



<b>Works approval number</b>	W6964/2024/1
<b>Works approval holder</b>	Hamersley Iron Pty Limited (Trading as: Rio Tinto Limited)
<b>ACN</b>	004 558 276
<b>Registered business address</b>	Level 18, 152 St Georges Terrace Perth WA 6000
<b>DWER file number</b>	DER2024/000462 / APP-0025982
<b>Duration</b>	28/07/2025 to 27/07/2028
<b>Date of issue</b>	28 July 2025
<b>Premises details</b>	<p>Biolron Pilot Plant Project 60 Office Road, East Rockingham WA 6168</p> <p>Legal description - Lot 1728 on Certificate of Title Volume 1912 Folio 815 As defined by the coordinates in Schedule 2</p>

Prescribed premises category description (Schedule 1, <i>Environmental Protection Regulations 1987</i> )	Assessed production / design capacity
Category 44: Metal smelting or refining: premises on which metal ore, metal ore concentrate or metal waste is smelted, fused, roasted, refined or processed.	8,736 tonnes per annum

This works approval is granted to the works approval holder, subject to the attached conditions, on 28 July 2025, by:

## MANAGER, PROCESS INDUSTRIES

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

## Works approval history

Date	Reference number	Summary of changes
28/07/2025	W6964/2024/1	Works approval granted.

## Interpretation

In this works approval:

- (a) the words ‘including’, ‘includes’ and ‘include’ in conditions mean “including but not limited to”, and similar, as appropriate;
- (b) where any word or phrase is given a defined meaning, any other part of speech or other grammatical form of that word or phrase has a corresponding meaning;
- (c) where tables are used in a condition, each row in a table constitutes a separate condition;
- (d) any reference to an Australian or other standard, guideline, or code of practice in this works approval:
  - (i) if dated, refers to that particular version; and
  - (ii) if not dated, refers to the latest version and therefore may be subject to change over time;
- (e) unless specified otherwise, any reference to a section of an Act refers to that section of the EP Act; and
- (f) unless specified otherwise, all definitions are in accordance with the EP Act.

**NOTE:** This works approval requires specific conditions to be met but does not provide any implied authorisation for other emissions, discharges, or activities not specified in this works approval.

## Works approval conditions

The works approval holder must ensure that the following conditions are complied with:

### Construction phase

#### Infrastructure and equipment

1. The works approval holder must:
  - (a) construct and/or install the infrastructure and/or equipment;
  - (b) in accordance with the corresponding design and construction / installation requirements; and
  - (c) at the corresponding infrastructure location.
 as set out in Table 1.

**Table 1: Design and construction / installation requirements**

	Infrastructure	Design and construction / installation requirements	Infrastructure location
1.	Biolron™ Furnace including microwave treatment section	a) Biolron Furnace to be constructed within a partially roofed structure; b) Microwave treatment section with a fully roofed structure; c) Designed to produce 1.3tph of hot DRI from 3tph of raw briquettes; d) Consists of the pre reduction process section and microwave treatment section; e) Designed and constructed to ensure waste gas from the furnace is directed to the 'off-gas system' that includes afterburner, spray cooler, baghouse, fan and exhaust stack; and f) The microwave furnace is designed and constructed to comply with Australian Standards so that microwave energy is safely contained within the furnace.	As shown in Figure 1 and generally within in accordance with the layout shown in Figure 2 in Schedule 1
2.	Off-gas system burner	a) The off-gas afterburner must be designed and constructed to ensure destruction and removal of dioxins, furans, VOC's and residual furnace off-gas; b) The burner must be appropriately sized and rated for the volume and composition of off-gas to be treated; c) The exhaust stack must be designed to ensure effective dispersion of emissions; d) Designed and constructed to ensure coarse dust is contained; and e) Be designed and constructed in such a manner that ensures that exit gas from the afterburner is directed to the emergency stack where a loss of the off-gas fan occurs (due to power failure or equipment failure).	As shown in Figure 1 and generally within in accordance with the layout shown in Figure 2 in Schedule 1
3.	Off-gas system baghouse	The off-gas system baghouse is to be designed and constructed: a) to capture particulate emissions from the off-gas spray cooler (cooled abated emissions from the off-gas burner); and b) achieve a maximum stack emission of 10mg/Am <sup>3</sup> (PM).	As shown in Figure 1 and generally within in accordance with the layout shown in Figure 2 in Schedule 1

