

Works approval number	nber W6579/2021/1		
Works approval holder	OZ Minerals Musgrave Operations Pty Ltd		
ACN	640 213 341		
Registered business address	Level 18, 171 Collins Street MELBOURNE VIC 3000		
DWER file number	DER2021/000448		
Duration	20/07/2022 to 19/07/2030		
Date of issue	20/07/2022		
Date of amendment	17 July 2024		
Premises details	West Musgrave Project Mining Licences: M 69/149, L 69/56 and L 69/57, as defined in Schedule 2		

Prescribed premises category description (Schedule 1, <i>Environmental Protection Regulations 1987</i> )	Assessed production / design capacity
Category 5: Processing or beneficiation of metallic or non-metallic ore: premises on which —	13.5 million tonnes per year
(a) metallic or non-metallic ore is crushed, ground, milled or otherwise processed; or	
(b) tailings from metallic or non-metallic ore are reprocessed; or	
(c) tailings or residue from metallic or non-metallic ore are discharged into a containment cell or dam.	
Category 52: Electric power generation: premises (other than premises within category 53 or an emergency or standby power generating plant) on which electrical power is generated using a fuel.	60MW
Category 57: Used tyre storage (general): premises (other than premises within category 56) on which used tyres are stored.	500 tyres
Category 62: Solid waste depot: premises on which waste is stored or sorted, pending final disposal or re-use, other than in the course of operating —	1,800 tonnes per year
(a) a refund point (as defined in the Waste Avoidance and Resource Recovery Act 2007 section 47C(1)) (a refund point); or	
(b) a facility or other place (an aggregation point) for the aggregation of containers that have been returned to refund points until those containers are accepted for processing or disposal.	

Category 73: Bulk storage of chemicals etc.: premises on which acids, alkalis or chemicals that —	8901 m <sup>3</sup> in aggregate
(a) contain at least one carbon to carbon bond; and	
(b) are liquid at STP (standard temperature and pressure),	
are stored.	

This amended works approval is granted to the works approval holder, subject to the attached conditions, on 17 July 2024 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	
20/07/2022	W6579/2021/1	Works approval granted	
16/11/2022	W6579/2021/1	Minor amendments to WWTP location and operation	
21/09/2023	W6579/2021/1	Amendment granted for changes to Category 5 processing infrastructure and throughput, modified dust controls at concentrate loading shed, modified TSF including installation of a seepage interception trench, increased landfill capacity and modified design and location, changes to volume of materials stored under Category 73, and inclusion of Category 77 (concrete batching plant) to enable off-site supply of concrete material to the nearby community.	
	W6579/2021/1	Amendment to Category 52 and 73 in relation to a temporary thermal power station to allow commissioning of a mobile power plant while the permanent plant is being constructed and commissioned.	
17/07/2024		Removal of Category 54 (wastewater treatment plant), Category 77 (concrete batching plant), Category 64 (landfill) and Category 12 (screening) from the works approval due to the construction of these categories being complete – moved across to licence L9375/2023/1.	

# 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 is authorised to:
  - (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.
- 2. The works approval holder must construct the critical containment infrastructure:
  - (a) in accordance with the corresponding design / construction requirements; and
  - (b) at the corresponding infrastructure location,

as set out in Table 2.

- **3.** The works approval holder must design, construct, and install groundwater monitoring wells in accordance with the requirements specified in Table 3.
- **4.** The works approval holder must undertake a baseline ambient groundwater sample according to Table 3 for the new bores. The results must compare against 95% level of species protection ANZG 2018 criteria.

