



Works approval number W6691/2022/1

Works approval holder Newcrest Operations Limited
ACN 009 221 505
Registered business address Level 8, 600-602 St Kilda Road
MELBOURNE VIC 3004

DWER file number DER2018/001042-7

Duration 29/08/2022 to 29/08/2024

Date of issue 29 August 2022

Premises details Havieron Project Stage 1 Landfill
EAST PILBARA WA 6760

Legal description -
Part of Mining Tenement M45/1287
As defined by the coordinates in Schedule 2

Prescribed premises category description (Schedule 1, <i>Environmental Protection Regulations 1987</i>)	Assessed design capacity
Category 89: Putrescible Landfill Site - premises on which waste (as determined by reference to the waste type set out in the document entitled "Landfill Waste Classification and Waste Definitions 1996" published by the Chief Executive Officer, as amended from time to time) is accepted for burial.	Less than 5,000 tonnes per annual period.

This works approval is granted to the works approval holder, subject to the attached conditions, on 29 August 2022, by:

Abbie Crawford
A/MANAGER, WASTE INDUSTRIES

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

Works approval history

Date	Reference number	Summary of changes
29/08/2022	W6691/2022/1	Works approval granted for the construction and time limited operations of a Category 89 Putrescible Landfill Site.

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.	Landfill	<ol style="list-style-type: none">a) Constructed within the existing Stage 1 Waste Rock Landform (WRL);b) Designed and constructed to meet a capacity of up to 5,000 tonnes per annum;c) Each landfill cell base to be constructed from a 300mm compacted layer of soil with the following specifications:<ol style="list-style-type: none">i. soil is to be free from organic matter and other deleterious material; andii. Soil to have a dry density of 95% of the maximum dry density (or 5% air voids);d) Landfill cells must not be constructed within;<ol style="list-style-type: none">i. 100 metres of any surface water body; orii. 3 metres of the highest level of the water table aquifer;e) Landfill cells must not be directly sited above another, unless separated by a minimum of 1 m WRL material; andf) A 3m firebreak is to be maintained around each landfill cell.	As shown in Schedule 1: Maps, Figure1 and Figure 2

	Infrastructure	Design and construction / installation requirements	Infrastructure location
2.	Stormwater Management	a) The base of the landfill cell must have a minimum 2% grade slope away from the cell entrance to retain water that has been in contact with the waste; b) Bunds must be installed to divert stormwater from the landfill and to retain water that has come into contact with the waste on site; c) Bunds are to be 2m high and a minimum of 4.5m wide at 1:1 slopes; d) A 300mm drive-over bund is to be installed at the entrance of each cell to prevent stormwater ingress.	Within the prescribed premises as depicted in Schedule 1, Figure 1
3.	Fence	a) A 1.8m high chain-link fence must be installed around the landfill to prevent fauna access and contain windblown litter.	Within the prescribed premises as depicted in Schedule 1, Figure 2

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.

Time limited operations phase

Commencement and duration

4. 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.

5. The works approval holder may conduct time limited operations for an item of infrastructure specified in condition 6:
- (a) for a period not exceeding 180 calendar days from the day the works approval holder meets the requirements of condition 4 for that item of infrastructure; or
 - (b) until such time as a registration or 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 condition 5(a).

Time limited operations requirements and emission limits

6. During the 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.

Table 2: Infrastructure and operational requirements during time limited operations

	Infrastructure	Operation requirements	Infrastructure location
1.	Landfill	<ul style="list-style-type: none"> a) The tipping area is to be no wider than 30m and no higher than 2m; b) All waste loads entering the site are to be covered to prevent uncontrolled release of litter; c) Each landfill cell must be filled to a maximum height of 2m; and d) No burning of waste is to occur. e) A water cart is to be available on site at all times for fire-fighting purposes. 	As shown in Schedule 1: Maps, Figure 1 and Figure 2
3.	Stormwater Management	<ul style="list-style-type: none"> a) Bunding is to be maintained around each cell to divert stormwater from the landfill and to retain water that has come into contact with waste on site; and b) A 300mm drive-over bund is to be maintained at the entrance of each cell to prevent stormwater ingress. 	Within the prescribed premises as depicted in Schedule 1, Figure 1
4.	Fence	<ul style="list-style-type: none"> a) Boundary fencing shall be maintained around the premises to contain windblown waste and to prevent fauna access. 	

Waste acceptance

7. The works approval holder must only accept onto the premises waste of a waste type that:
- (a) does not exceed the rate at which waste is received for the specified prescribed premises categories; and
 - (b) which meets the corresponding acceptance specification,
- as set out in Table 3.