	Infrastructure	Design and construction / installation requirements	Infrastructure location
4.	Induction Furnace	<ul style="list-style-type: none"> <li>a) Constructed on a bunded hardstand, inside an enclosed building;</li> <li>b) Designed and constructed to process 1.3tph DRI briquettes and produce 1 tph of molten metal;</li> <li>c) Designed and constructed to ensure that emissions generated through the induction furnace are collected by the furnace hood and dust removed by a baghouse (induction furnace baghouse); and</li> <li>d) The induction furnace baghouse is to be designed and constructed: <ul style="list-style-type: none"> <li>i. to treat emissions collected from the induction furnace, incorporating reverse pulse cleaning; and</li> <li>ii. achieve a maximum stack emission of 40mg/Am<sup>3</sup> (PM).</li> </ul> </li> </ul>	As shown in Figure 1 and generally within in accordance with the layout shown in Figure 2 in Schedule 1
5.	Milling and Storage (hammer mill, bucket elevators, day bins, bag breakers, mix feed hoppers):	<ul style="list-style-type: none"> <li>a) All feed and discharge points such as hoppers and conveyors should be sealed or equipped with dust controls measures (e.g. dust covers, flexible connections to prevent material spillage or dust escape);</li> <li>b) All dust emissions must be directed to the raw materials baghouse;</li> <li>c) Controls to reduce or eliminate risk of sparks will be implemented which include tramp metal detection, hazardous area rating construction and the use of 'rock-box' lining systems; and</li> <li>d) The design of the fire mitigation system shall comply with the following Australian Standards: <ul style="list-style-type: none"> <li>i. AS 1940: The storage and handling of flammable and combustible liquids</li> <li>ii. AS 1851: Maintenance of fire protection systems and equipment</li> <li>iii. AS 2118: Automatic fire sprinkler systems</li> <li>iv. AS 5062: Gas suppression systems for fire protection</li> <li>v. AS 5601: Gas installations</li> <li>vi. AS60079 series: Explosive atmospheres standards</li> </ul> </li> </ul>	As shown in Figure 1 and generally within in accordance with the layout shown in Figure 2 in Schedule 1
6.	Raw materials baghouse	<p>Designed and constructed:</p> <ul style="list-style-type: none"> <li>a) to capture all particulate emissions from the conveyor transfers in the raw materials section of the plant; and</li> <li>b) achieve a maximum stack emission of 40mg/Am<sup>3</sup> (PM).</li> </ul>	As shown in Figure 1 and generally within in accordance with the layout shown in Figure 2 in Schedule 1
7.	Bag filters	<p>All bag filters must be:</p> <ul style="list-style-type: none"> <li>a) Adequately sized to cater for maximum air volume;</li> <li>b) Capable of minimising particulate matter emissions during normal operations; and</li> <li>c) Fitted with a system for detection of broken bags.</li> </ul>	N/A

	Infrastructure	Design and construction / installation requirements	Infrastructure location
8.	Main stack	<ul style="list-style-type: none"> <li>a) Designed and constructed to receive emissions from the Biolron furnace;</li> <li>b) Discharge height to be constructed to a minimum of 30m; and</li> <li>c) Main stack must be fitted with a monitoring port that meets the requirements of AS4323.1.</li> </ul>	As shown in Figure 1 and generally within in accordance with the layout shown in Figure 2 in Schedule 1
9.	Emergency vent stack	<ul style="list-style-type: none"> <li>a) Designed and constructed to operate during failure of the offgas system baghouse fan or afterburner;</li> <li>b) Discharge height to be constructed to a minimum of 30m; and</li> <li>c) Emergency vent stack must be fitted with a monitoring port that meets the requirements of AS4323.1</li> </ul>	
10.	Raw materials baghouse stack	<ul style="list-style-type: none"> <li>a) Designed and constructed to receive emissions from the raw materials handling area conveyor transfers;</li> <li>b) Discharge height to be constructed to a minimum of 14m; and</li> <li>c) Raw materials baghouse stack must be fitted with a monitoring port that meets the requirements of AS4323.1.</li> </ul>	
11.	Induction furnace baghouse stack	<ul style="list-style-type: none"> <li>a) Designed and constructed to receive emissions from the induction furnace hood;</li> <li>b) Discharge height to be constructed to a minimum of 14m; and</li> <li>c) Induction furnace baghouse stack must be fitted with a monitoring port that meets the requirements of AS4323.1.</li> </ul>	
12.	Conveyors:	All conveyors are to be enclosed with dust seals and dust extraction at transfer points.	
13.	Stockpiling areas: (Iron ore stockpiles, Flux stockpiles (i.e. limestone), Biomass stockpiles).	<ul style="list-style-type: none"> <li>a) Walled concrete bunkers to be constructed to accept raw material. Concrete bunkers are fitted with dust suppression system to mitigate dust emissions both inside and outside of the facility;</li> <li>b) A dust suppression fogging system to be fitted to the iron ore concrete bunker stockpiles;</li> <li>c) Unloading area to be located within the existing building; and</li> <li>d) Biomass storage silos to be fitted with dust filtration units.</li> </ul>	
14.	Slag storage	Designed and constructed to ensure slag is stored within bunded bunker (walls and floors or bund to achieve a permeability of $1 \times 10^{-9}$ m/s or less).	
15.	Directly Reduced Iron (DRI) storage:	<ul style="list-style-type: none"> <li>a) Constructed on a bunded hardstand;</li> <li>b) DRI fines are to be stored and cooled in silos; and</li> <li>c) After passivation, DRI must be stored in dust tight bags or drums.</li> </ul>	

