

Works Approval

Works approval number	W6860/2023/1
Works approval holder	Cockatoo Island Mining Pty Ltd
ACN	628 239 065
Registered business address	Level 1, 91 Havelock St, West Perth WA 6005
DWER file number	DER2023/000633
Duration	07/05/2024 to 06/05/2027
Date of issue	07/05/2024
Premises details	Cockatoo Island Iron Ore Mine and Processing Facility Legal description - Mining Tenements M04/448, L04/49, G04/33, G04/34, G04/35, G04/36 and G04/37 COCKATOO ISLAND WA 6713

Prescribed premises category description (Schedule 1, <i>Environmental Protection Regulations 1987</i>)	Assessed production / design capacity
Category 5 (a and b): Processing or beneficiation of metallic or non-metallic ore	2,628,000 tonnes per annual period
Category 58: Bulk material loading or unloading via an open materials loading system	48,000 tonnes per day
Category 64: Landfill - Class II or III putrescible landfill site	500 tonnes per annual period

This works approval is granted to the works approval holder, subject to the attached conditions, on 5 May 2024, by:

Timothy Moran A/MANAGER, RESOURCE INDUSTRIES

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

Works approval history

Date	Reference number	Summary of changes
07/05/2024	W6860/2023/1	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; and

as set out in Table 1.

Table 1 Design and construction / installation requirements

	Infrastructure	Design and construction / installation requirements	Infrastructure location
1.	Mobile crushing and screening unit, comprising: Rockfill constructed Direct Shipping Ore (DSO) pad with stormwater drainage channels and unlined sumps	 Installation of gravity fed sprinkler system prior to works to suppress dust from vehicles and other construction activities. DSO pad designed to have diversion bunding to control stormwater, which is to be directed to unlined sumps for infiltration and capture of sediment 	To be installed within the proposed 'mobile crushing and screening area', as depicted in Figure 2 and Figure 3. Stormwater drainage sump and containment bund as depicted in Figure 5
2.	Ship loading facility	 Installation of gravity fed sprinkler system prior to commissioning to suppress dust from vehicles and other construction activities. 	Ship loading facility as depicted in Figure 6 and Figure 7.
		 Pile installation must not occur between 1st June and 30th October. 	
		• Soft start-up piling of at least 30 minutes must be used prior to the commencement of each pile driving event, with soft vibration hammering techniques used to drive piles through marine clay and other soft sediments.	
		 During pile installation, hammer drilling may only to be used for hard rock. 	
		 Pile installation must only occur during daylight hours 	
		 Installation of dust suppression system (sprayers) to be installed on ore bins to ensure DSO is moist prior to loading onto conveyors. 	
		 Installation of a programable logic controller on conveyors and feed bin to 	

	Infrastructure	Design and construction / installation requirements	Infrastructure location
		prevent overloading of conveyors.	
		Emergency stops fitted at operator control point.	
		Marine fauna monitoring during piling activities:	
		 Implement a significant marine fauna observation zone consisting of at least a two (2) kilometre radius from the shiploading facility (noise emitting source) whereby a suitably qualified and experienced marine fauna observer must undertake continuous significant marine fauna observation for a minimum of thirty (30) minutes prior to the commencement of pile driving, and at all times during pile driving activities 	
		 Implement an exclusion zone consisting of at least one (1) kilometre, radius from the noise emitting source whereby: 	
		 pile driving cannot commence should significant marine fauna be within the exclusion zone; and 	
		 pile driving activities to cease should significant marine fauna enter the exclusion zone during pile driving and are not to recommence until the animal(s) have moved outside the exclusion zone. 	
		• Duing piling activities, must engage suitably qualified and experienced Marine Fauna Observer(s) who have a demonstrated knowledge of significant marine fauna in the North-West region to undertake continuous observations in the observation zone and exclusion zone;	
		 Maintain a log of recorded sightings, locations and behaviours indicative of stress or disturbance of significant marine fauna, and submit these to the National Cetacean Sighting Database; and 	
		 Document and report to the CEO, DCCEEW and DBCA any incidents relating to significant marine fauna injury / mortality. 	
3.	Class II / III landfill facility	 Landfill must be sited on leeward side of Homer Waste Rock Landform above the water table; 	As depicted in Figure 2 and Figure 4
		Tip head to be no more than 15 m in	

	Infrastructure	Design and construction / installation requirements	Infrastructure location
		 length; Trenches to be excavated within the landfill surface with material stockpiled on either side to prevent surface water inflows, provide additional wind protection and provide a source of cleanfill. 	
		 Trenches are to have maximum dimensions of 15 m wide at the base, 50 m long and 5 m deep 	
4	Water cart	 Water cart(s) must be available and operational to effectively wet down dust generating areas during construction and vehicle movements within the premises. 	Within the premises boundary.

- 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 and experienced Engineer (eligible for membership of the Institute of Engineers, Australia) 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.
- 4. Where an item of infrastructure has been certified as not being located or constructed, or does not comply with the corresponding requirements, the Works approval holder must correct the non-compliant or defective works, prior to re-certifying, or provide to the CEO a description of, and explanation for, any departures from the requirements specified in condition 1 that do not require relocation or rectification and do not constitute a material defect along with the Environmental Compliance Report.