Table 3: Types of waste authorised to be accepted onto the premises

Waste type	Rate at which waste is received	Acceptance specification
Clean Fill	Combined total limit of 5,000 tonnes per annual period (must not contain more than 0.1 tonne of Special Waste Type 2)	N/A
Inert Waste Type 1		Waste containing visible asbestos or ACM shall not be accepted.
Inert Waste Type 2		Tyres and plastic
Putrescible Waste		May include covid-19 relate waste, including: (a) Used Personal Protective Equipment; (b) Used testing kits and equipment (Rapid Antigen Tests (RATs), Polymerase Chain Reaction (PCR) tests); and (c) Other non-infectious wastes.
Special Waste Type 2		Clinical waste: (a) sharps and syringes contained within a sharps container; and (b) bandages

8. The works approval holder must ensure that where waste does not meet the waste acceptance criteria set out in Condition 7, it is removed from the Premises by the delivery vehicle or, where that is not possible, stored in a quarantined storage area or container and removed to an appropriately authorised facility as soon as practicable.
9. The works approval holder is to ensure that Special Waste Type 2 is disposed of under the supervision of a designated Newcrest Operations Limited staff member.
10. The works approval holder must ensure that cover is applied to waste in accordance with Table 4 and that sufficient stockpiles of cover are maintained on site at all times.

Table 4: Cover Requirements

Waste type	Cover requirements
Clean fill	No cover required
Inert Waste Type 1	
Inert Waste Type 2	To be covered with 100mm of Type 1 inert waste, soil or clay by the end of the day in which the waste is deposited.
Putrescible Waste	To be covered with 300mm of Type 1 inert waste, soil or clay by the end of the day in which the waste is deposited.
Special Waste Type 2	To be covered with 1,000mm of Type 1 inert waste, soil or clay immediately after deposition.

Monitoring

11. The works approval holder must record the total amount of waste accepted onto the premises, for each waste type listed in Table 5, in the corresponding unit, and for each corresponding time period, as set out in Table 5.

Table 5: Waste accepted onto the premises

Waste Type	Units	Time Period
Clean fill	Tonnes	Each load arriving at the Premises.
Inert Waste Type 1		
Inert Waste Type 2		
Putrescible Waste		
Special Waste Type 2		

12. The works approval holder must record the total amount of waste removed from the premises, for each waste type listed in Table 6, in the corresponding unit, and for each corresponding time period set out in Table .

Table 6: Waste removed from the Premises

Waste Type	Units	Time Period
Waste type as defined in the Landfill Definitions	Tonnes	Each load rejected from the Premises.

Compliance reporting

13. The works approval holder must submit to the CEO a report on 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.
14. The works approval holder must ensure the report required by condition 13 includes the following:
- (a) a summary of the time limited operations, including timeframes and volumes of waste material processed and removed from the Premises (in tonnes);
 - (b) a review of performance and compliance against the conditions of the works approval; and
 - (c) where 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)

- 15.** 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.
- 16.** The works approval holder must record the location, on a plan, where all Special Waste Type 2 is disposed of at the premises.
- 17.** The works approval holder must record the following information in relation to the burial of Special Waste Type 2 at the premises:

 - (a) the date the waste was deposited;
 - (b) the name of the person who supervised the disposal; and
 - (c) a declaration that the waste was covered in accordance with the requirements of condition 10.
- 18.** 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 6;
 - (c) monitoring programmes undertaken in accordance with conditions 11 and 12;
 - (d) the location, and details of Special Waste Type 2 buried at the premises in accordance with conditions 16 and 17; and
 - (e) complaints received under condition 15.
- 19.** The books specified under condition 18 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 have the meanings defined.

Table 7: Definitions

Term	Definition
ACM	means asbestos containing material and has the meaning defined in the Guidelines for Assessment, Remediation and Management of Asbestos Contaminated Sites, Western Australia, (DOH, 2009)
annual period	a 12 month period commencing from 1 January until 1 January 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 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.
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	<i>Environmental Protection Act 1986</i> (WA).
EP Regulations	<i>Environmental Protection Regulations 1987</i> (WA).
landfill definitions	Means the document titled “Landfill Waste Classification and Waste Definitions 1996” published by the Chief Executive Officer of the Department of Water and Environmental Regulation as amended from time to time.
premises	the premises to which this works approval 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.
putrescible Waste	has the same meaning given to that term in the Landfill Definitions.
suitably qualified engineer	means a person who: <ul style="list-style-type: none"> a. holds a Bachelor of Engineering recognised by the Institute of Engineers, Australia; and b. has a minimum of at least five years of experience working in the area of civil engineering or is otherwise approved by the CEO to act in this capacity.
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