	Infrastructure	Design and construction / installation requirements	Infrastructure location
16.	Site - general	a) The premises must designed and constructed to direct non-contaminated surface water to diversion bunds / containment drains or directly into the stormwater disposal basins. b) The premises must be designed and constructed to prevent the ingress of stormwater runoff from the premises. c) Potentially contaminated stormwater storage must be designed and constructed to ensure that potentially contaminated water and spills are contained and directed to an impervious tank for removal off site.	Generally, in accordance with the layout shown in Figure 3, Schedule 1.
17.	Storage of environmentally hazardous materials	Located within a bunded areas (walls and floors or bund to achieve a permeability of $1 \times 10^{-9}$ m/s or less).	As shown in Figure 1 and generally within in accordance with the layout shown in Figure 2 in Schedule 1
18.	Wastewater	Wastewater storage tanks are to be fitted with water level sensors, temperature probes and sealed emergency overflow sumps.	

### Compliance reporting

2. The works approval holder must within 30 calendar days of an item of infrastructure or equipment required by condition 1 being constructed and/or installed:
  - (a) undertake an audit of their compliance with the requirements of condition 1; and
  - (b) prepare and submit to the CEO an Environmental Compliance Report on that compliance.
3. The Environmental Compliance Report required by condition 2, must include as a minimum the following:
  - (a) certification by a suitably qualified engineer that the items of infrastructure or component(s) thereof, as specified in condition 1, have been constructed in accordance with the relevant requirements specified in condition 1;
  - (b) as constructed plans and a detailed site plan for each item of infrastructure or component of infrastructure specified in condition 1; and
  - (c) be signed by a person authorised to represent the works approval holder and contains the printed name and position of that person.

### Ambient air quality plan

4. The works approval holder must, at least 2 months prior to the commencement of environmental commissioning, provide to the CEO, an Ambient Air Quality Monitoring Plan.
5. The Ambient Air Quality Monitoring Plan required by condition 4 must include as a minimum the following:
  - (a) a plan developed in conjunction with an air quality monitoring consultant to conduct air quality monitoring for the purposes of monitoring emissions from the premises and potential impacts to the closest sensitive receptor(s);
  - (b) include suitable locations surrounding the premises, including nearby sensitive receptors;

- (c) include air quality monitors that are appropriately designed and installed to monitor for relevant air quality parameters, including but not limited to PM<sub>2.5</sub>, PM<sub>10</sub>, NO<sub>2</sub> and meteorological conditions at a minimum;
- (d) air quality monitoring that meets the relevant Australian Standard for the methodology selected, and in accordance with AS/NZS 3580.1.1; and
- (e) undertake monitoring during environmental commissioning and time limited operations at a suitable frequency and duration to achieve the objective required by part (a) of this condition.

## Environmental commissioning

### Commencement and duration

6. The works approval holder may only commence environmental commissioning for an item of infrastructure identified in condition 7 once the:
- (a) The Environmental Compliance Report as required by condition 2 has been submitted by the works approval holder; and
  - (b) The CEO has notified the works approval holder that the Ambient Air Quality Monitoring Plan as required by condition 4 meets the requirements of Condition 5.