Time limited operations phase

Commencement and duration

5. The works approval holder may only commence time limited operations for an item of infrastructure identified in condition 1 where the Environmental Compliance Report as required by condition 2 has been submitted by the works

approval holder for that item of infrastructure.

- **6.** The works approval holder may conduct time limited operations for an item of infrastructure specified in condition 7 (as applicable):
 - (a) for a period not exceeding 180 calendar days from the day the works approval holder meets the requirements of condition 5 for that item of infrastructure; or
 - (b) until such time as a licence amendment 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 condition 6(a).

Time limited operations requirements

7. 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 requirement set out in Table 2.

	Site infrastructure and equipment	Operational requirement	Infrastructure location
1.	Mobile crushing and screening area	 Machinery maintained in accordance with manufacturer's specifications. 	As depicted in Figure 3
		• Dust suppression sprayers and water carts are to be used to mitigate dust generation from stockpiles, access roads and active tipping areas on the run of mine (ROM) pad.	
		 ROM pad diversion bunding to be monitored and re-instated if damaged by heavy rainfall events within two months of rain event. 	
		• Direct stormwater from within the DSO pad and mobile crushing and screening area to unlined sumps for infiltration and capture of sediment	
2.	Shiploading facility	• Loading arm must only to be operated while a ship is berthed and stationary (not warping).	As depicted in Figure 6
		 Ore not to be left on conveyor between shipping events. 	
		 Sprayers to be operational to effectively wet down dust generating activities, areas and stockpiles at all times. 	
3.	Class II / III landfill facility	 Disposal of waste by landfilling must only take place within the landfill areas shown in Figure 4. 	As depicted in Figure 4
		 No more than 500 tonnes per year of all waste types cumulatively may be 	

Site infrastructure and equipment	Operational requirement	Infrastructure location
	disposed of by landfilling	
	 No more than 100 tonnes per year of tyres may be disposed of by landfilling 	
	• Can only accept wastes that meet the acceptance criteria for Class II / III landfills defined in the Landfill Waste Classification and Waste Definitions 1996	
	• Windrows of excavated material to be placed on either side of each trench to prevent surface water ingress and act as a windbreak	
	 No waste is permitted to be disposed of above the constructed surface of Homer Waste Rock Landform (WRL) 	
	 Completed trenches must be progressively backfilled with clean fill and mounded to form water shedding structures; 	
	 No disposal of liquid wastes to the landfill; 	
	 Putrescible and potentially dispersive wastes to be covered with no less than 100 mm of clean fill at least fortnightly; and 	
	 Windblown wastes must be collected and returned to landfill at least once per calendar month. 	

Compliance reporting

- 8. The works approval holder must submit to the CEO a report on the time limited operations within 60 calendar days of the completion date of time limited operations or 60 calendar days before the expiration date of the works approval, whichever is the sooner.
- **9.** The works approval holder must ensure the report required by condition 8 includes the following:
 - (a) a summary of the time limited operations, including timeframes and amount of ore processed;
 - (b) a review of performance and compliance against the requirements specified in conditions of the works approval, including the requirements in Table 2; and
 - (c) 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)

- **10.** 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.
- **11.** 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 to comply with condition 7; and
 - (c) complaints received under condition 10.
- **12.** The books specified under condition 11 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 3 have the meanings defined.

Table 3: Definitions

Term	Definition	
annual period	a 12 month period commencing from 1 January until 31 December of the immediately following year.	
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</i> <i>1986</i> Locked Bag 10 Joondalup DC WA 6919 info@dwer.wa.gov.au	
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.	
DBCA	The government agency responsible for the administration of the <i>Biodiversity Conservation Act 2016</i> , which at the time of publication of this Ministerial Statement is the Department of Biodiversity, Conservation and Attractions.	
DCCEEW	Department of Climate Change, Energy, the Environment and Water.	
discharge	has the same meaning given to that term under the EP Act.	
emission	has the same meaning given to that term under the EP Act.	
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	Environmental Protection Act 1986 (WA).	
EP Regulations	Environmental Protection Regulations 1987 (WA).	
Marine Fauna Observer (MFO) or Marine Mammal Observer (MMO)	means a person who hold's an Internationally recognised MFO qualification in accordance with industry standards and at least five (5) years' experience in Australian waters.	
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.	

Term	Definition	
prescribed premises	has the same meaning given to that term under the EP Act.	
Suitably qualified	means a person who:	
and experienced engineer	 (a) holds a Bachelor of Engineering recognized by the Institute of Engineers; and 	
	(b) has a minimum of five years experience working in the area of engineering	
	or is otherwise approved by the CEO to act in this capacity.	
Significant marine fauna	Includes turtles, cetaceans, dugongs, sawfish and other marine fauna species listed under state or Commonwealth legislation.	
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.	
waste	has the same meaning given to that term under the EP Act.	
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.	

END OF CONDITIONS

Schedule 1: Maps

Premises map



Figure 1: Works approval prescribed premises boundary



Figure 2: Key premises infrastructure



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Figure 3: Proposed DSO pad and crushing and screening infrastructure location (both within the 'Mobile Crushing and Screening' area)



Figure 4: Landfill at Cockatoo Island



Figure 5: Drainage infrastructure



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Figure 6: Ship loader conceptual layout

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Figure 7: Ship loader general arrangement