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

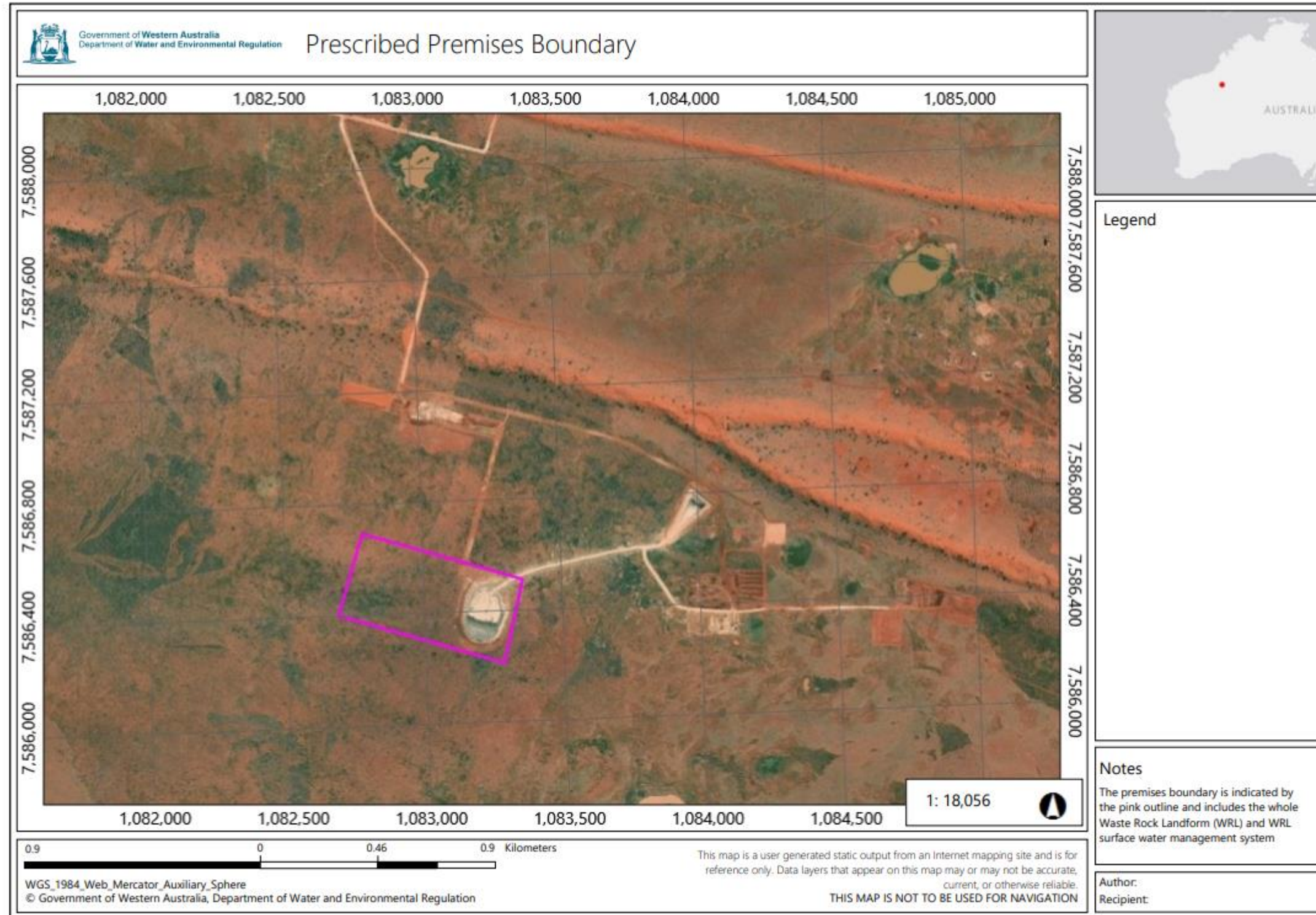


Figure 1: Map of the boundary of the prescribed premises

Schedule 2: Premises boundary

The premises boundary is defined by the coordinates in Table 8.

Table 8: Premises boundary coordinates

Easting	Northing
21.72768°S	122.62867°E
21.72914°S	122.63426°E
21.73186°S	122.63363°E
21.73033°S	122.62784°E