### Requirements and emissions

7. During environmental commissioning, the works approval holder must ensure that the premises infrastructure and equipment listed in Table 2 and located at the corresponding infrastructure location is maintained and operated in accordance with the corresponding operational requirement set out in Table 2.

**Table 2: Infrastructure and equipment requirements during commissioning and time limited operations**

Infrastructure	Operational requirements
Biolron™ Furnace including microwave treatment section	<ul style="list-style-type: none"> <li>a) Waste gas from the furnace must be directed to the 'off-gas system' that includes afterburner, spray cooler, baghouse, fan and exhaust stack;</li> <li>b) The post combusted hot gas must be chilled through a spray cooler with the addition of dilution air;</li> <li>c) Cooled gas must be fed through a baghouse to remove the fine particles and then discharged into the atmosphere via an exhaust gas fan and stack; and</li> <li>d) Operated in accordance with design specifications.</li> </ul>
Off-gas system burner	<ul style="list-style-type: none"> <li>a) Coarse dust that drops to the bottom must be contained in a sealed vessel during maintenance / shutdown.</li> <li>b) If there is a loss of the off-gas fan (due to power failure or equipment failure) the gas exiting the afterburner vessel must exit via the emergency stack rather than the spray cooler.</li> </ul>
Induction Furnace	Operated to ensure that emissions generated through the induction furnace are collected by the furnace hood and dust removed by the induction furnace baghouse.
Off gas system baghouse/Induction furnace baghouse/raw materials baghouse	Must be operated at all times while the induction furnace, raw materials and off-gas system is operational.

Infrastructure	Operational requirements
Milling and Storage (hammer mill, bucket elevators, day bins, bag breakers, mix feed hoppers):	All dust emissions must be directed to a raw materials baghouse.
Conveyors	All conveyors must only be operated when the dust collectors at their associated transfer points are operational.
Stockpiling areas: (Iron ore stockpiles, Flux stockpiles (i.e. limestone), Biomass stockpiles).	A dust suppression/fogging system to be operational on the iron ore concrete bunker stockpiles as required to mitigate dust emissions.
Dust collectors	<ul style="list-style-type: none"> <li>a) All dust collectors must be monitored by a broken bag detection system;</li> <li>b) Faulty or broken bag filters must be replaced to ensure dust collectors are operated and effective;</li> <li>c) Must be operational during unloading and loading of raw products and processing; and</li> <li>d) Bags are to be replaced as per the manufacturer's specifications.</li> </ul>
Slag Storage	Slag must be stored and contained on a concrete bunker and taken off-site to a suitably licensed facility.
DRI Storage	DRI fines must be stored in bags / drums on a concrete bunker and reused as briquettes or disposed of at a suitably licensed facility.
Stormwater System	Potentially contaminated stormwater must be kept on site and disposed of at an appropriately licensed facility.
Vehicles	<ul style="list-style-type: none"> <li>a) Vehicle speeds are restricted to 25km/hr within the premises.</li> <li>b) All vehicles leaving the site to be enclosed or covered to prevent dust emissions leaving the premises.</li> <li>c) Transport operators to be trained in emergency response plans and have the capacity to respond to spill or discharges.</li> </ul>

8. During environmental commissioning, the works approval holder must ensure that the emissions specified in Table 3, are discharged only from the corresponding discharge points and only at the corresponding discharge point locations.



**Table 3: Authorised discharge points during commissioning and time limited operations**

Discharge point		Emissions	Discharge height (m)	Discharge point location
1.	Main stack	PM, CO, NO <sub>2</sub> , SO <sub>2</sub>	30	To be restricted to within the infrastructure footprint as shown in Figure 1.
2.	Emergency stack		30	
3.	Raw baghouse stack		14	
4.	Induction furnace stack		14	

