within 10 km of the Premises.
- water flows and water quality within Duck Creek.
- permanent and semi-permanent pools inside and within 10 km of the Premises.

The Inland Waters Environmental Plan (the plan) must include risk-based management actions to address impacts on hydrological regimes and water quality, from, but not limited to, water abstraction, managed aquifer recharge (MAR), disposal of mine dewater to surface systems, diversion and interception of surface water systems, discharge of wastes including stormwater, management of hydrocarbon and chemical spills, exposure of acid sulfate soils and creation of acid or metalliferous drainage.

The plan must specify measurable management target(s) to determine the effectiveness of the risk-based management actions. The plan must also specify monitoring to measure the effectiveness of management actions against targets, including but not limited to, parameters to be measured, baseline data, monitoring locations, and frequency and timing of monitoring.

Terrestrial Fauna - MS1109 condition 10

Avoid where possible, and minimise direct and indirect impacts to significant fauna and their habitat.

Subterranean Fauna - MS1109 condition 11

Avoid where possible, and minimise direct and indirect impacts to subterranean fauna and their habitat.

3. Risk assessment

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

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

3.1 Source-pathways and receptors

3.1.1 Emissions and controls

The key emissions and associated actual or likely pathway during premises operation which have been considered in this Amendment Report are detailed in Table 2 below.

Table 2 also details the proposed control measures the Licence Holder has proposed to assist in controlling these emissions, where necessary.

Table 2: Licence Holder controls

Emission	Sources	Potential pathways	Proposed controls
Leachate	Storage and burial of putrescible wastes	Seepage to surrounding soils and groundwater	Only inert and putrescible waste will be disposed of at the landfill. Hazardous waste will not be disposed at the landfill.
Odour	Storage and burial of putrescible wastes	Air/windborne pathway	Waste will be covered on a regular basis with earth material.
Windblown waste	Storage and burial of wastes	Air/windborne pathway	Fence is located around the perimeter of the landfill and the solid waste depot. Tipping face at the Class II landfill will be limited to 30 m in length. Waste at the Class II landfill will be covered at least weekly.
Discharge of hydrocarbons caused by used tyre fire	Storage of used tyres and rubber and increased used tyre storage in existing storage areas	Overland flow and seepage causing contamination of soils and groundwater	Stormwater drainage system to segregate internally captured stormwater with external surface water runoff. Maximum number of used tyres stored onsite at any one time awaiting burial within waste rock dumps and mined pit voids will be no more than 5,000 Licence Holder has previously committed to storing and disposing of used tyres in accordance with the requirements set out in Regulation 14(2) of the <i>Environmental Protection Regulations 1987</i> .
Stored chemicals and hydrocarbons	Increased chemical storage capacity	Breach of containment causing discharge to land; seepage causing contamination of soils and groundwater	Storage vessels and containment infrastructure built and maintained in accordance Australian Standard 1940:2017 <i>Storage and Handling of Flammable and Combustible Liquids Standards</i> (AS1940).

Emission	Sources	Potential pathways	Proposed controls
Contaminated stormwater at landfill	Rainfall coming in contact with putrescible wastes	Overland flow; seepage causing contamination of soils and groundwater	Diversion drainage to divert stormwater surface flows around the landfill.
Contaminated stormwater at solid waste depot	Rainfall coming in contact with stored waste	Overland flow; seepage causing contamination of soils and groundwater	Stormwater drainage system to segregate internally captured stormwater with external surface water runoff. Hazardous waste stored in self-bunded containers and/or covered bins.

3.1.2 Receptors

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

Please note that the closest offsite human receptors is a minimum of 30km from the premises. Therefore, human receptors have not been considered in this risk assessment.

Table 33 below provides a summary of potential environmental receptors that may be impacted as a result of activities upon or emission and discharges from the prescribed premises (*Guideline: Environmental siting* (DWER 2020)).