	Infrastructure	Design and construction / installation requirements	Infrastructure location
	Ore processing infrastructure (category 5)		
1.	Primary and secondary crushing areas	<ul> <li>(a) Ore received at a ROM bin that feeds the Primary Crusher.</li> <li>(b) Ore crushing infrastructure includes dust collection: <ul> <li>i. that has a design flow rate of up to 45,000 m<sup>3</sup>/hr at 40 degrees C;</li> <li>ii. consisting of bag filtration system that is able to be regularly cleaned using pulse jetting;</li> <li>iii. that is capable of achieving a maximum dust discharge of 50 mg/Nm<sup>3</sup>; and</li> <li>iv. installed with a dust monitoring system in the stack outlet to enable remote identification of broken bags.</li> </ul> </li> <li>(c) Sprays must be fitted to the crusher discharge and stockpile feed conveyor belts with a droplet size suited for dust suppression.</li> </ul>	As depicted in Figure 6 and at the 'MPP' location depicted in Figure 1, of Schedule 1.
2.	Grinding circuit	<ul> <li>Grinding circuit consists of:</li> <li>(a) two vertical roller mills, each connected to air extraction units and baghouses, and operating in parallel;</li> <li>(b) that is capable of achieving a maximum dust discharge of 50mg/Nm<sup>3</sup>;</li> <li>(c) reject feed conveyors and ground ore conveyors that are covered;</li> <li>(d) reject feed bin;</li> <li>(e) ground ore storage silos;</li> <li>(f) hard piped vacuum system; for cleanup of any dry product spillage; and</li> <li>(g) four sumps located on a concrete area adjacent to the mills to allow collection of washdown runoff.</li> </ul>	As depicted in Figure 6 and at the 'MPP' location depicted in Figure 1, of Schedule 1.
3.	Flotation, product and waste circuit	<ul> <li>Flotation, product and waste circuit is contained within a bunded hardstand area and consists of:</li> <li>(a) repulp tank;</li> <li>(b) bulk rougher flotation cells;</li> <li>(c) regrind circuit;</li> <li>(d) bulk cleaner and recleaner floatation cells;</li> <li>(e) separation flotation cells;</li> <li>(f) nickel thickener;</li> <li>(g) copper thickener;</li> <li>(h) tailings thickener; and</li> <li>(i) connecting pipework.</li> </ul>	As depicted in Figure 6 and at the 'MPP' location depicted in Figure 1, of Schedule 1.

# Table 1: Design and construction / installation requirements

	Infrastructure	Design and construction / installation requirements	Infrastructure location
4.	Concentrate storage	<ul> <li>Concentrate storage shed constructed with:</li> <li>(a) concrete flooring;</li> <li>(b) doors to allow the shed to be closed during concentrate handling, unless where truck access is required, to minimise dust emissions;</li> <li>(c) a wheel wash at the truck exit point to capture wheel-carried contaminants on trucks exiting the shed;</li> <li>(d) a concrete apron between the loading area and the wheel wash; and</li> <li>(e) a dedicated storage container storage area.</li> </ul>	As depicted in Figure 6 and at the 'MPP' location depicted in Figure 1, of Schedule 1.
5.	Water storage infrastructure	e (a) Water storage infrastructure includes: As	
	Power generation (	category 52)	
6.	Permanent Thermal Electricity Generation Plant	manent rmal Electricity Generation Plant constructed with a maximum output of 60MW using diesel fuel and: (a) consisting of up to 24 engine generators each being a Caterpillar C175-20 or equivalent sized up to 3	
7.	Temporary Thermal Electricity Generation Plant	Temporary Thermal Electricity Generation Plant constructed with a maximum output of 60 MW using diesel fuel and: (a) Consisting of : (i) up to 63 containerised diesel generator sets, each with the capacity of up to 1.2Mwe; (ii) transformer substations (containerised), step-up transformers and neutral earthing resistors;	As depicted in Figure 8 and at the 'Temporary Power Plant' location depicted in Figure 1, of

	Infrastructure	Design and construction / installation requirements	Infrastructure location
		<ul> <li>(iii) Double bunded diesel fuel tanks;</li> <li>(b) installed on level building pad that is contained within a bunded area; and</li> <li>(c) to be installed as per manufacturers specifications.</li> </ul>	Schedule 1.
8.	Fuel storage	Constructed in accordance with row 4 of Table 2.	N/A
	Waste disposal fac	ilities (categories 57, 62 and 64)	
9.	Tyre storage	Tyre storage area capable of storing up to 500 tyres in compliance with AS 1940 in an area not accessible by public.	At the 'Landfill & Waste Transfer Station' location depicted in Figure 1, of Schedule 1.
10.	Solid waste storage and transfer	Solid waste transfer area constructed over a covered and bunded concrete pad to prevent stormwater access.	At the 'Landfill & Waste Transfer Station' location depicted in Figure 1, of Schedule 1.
	Stormwater management		
11.	Surface water management	<ul> <li>(a) Site must be designed to divert uncontaminated surface water runoff away from operational and concentrate storage areas.</li> <li>(b) Areas containing wet processing equipment must be concrete sealed and bunded to contain spills and runoff from these areas.</li> <li>(c) Process area constructed to allow residual stormwater to be captured in sediment ponds for reuse in ore processing evaporation.</li> </ul>	N/A