### Monitoring during commissioning

9. The works approval holder must monitor emissions during environmental commissioning in accordance with Table 4.

**Table 4: Emissions to air monitoring during commissioning and time limited operations**

Discharge point	Parameter	Frequency	Averaging Period	Unit <sup>2</sup>	Method <sup>1, 3, 4</sup>
Main stack (Stack 1) (Off-gas system) Emergency Vent (Stack 2) Induction furnace (Stack 4)	Volumetric flow rate	Quarterly	N/A	m <sup>3</sup> /s	USEPA Method 2
	SO <sub>2</sub>		60 minutes	µg/m <sup>3</sup>	USEPA Method 6C
	NO <sub>2</sub>		60 minutes	µg/m <sup>3</sup>	USEPA Method 7E
	PM		60 minutes	mg/m <sup>3</sup> g/min	USEPA Method 5 or US EPA Method 17
Baghouse collection air emissions (Stack 3)	Exit velocity	Three individual tests during the commissioning period	N/A	m <sup>3</sup> /s	USEPA Method 2
	Particulate matter	At least twice within the environmental commissioning period.	60 minutes	mg/m <sup>3</sup> g/min	USEPA Method 5 or US EPA Method 17

Note 1: Duplicate sample runs are to be conducted consecutively on the same sampling day

Note 2: All units are to be reported as STP dry.

Note 3: Monitoring shall be undertaken to reflect normal operating conditions.

Note 4: Where any US EPA method refers to US EPA Method 1 for the sampling plane, this must be read as a referral to AS4323.1:2001.

10. The works approval holder must conduct ambient air quality monitoring during environmental commissioning as required, as specified by the Ambient Air Quality Monitoring Plan prepared in accordance with condition 4.
11. The works approval holder must record the results of all monitoring activity required by condition 9 and 10.

### Commissioning report

12. The works approval holder must submit to the CEO a report on the environmental

commissioning within 30 calendar days of the completion date of commissioning or 30 calendar days before the expiration date of the works approval, whichever is sooner.

13. The works approval holder must ensure the report required by condition 12 includes the following:
- (a) a summary of the commissioning, including timeframes and amount of material processed;
  - (b) a summary of monitoring results as recorded in accordance with conditions 9;
  - (c) A summary of the monitoring results as recorded in accordance with condition 10.
  - (d) a summary of the environmental performance of all infrastructure as constructed or installed, as applicable; and
  - (e) where the manufacturer's design specifications and the conditions of this works approval have not been met, what measures will the works approval holder take to meet them, and what timeframes will be required to implement those measures.

### Time limited operations

14. The works approval holder may only commence<sup>1</sup> time limited operations for an item of infrastructure identified in condition 1;
- (a) where an item of infrastructure is not authorised to undertake environmental commissioning, the Environmental Compliance Report as required by condition 2 has been submitted by the works approval holder for that item of infrastructure; and
  - (b) where an item of infrastructure is authorised to undertake environmental commissioning under condition 6, the Environmental Commissioning Report for that item of infrastructure as required by condition 12 has been submitted by the works approval holder.
15. The works approval holder may conduct time limited operation for an item of infrastructure specified in condition 1;
- (a) For a period not exceeding 180 calendar days following the works approval holder meeting the requirements of condition 14 for that item or infrastructure; or
  - (b) until such time as a licence for that item of infrastructure is granted in accordance with Part V of the *Environmental Protection Act 1986*, if one is granted before the end of the period specified in 15(a).
16. During time limited operations, the works approval holder must ensure that the premises infrastructure and equipment listed in Table 2 and located at the corresponding infrastructure location is maintained and operated in accordance with the corresponding operational requirements set out in Table 2.
17. During time limited operations, the works approval holder must ensure that the emissions specified in Table 3, are discharged only from the corresponding discharge points and only at the corresponding discharge point location.

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<sup>1</sup> Time limited operations may commence immediately following the works approval holder meeting the requirements of condition 14, or after this date, subject to the requirements of condition 15 and the expiration date of the works approval.

18. During time limited operations, the works approval holder must monitor emissions during time limited operations in accordance with Table 4.
19. During time limited operations, the works approval holder must conduct ambient air quality monitoring as specified by the Ambient Air Quality Monitoring Plan, prepared in accordance with condition 4.
20. The works approval holder must record the results of all monitoring activity required by condition 18 and 19.