Table 3: Sensitive environmental receptors and distance from prescribed activity

Environmental receptors	Distance from prescribed activity
Threatened/priority fauna	
Northern Quoll (<i>Dasyurus hallucatus</i>) – Endangered	Habitat identified within premises boundary Recorded in vicinity (within 5km) of premises boundary Screened out - Impacts to significant fauna and their habitat regulated under conditions 6 and 10 of MS1109.
Ghost bat (<i>Macrodermia gigas</i>) – Vulnerable	
Pilbara Leaf-Nosed Bat (<i>Rhinonictis aurantia</i>) – Vulnerable	
Pilbara Olive Python (<i>Liasis olivaceus barroni</i>) – Vulnerable	
Western Pebble-Mound Mouse (<i>Pseudomys chapmani</i>) – Priority 4	
Priority flora	
<i>Indigofera</i> sp.Bungaroo Creek – Priority 3	Recorded in vicinity (within 5km) of premises boundary. Screened out - Impacts to significant flora and their habitat

<i>Goodenia nuda</i> – Priority 4	regulated under conditions 6 and 7 of MS1109. See section 2.3.2 for further details.
<i>Rhynchosia bungarensis</i> – Priority 4	However adequate dust management from prescribed activities compliments MS1109 conditions.
Surface waters	
Unnamed ephemeral creeks	Within and in the vicinity of premises boundary. Screened out - Impacts on inland waters regulated under conditions 6 and 9 of MS1109. See section 2.3.2 for further details.
Pinarra creek	Approximately 750m south of the premises boundary. Screened out - Impacts on inland waters regulated under conditions 6 and 9 of MS1109. See section 2.3.2 for further details.
Duck creek	Approximately 5.5kms north of the premises boundary. Screened out - Impacts on inland waters regulated under conditions 6 and 9 of MS1109. See section 2.3.2 for further details.
Duck creek pools	DWER's GIS indicates the nearest pools are approximately 5.5kms north of the premises boundary. Screened out - Impacts on inland waters regulated under conditions 6 and 9 of MS1109. See section 2.3.2 for further details.
Groundwater	
Groundwater	Located approximately 15 mbgl at the landfill location. Screened out - Impacts on groundwater regimes regulated under conditions 6 and 9 of MS1109.

3.2 Risk ratings

Risk ratings have been assessed in accordance with the *Guideline: Risk Assessments* (DWER 2020) for those emission sources which are proposed to change and takes into account potential source-pathway and receptor linkages as identified in Section 3.1. Where linkages are 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 3.1), 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 4.

The Revised Licence L9221/2019/1 that accompanies this Amendment Report authorises emissions associated with the operation of the Premises i.e. Category 5, 6, 12, 52, 54, 57, 62, 63, 64 and 73 activities.

The conditions in the Revised Licence have been determined in accordance with *Guidance Statement: Setting Conditions* (DER 2015).

Table 4. Risk assessment of potential emissions and discharges from the Premises during operation

Risk Event					Risk rating ¹ C = consequence L = likelihood	Licence Holder's controls sufficient?	Conditions ² of licence	Justification for additional regulatory controls
Source/Activities	Potential emission	Potential pathways and impact	Receptors	Licence Holder's controls				
Operation								
Category 57 Used tyre storage Increased storage of used tyres	Contaminated (hydrocarbons) fire wash water	Overland flow and seepage causing ecosystem disturbance to soils	Surrounding soils	Refer to Section 3.1	C = Slight L = Unlikely Low risk	Y	Conditions 1 , 8, 9, 10, 11, and 12	Impacts on soils from emissions caused by a used tyre fire are not regulated by MS1109. Additional used tyre storage areas to be located as identified in the submitted application. Existing operational requirements conditioned in the Licence. Standard recording and reporting conditions apply. Provisions of the <i>Environmental Protection (Unauthorised discharges) Regulations 2004</i> apply.
Class 62 Solid Waste Depot Acceptance and storage of waste pending offsite disposal.	Contaminated stormwater Chemical spill	Overland flow and seepage causing ecosystem disturbance to soils	Surrounding soils	Refer to Section 3.1	C = Slight L = Unlikely Low risk	Y	Conditions 1 , 8, 9, 10, 11, and 12	Impacts on soils from emissions caused by the storage of solid wastes are not regulated by MS1109. Time Limited Operation conditions applied to W6478 have been carried over into the Licence. Standard recording and reporting conditions apply. General provisions of the EP Act) regarding environmental harm apply. Provisions of the <i>Environmental Protection (Unauthorised discharges) Regulations 2004</i> also apply.

Risk Event					Risk rating ¹ C = consequence L = likelihood	Licence Holder's controls sufficient?	Conditions ² of licence	Justification for additional regulatory controls
Source/Activities	Potential emission	Potential pathways and impact	Receptors	Licence Holder's controls				
<p>Category 63 Class I inert landfill</p> <p>Acceptance and burial of concrete, rubber and untreated timber at waste rock dumps and mined pit voids</p>	<p>Contaminated stormwater</p> <p>Contaminated fire wash water from rubber fire</p>	Overland flow and seepage causing ecosystem disturbance to soils	Surrounding soils	Refer to Section 3.1	<p>C = Slight</p> <p>L = Unlikely</p> <p>Low risk</p>	Y	<p>Conditions 1, 8, 9, 10, 11, and 12</p>	<p>Impacts on soils from emissions caused by the acceptance and burial of Class I wastes are not regulated by MS1109.</p> <p>Concrete, rubber and untreated timber are considered inert materials requiring minimal operational requirements.</p> <p>New condition requiring a final minimum soil cover of 500 mm is applied to the waste to mitigate fires (rubber).</p> <p>Standard recording and reporting conditions apply.</p> <p>General provisions of the EP Act) regarding environmental harm apply.</p> <p>Provisions of the <i>Environmental Protection (Unauthorised discharges) Regulations 2004</i> also apply.</p>
<p>Category 64 Class II putrescible landfill</p> <p>Acceptance and burial of waste</p>	<p>Leachate</p> <p>Contaminated stormwater</p> <p>Contaminated Fire wash water</p>	Overland flow and seepage causing ecosystem disturbance to soils	Surrounding soils	Refer to Section 3.1	<p>C = Slight</p> <p>L = Unlikely</p> <p>Low risk</p>	Y	<p>Conditions 1, 6, 8, 9, 10, 11, and 12</p>	<p>Impacts on soils from emissions caused by the acceptance and burial of Class II wastes are not regulated by MS1109.</p> <p>Time Limited Operation conditions applied to W6478 for the acceptance and burial of Class II wastes have been carried over into the Licence as operational conditions.</p> <p>Applicant initiated ambient groundwater monitoring requirements were applied as conditions in W6478. These conditions have not been carried over into the Licence as impacts to inland waters (surface and ground water) are regulated under MS1109.</p> <p>Standard recording and reporting conditions apply.</p>

Risk Event					Risk rating ¹ C = consequence L = likelihood	Licence Holder's controls sufficient?	Conditions ² of licence	Justification for additional regulatory controls
Source/Activities	Potential emission	Potential pathways and impact	Receptors	Licence Holder's controls				
Category 73 Bulk storage of chemicals Increased storage of bulk chemicals (diesel)	Accidental discharge of hydrocarbons	Direct discharge and/or overland runoff potentially causing ecosystem disturbance	Surrounding soils	Refer to Section 3.1	C = Slight L = Unlikely Low risk	Y	Conditions 1 , 8, 9, 10, 11, and 12	<p>Impacts on soils from hydrocarbons spills are not regulated by MS1109.</p> <p>Storage vessels and containment infrastructure built and maintained in accordance Australian Standard AS1940.</p> <p>Existing operational requirements for the storage of bulk chemicals are already conditioned in the Licence.</p> <p>Standard recording and reporting conditions apply.</p> <p>General provisions of the EP Act regarding environmental harm apply.</p> <p>Provisions of the Environmental Protection (Unauthorised discharges) Regulations 2004 also apply for certain discharges to the environment such as hydrocarbons.</p>

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.