### Noise emission verification

21. Prior to the completion of time limited operations, the works approval holder must retain the services of a person qualified and experience in the area of environmental noise assessment and who by their qualifications and experience is eligible to hold membership of the Australian Acoustical Society or the Australian Association of Acoustical Consultants to:
  - (a) investigate the nature of and extent of noise emissions from the premises, with the focus on tonality and nighttime noise emissions;
  - (b) assess in accordance with the methodology required in the *Environmental Protection (Noise) Regulations 1997*, the compliance of the noise emissions from the Premises, against the relevant assigned levels specified in those Regulations; and
  - (c) compile and submit to the works approval holder within 60 days, a report in accordance with condition 22.
22. The report prepared pursuant to condition 21(c) is to include:
  - (a) a description of the methods used for monitoring and/or modelling of noise emissions from the premises;
  - (b) details and the results of the investigation undertaken pursuant to condition 21(a);
  - (c) details and results of the assessment of the noise emissions from the premises, against the relevant assigned levels in the *Environmental Protection (Noise) Regulations 1997* undertaken pursuant to condition 21(b); and
  - (d) an assessment of noise levels against the most recent previous noise modelling assessment for the premises.
23. The noise emission verification report prepared pursuant to condition 21(c) is to be submitted to the CEO within 30 calendar days of being received by the works approval holder.
24. Where an assessment pursuant to condition 21(b) indicates that noise emissions do not comply with the relevant assigned levels in the *Environmental Protection (Noise) Regulations 1997*, the works approval holder must:
  - (a) Within 60 days of receiving an assessment report pursuant to condition 21(c) prepare a plan to ensure the undertaking of the licensed activity will no longer lead to any contravention of the *Environmental Protection (Noise) Regulations 1997*; and
  - (b) Provide to the CEO a copy of the plan prepared pursuant to condition 24(a) within 30 days of its preparation.

## Time Limited Operations Report

25. The works approval holder must submit to the CEO a report of the time limited operations within 30 calendar days of the completion date of time limited operations or 30 calendar days before the expiration date of the works approval, whichever is the sooner.
26. The works approval holder must ensure the report required by condition 25 includes the following:
  - (a) a summary of the time limited operations, including timeframes and amount of material processed;
  - (b) a summary of monitoring results as recorded in accordance with conditions 18 and 19;
  - (c) a summary of complaints received in accordance with condition 27;
  - (d) a summary of the environmental performance of all infrastructure as constructed or installed, as applicable; and
  - (e) where the manufacturer's design specifications and the conditions of this works approval have not been met, what measures will the works approval holder take to meet them, and what timeframes will be required to implement those measures.

## Records and reporting (general)

27. The works approval holder must record the following information in relation to complaints received by the works approval holder (whether received directly from a complainant or forwarded to them by the Department or another party) about any alleged emissions from the premises:
  - (a) the name and contact details of the complainant, (if provided);
  - (b) the time and date of the complaint;
  - (c) the complete details of the complaint and any other concerns or other issues raised; and
  - (d) the complete details and dates of any action taken by the works approval holder to investigate or respond to any complaint.
28. The works approval holder must maintain accurate and auditable books including the following records, information, reports, and data required by this works approval:
  - (a) the works conducted in accordance with condition 1;
  - (b) any maintenance of infrastructure that is performed in the course of complying with condition 1 and condition 7;
  - (c) complaints received under condition 27.
29. The books specified under condition 28 must:
  - (a) be legible;
  - (b) if amended, be amended in such a way that the original version(s) and any subsequent amendments remain legible and are capable of retrieval;
  - (c) be retained by the works approval holder for the duration of the works approval; and
  - (d) be available to be produced to an inspector or the CEO as required.

## Definitions

In this works approval, the terms in Table 5 have the meanings defined.