4. Consultation

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

Table 5: Consultation

Consultation method	Comments received	Department response
Department of Mines, Industry Regulation and Safety (DMIRS) advised of proposal on 16 January 2023	No comments received. Note: Comment was sort from DMIRS on the proposed W6478. DMIRS responded on 10 February 2021 that they had no concerns with the disposal of wastes on M47/1524 (location of mined pits and waste rock dumps).	N/A
Licence Holder was provided with a draft amendment on 17 March 2023	Requested 5,000 used tyres instead of 1,000 used tyres can be stored at the Premises awaiting burial. Licence Holder requested this change as currently there are no suitable locations within the WRD's and mine pit voids.	Supported. Condition updated to allow 5,000 used tyres can be stored awaiting burial however the used tyres must be stored in stacks of no greater than 1,000 tyres in each stack and be separated by 3 m and no higher than 5 m. The Licence Holder has supported this change (A2166026).
	The Licence Holder requested a minor change to the wording to combine the total quantity of wastes that can be stored or sorted, pending final disposal or re-use under Category 62 rather than providing individual volumes of wastes.	Supported.
	Licence Holder provided an updated Figure 8.	Supported. Figure updated.

5. Conclusion

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

5.1 Summary of amendments

Table 6 provides a summary of the proposed amendments and will act as record of implemented changes. All proposed changes have been incorporated into the Revised Licence as part of the amendment process.

Table 6: Summary of licence amendments

Condition no.	Proposed amendments
N/A	Include new categories 62, 63 and 64 and update category 57 on the prescribed premises category description table.

Condition no.	Proposed amendments
Condition 1, Table 1	<p>Condition amended by updating the operational requirements for the used tyre storage and disposal areas to include:</p> <ul style="list-style-type: none"> - mined pit voids as additional disposal areas; - a limit on the number of used tyres stored onsite awaiting burial. New limit set at 5,000 however used tyres must be arranged in stacks of no greater than 1,000 in each stack; and - an increase in the number of used tyres authorised to be buried annually;
Condition 1, Table 1 – Class I inert landfill	New operational requirements, including a description of the location, for the burial of concrete, rubber and untreated timber within waste rock dumps and mined pit voids.
Condition 1, Table 1 – Class II putrescible landfill	New operational requirements, including a description of the location, for the Class II putrescible landfill built under W6478. Operational conditions have been carried over from the Time Limited Operation conditions imposed in W6478.
Condition 1, Table 1 – Solid waste depot	New operational requirements, including a description of the location, for the Solid waste depot built under W6478. Operational conditions have been carried over from the Time Limited Operation conditions imposed in W6478.
Condition 1, Table 1 – Chemical and hydrocarbon storage	Condition amended by increasing the total authorised volume of chemicals stored at the Premises from 4,500 m ³ to 6,500 m ³ .
Condition 2, Table 2	<p>Correction of administrative error with reference to location.</p> <p>Include maintenance periods and inflow surges as additional authorised contingency discharge events.</p>
Condition 7	<p>Condition amended by including the requirement to:</p> <ul style="list-style-type: none"> - record the volumes of concrete, rubber and untreated timber waste buried within waste rock dumps and mine pit voids; - record the volume of waste buried within the class II landfill site; - record the number of used tyres buried within waste rock dumps and mined pit voids.
Condition 11, Table 5	Table amended to include the requirement for the Licence Holder to present in the Annual Environmental Report the data collected under condition 7.
Definitions	Definitions table updated with additional terms.
Schedule 1: Maps Figure 1	'Prescribed Premises' map updated with new map as provided by Applicant. Map updated to remove the 'Proposed Tyre Disposal Landform'.
Schedule 1: Maps Figure 5	'Camp Power Station generator layout map' updated with new map as provided by Applicant. Map updated to remove the 'Proposed Tyre Disposal Landform'.
Schedule 1: Maps Figure 6	'Infrastructure layout including tyre disposal area' map updated with new map to remove the 'Proposed Tyre Disposal Landform'.
Schedule 1: Maps Figure 8	New map providing the location of the concrete, rubber, untreated timber and tyre disposal areas.

References

1. Department of Environment Regulation (DER) 2015, *Guidance Statement: Setting Conditions*, Perth, Western Australia.
2. Department of Water and Environmental Regulation (DWER) 2020, *Guideline: Environmental Siting*, Perth, Western Australia.
3. DWER 2020, *Guideline: Risk Assessments*, Perth, Western Australia.
4. FMG Fortescue, Application, Licence Amendment, *Eliwana Iron Ore Mine Licence L9221/2019/1 (EW-1000-AE-EN-0001 Rev0)*, 4/11/2022
5. W6478/2020/1 Decision Report available at:
https://www.der.wa.gov.au/images/documents/our-work/licences-and-works-approvals/Decisions/_W6478-2020-1_DR.pdf
6. Government of Western Australia, Environmental Protection Authority, *Ministerial Statement 1109, Eliwana Iron Ore Mine Project*, date of approval 14 August 2019

Appendix 1: Application validation summary

VALIDATION CHECKLIST:

WORKS APPROVAL, LICENCE, REGISTRATION, AND AMENDMENT APPLICATIONS

SECTION 1: APPLICATION SUMMARY			
Application type			
Amendment to licence	<input checked="" type="checkbox"/>	Current licence number:	L9221/019/1
		Relevant works approval number:	W6478/2020/1 LO notes that relevant compliance documents were submitted and reviewed – see DWERDT644703
Date application received		8/11/2022	
Applicant and Premises details			
Applicant name/s (full legal name/s)		Fortescue Metals Group Ltd	
Premises name		Eliwana Iron Ore Mine	
Premises location		Mining Act tenements M47/1509, M47/1522, M47/1523, M47/1524, M47/1525, M47/1526 and M47/1537 Note: no changes to premises location/boundary	
Local Government Authority		Shire of Ashburton	
Application documents			
HPCM file reference number:		DER2019/000542~3	
Key application documents (additional to application form):		Licence Amendment Supporting document; ASIC company extract, maps, sitting and location; tenure information	
Scope of application/assessment			