**Table 5: Definitions**

Term	Definition
Air quality monitoring consultant	Means a person who: <ol style="list-style-type: none"> <li>holds tertiary academic qualifications and/or has expertise in assessing and measuring air quality, and</li> <li>has a minimum of 5 years experience in the development and oversight of air quality monitoring programs that meet relevant Australia Standards; and</li> <li>has a sound understanding of relevant Australian guidelines for air quality assessment.</li> </ol>
AS/NZS 3580.5-2011	means <i>Australian / New Zealand Standard (AS) 3580.5.1-2011, Methods for Sampling and Analysis of Ambient Air – Determination of Oxides of Nitrogen – Direct Reading Instrumental Method.</i>
AS/NZS 3580.1.1	means AS 3580.1.1 Methods for sampling and analysis of ambient air – Guide to siting air monitoring equipment
AS 4323.1	means AS 4323.1 1995 Station Source Emissions – Selection of Sampling Positions
AS/NZS 3580.9.11	means AS 3580.9.11: 2022 Methods for sampling and analysis of ambient air Determination of suspended particulate matter – PM10 beta attenuation monitors
AS/NZS 3580.14	means AS 3580.14: 2014 Methods for sampling and analysis of ambient air Meteorological monitoring for ambient air quality monitoring applications
AS1940	Australian Standard AS1940 The storage and handling of flammable and combustible liquids
AS1692	Australian Standards AS1692 Steel Tanks for flammable and Combustible Liquids
AS4323.1	Australian Standard AS4323.1 <i>Stationary Source Emission Method 1: Selection of sampling positions</i>
books	has the same meaning given to that term under the EP Act.
CEO	means Chief Executive Officer. CEO for the purposes of notification means: Director General Department administering the <i>Environmental Protection Act 1986</i> Locked Bag 10 Joondalup DC WA 6919 <a href="mailto:info@dwer.wa.gov.au">info@dwer.wa.gov.au</a>
Department	means the department established under section 35 of the <i>Public Sector Management Act 1994</i> and designated as responsible for the administration of Part V Division 3 of the EP Act.
discharge	has the same meaning given to that term under the EP Act.
DRI	Direct Reduced Iron

Term	Definition
emission	has the same meaning given to that term under the EP Act.
environmental commissioning	means the sequence of activities to be undertaken to test equipment integrity and operation, or to determine the environmental performance, of equipment and infrastructure to establish or test a steady state operation and confirm design specifications.
Environmental Commissioning Report	means a report on any commissioning activities that have taken place and a demonstration that they have concluded, with focus on emissions and discharges, waste containment, and other environmental factors.
Environmental Compliance Report	means a report to satisfy the CEO that the conditioned infrastructure and/or equipment has been constructed and/or installed in accordance with the works approval.
EP Act	<i>Environmental Protection Act 1986 (WA).</i>
EP Regulations	<i>Environmental Protection Regulations 1987 (WA).</i>
NO <sub>2</sub>	Oxides of nitrogen
PM	Particulate matter
PM <sub>2.5</sub>	means particulate matter with an aerodynamic diameter of less or equal to 2.5µm
PM <sub>10</sub>	means particulate matter with an aerodynamic diameter of less or equal to 10µm
premises	the premises to which this licence applies, as specified at the front of this licence and as shown on the premises map (Figure 1) in Schedule 1 to this works approval.
prescribed premises	has the same meaning given to that term under the EP Act.
SO <sub>2</sub>	Sulfur dioxide
STP Dry	Means standard temperature and pressure (0°Celsius and 101.325 Kilopascals respectively) dry
Suitably qualified engineer	means a person who holds a tertiary academic qualification in engineering and has a minimum 5 years of experience working in their area of expertise
time limited operations	refers to the operation of the infrastructure and equipment identified under this works approval that is authorised for that purpose, subject to the relevant conditions.
USEPA Method 2	United States (of America) Environmental Protection Agency <i>Determination of Stack Gas Velocity and Volumetric Flow Rate (Type S Pitot Tube).</i>
USEPA Method 6C	United States (of America) Environmental Protection Agency <i>Determination of sulfur dioxide emissions from stationary sources</i>
USEPA Method 7E	United States (of America) Environmental Protection Agency <i>Determination of nitrogen oxide emissions from stationary sources (instrument analyser procedure)</i>
USEPA Method 26 or 26A	United States (of America) Environmental Protection Agency <i>Hydrogen halide and Halogen – Isokinetic Method</i>
waste	has the same meaning given to that term under the EP Act.

Term	Definition
Wastewater	Means process water collected from dust suppression sprays, mixer water, off gas spray cooler water and emergency cooling water.
works approval	refers to this document, which evidences the grant of the works approval by the CEO under section 54 of the EP Act, subject to the conditions.
works approval holder	refers to the occupier of the premises being the person to whom this works approval has been granted, as specified at the front of this works approval.

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**END OF CONDITIONS**



# Schedule 1: Maps

## Premises map

The boundary of the prescribed premises is shown in the map below (Figure 1).



**Figure 1: Map of the boundary of the prescribed premises**

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IR-T05 Works approval template (v6.0) (September 2022)





IR-T05 Works approval template (v6.0) (September 2022)



Figure 3: Stormwater and site drainage