<p>Summary of proposed activities or changes to existing operations.</p>	<p>The Eliwana Iron Ore Mine (the Mine) is located approximately 90 km west-northwest of Tom Price in the Pilbara region of Western Australia. The Mine is approved under Part IV of the Environmental Protection Act (EP Act) according to Ministerial Statement (MS) 1109 and licensed under Part V of the EP Act pursuant to L9221/2019/1 (the Licence).</p> <p>Fortescue seeks to expand its current operations at the Mine by amending the Part V Licence L9221/2019/1 under s59 of the EP Act by proposing the following:</p> <p>Transfer of the Eliwana Solid Waste Depot and Landfill Facility Works Approval W6478/2020/1 into the Eliwana Iron Ore Mine Licence L9221/2019/1, resulting in two new categories (category 62 and category 64) with all current approved waste types from the Works Approval replicated into the Eliwana Licence;</p> <p>Administrative changes required to update Figure 1, Figure 5 and Figure 6 of the Schedule 1 maps contained in the Eliwana Licence. An additional map has been provided (Figure 8) to depict the waste disposal areas at the Mine for concrete, rubber, untreated timber and tyres;</p> <p>Proposed changes to infrastructure and equipment requirements (Table 1 of L9221/2019/1) to update the wording to increase the storage of up to 2,500 5,000 tyres on site prior to burial. In addition the disposal of used tyres both within waste rock dumps and mined pit voids.</p> <p>Fortescue also requests to dispose of concrete, rubber and untreated timber waste within the voids;</p> <p>Administrative changes are also being requested to the authorised discharge points (Table 2 of L9221/2019/1) to correct the image reference to Figure 2 6 (depicting the treated OWS discharge point) and to remove the requirement to discharge during heavy rainfall events;</p> <p>Increase the prescribed premises category for the bulk storage of chemicals (Table 1 of L9221/2019/1) to 4,500 m3 6,500 m3 in aggregate under category 73 to support mining and additional infrastructure requirements demanded by the Flying Fish mining area;</p> <p>Extension of the approved Shooting Star Managed Aquifer Recharge (MAR) borefield and injection network to include the new Apollo injection borefield (consisting of an additional 6 new injection bores and ~5 km of injection pipeline) with an additional ~15 km of pipeline required for Flying Fish dewatering to be connected to Apollo. There will be no changes to category 6 for mine dewatering.</p> <p>Note on fee calculation:</p> <p>Applicant has used the highest CAT (which is CAT 64) related to this amendment to calculate the fee. However, the current licence also involves CAT 5 (which would be the highest category). No changes are proposed to CAT 5 as part of this amendment. LO had a chat with other officers, and it is understood that CAT 5 should be considered in calculation, giving a total of \$6,120.00 instead of \$2,176.00 (when only CAT 64 was considered)</p>
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Category number/s (activities that cause the premises to become prescribed premises)

Table 1: Prescribed premises categories

Prescribed premises category and description	Approved or proposed production or design capacity	Proposed changes to the production or design capacity (amendments only)
Category 5: Processing or beneficiation of metallic or non-metallic ore	35,000,000 tonnes per annum.	No changes
Category 6: Mine dewatering	Volume as specified under Ministerial Statement 1109	No changes to assessed capacity, however extension of the approved Shooting Star Managed Aquifer Recharge (MAR) borefield and injection network is proposed.
Category 12: Screening etc. of material	1,000,000 tonnes per annum	No changes
Category 52: Electric power generation	30.4 MW in aggregate	No changes
Category 54: Sewage facility	350 m ³ per day	No changes
Category 57: Used tyre storage (general)	2,500 tyres	proposed change to increase used tyre storage from 2,500 to 5,000 and waste disposal areas
Category 73: Bulk storage of chemicals etc.	4,500 m ³ in aggregate	proposed change to increase the production capacity from 4,500 m ³ in aggregate to 6,500 m ³ in aggregate
Category 62 – Solid waste depot	6,000 tonnes per annum	New category to be added to the licence from the transfer of W6478/2020/1 to L9221/2019/1
Category 64 – Class II or III putrescible landfill site	10,000 tonnes per annum	New category to be added to the licence from the transfer of W6478/2020/1 to L9221/2019/1

6. Legislative context and other approvals

Has the applicant referred, or do they intend to refer, their proposal to the EPA under Part IV of the EP Act as a significant proposal?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Not for this amendment.
Does the applicant hold any existing Part IV Ministerial Statements relevant to the application?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Ministerial statement No: 1109
Has the proposal been referred and/or assessed under the EPBC Act?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	EPBC 2017/8024
Has the applicant demonstrated occupancy (proof of occupier status)?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Mining Act tenements M47/1509, M47/1522, M47/1523, M47/1524, M47/1525, M47/1526 and M47/1537. Refer to Attachment 1A. Expiring date 12 March 2039. Held by FMG Pilbara Pty Ltd, a fully owned subsidiary of parent company Fortescue Metals Group Ltd.
Has the applicant obtained all relevant planning approvals?	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" type="checkbox"/>	Mining Act tenure, so N.A.
Has the applicant applied for, or have an existing EP Act clearing permit in relation to this proposal?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	In accordance with the application form no clearing is proposed. LO also note that proposed activities are within development envelope approved under MS1109.
Has the applicant applied for, or have an existing CAWS Act clearing licence in relation to this proposal?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	N.A
Has the applicant applied for, or have an existing RIWI Act licence or permit in relation to this proposal?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	GWL202596.
Does the proposal involve a discharge of waste into a designated area (as defined in section 57 of the EP Act)?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Name: Pilbara Type: Proclaimed Groundwater Area/Surface Water Area Has Regulatory Services (Water) been consulted? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A <input type="checkbox"/> Regional office: North West LO notes that this application might trigger consultation with North West water planning team, due to new reinjection borefield being added.
Is the Premises situated in a Public Drinking Water Source Area (PDWSA)?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	N.A

Is the Premises subject to any other Acts or subsidiary regulations (e.g. <i>Dangerous Goods Safety Act 2004</i> , <i>Environmental Protection (Controlled Waste) Regulations 2004</i> , <i>State Agreement Act xxxx</i>)	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Mining Act 1978 EP Act subsidiary regulations Aboriginal Heritage Act
Is the Premises within an Environmental Protection Policy (EPP) Area?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	N.A
Is the Premises subject to any EPP requirements?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	N.A
Is the Premises a known or suspected contaminated site under the <i>Contaminated Sites Act 2003</i> ?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Not shown in Geocortex.

SECTION 2: RECEPTORS

The nearest town of Tom Price	Is approximately 90 km south east of the Premises.
Human receptors	Distance from activity / prescribed premises
Pastoral homesteads	Duck Creek and Mount Brockman homesteads are located approximately 10kms (or more) away from the premises. SCREENED OUT due to distance.
Environmental receptors	Distance from activity / prescribed premises
Threatened/priority fauna	
Northern Quoll (<i>Dasyurus hallucatus</i>) – Endangered	Habitat identified within premises boundary. Recorded in vicinity (within 5km) of premises boundary. SCREENED OUT adequately managed under MS 1109; Condition 10
Ghost bat (<i>Macrodermia gigas</i>) – Vulnerable	
Pilbara Leaf-Nosed Bat (<i>Rhinonictis aurantia</i>) – Vulnerable	
Pilbara Olive Python (<i>Liasis olivaceus barroni</i>) – Vulnerable	
Western Pebble-Mound Mouse (<i>Pseudomys chapmani</i>) – Priority 4	
Lined soil crevice skink (<i>Notoscincus butleri</i>)	
Nankeen kestrel (<i>Falco cenchroides</i>)	
Grey falcon (<i>Falco hypoleucos</i>) - Vulnerable	
Peregrine falcon (<i>Falco peregrinus</i>)	

Priority flora	
Indigofera sp.Bungaroo Creek – Priority 3	Recorded in vicinity (within 5km) of premises boundary. SCREENED OUT adequately managed under MS 1109; Condition 7
Goodenia nuda – Priority 4	
Rhynchosia bungarensis – Priority 4	
Groundwater	
Underlying aquifer	Depth to groundwater within the premises is expected to vary from shallow groundwater beneath ephemeral creek systems to deep groundwater within fractured rock aquifers. The main aquifers relevant to the Premises are likely to be fractured rock aquifers with depth to groundwater between 20 and 80 metre below ground level (mbgl). The Wittenoom Formation is approximately 40 to 60 mbgl. Groundwater quality is fresh to brackish. Detailed water quality is provided in table 12 of supporting document. SCREENED OUT adequately managed under MS 1109; Condition 9
Surface water	
Unnamed ephemeral creeks	Within and in the vicinity of premises boundary. SCREENED OUT adequately managed under MS 1109; Condition 9
Pinarra creek	Approximately 750m south of the premises boundary. SCREENED OUT adequately managed under MS 1109; Condition 9
Heritage Sites	
Several sites within premises	Within and in the vicinity of premises boundary. SCREENED OUT adequately managed under MS 1109; Condition 13
Soils	
Local soils	Within and in the vicinity of premises boundary