	Infrastructure	Design and construction / installation requirements	Infrastructure location
	Tailings storage facili	ty (category 5)	
1	Tailings storage facility	<ul> <li>Designed with the following characteristics: <ul> <li>(a) Maximum storage capacity (at final height) of 306 million tonnes across two cells.</li> <li>(b) Maximum starter embankment height: RL 471.3 m AHD.</li> <li>(c) Maximum overall downstream slope batter (external batters): 1V:3H (~20°).</li> <li>(d) Maximum upstream slope batter (internal batters): 1V:2H (~31°).</li> <li>(e) TSF embankment walls constructed: <ul> <li>i. with a permeability no more than 1 × 10<sup>-7</sup> m/s;</li> <li>ii. to at least 2 m below ground surface, or connected to the calcrete layer beneath the base of the TSF where intercepted within 2 m of the ground surface; and</li> <li>iii. with a rock armour along the western embankment walls of the TSF to prevent erosion from surface water flows during high rainfall events;</li> <li>(f) Fractured and/or brecciated foundation under the starter embankment must be ripped and recompacted where intercepted within 2 m of the ground surface.</li> <li>(g) Embankment walls compacted to achieve a dry density of greater than 95% standard maximum dry density.</li> <li>(h) Constructed with underdrainage approximately 50 m and 100 m upstream of the toe and 1x underdrainage beneath each of the two decant pond locations.</li> <li>(i) Under drainage infrastructure must be installed within filter compatible zones of gravel and sand to minimise the potential for clogging during operation.</li> <li>(j) Toe drains constructed along downstream embankments approximately 1 m deep and graded to sump locations.</li> <li>(k) Vibrating wire piezometers installed for the purpose of monitoring the ongoing performance of the drains.</li> <li>(j) Seepage interception trench installed approximately 50 m from the downstream toe of the tailings storage facility embankments (in the upgradient groundwater direction) to a depth of at least 4 m; and</li> </ul> </li> </ul></li></ul>	As depicted in Figures 2, 3 and 4, at the 'TSF' location depicted in Figure 1, of Schedule 1.
2	Tailings and return water pipelines	Decant system.         constructed with slope batters of 1V:2H and a nominal crest width of 7 m;	As depicted in Figure 2, and at the 'TSF' location depicted in Figure 1, of

# Table 2: Critical containment infrastructure design and construction requirements

	Infrastructure	Design and construction / installation requirements	Infrastructure location
		permanent floating turret pump with a minimum capacity of 60L/s located in the decant supernatant pond (on the TSF) and which reports to the Decant Return Pond; and	Schedule 1.
		floating turret decant system to be installed at the TSF and able to capture supernatant v a minimum depth of 250 mm.	vater to
		TSF water recovery system designed to capture and pump water directly from TSF pond downstream embankment toe drains to the process plant and/or the Decant Return Wate defined in row 3 of this table.	
		Tailings and return water pipelines to be:	
		(e) placed so as to avoid interaction with site vehicles and machinery;	
		<ul> <li>(f) bunded within a trench at least 500mm deep to contain discharges. Bunding must direct captured discharge to scour pits constructed at low elevation points to provide contain capacity of a pipeline leak;</li> </ul>	
		(g) installed with pressure/flow sensors and alarms capable of detecting pipeline failure an alerting personnel to prevent continued discharge; and	ld
		(h) fitted with isolation valves.	
3	Process water pond and Decant Return Water Pond	<ul> <li>(a) Process water pond must be constructed with a minimum storage capacity of 34,000 m</li> <li>(b) Decant Return Water Pond must be constructed with a minimum storage capacity of 9,0</li> <li>(c) Process Water Pond and Decant Return Water Pond must be:</li> </ul>	
		<ul> <li>installed with leak detection system;</li> <li>fitted with water level indicators and control alarms; and</li> </ul>	
		iii. lined in accordance with the requirements specified below.	Decant Return Water Pond as depicted as
		Item Property/construction requirement	'Process Water Dam' in
		Liner properties HDPE liners must have the following properties:	Figure 2 of Schedule 1.
		<ul> <li>Minimum 1.0mm thickness;</li> <li>Specific gravity of 0.94 or more;</li> <li>Melt index of 0.05 g to 0.40 g in 10 minutes;</li> <li>Carbon black content of 2-3%;</li> <li>Minimum tensile strength at yield of 18N/mm;</li> <li>Minimum tensile strength at break of 18 N/mm;</li> <li>Minimum elongation at yield of 10%, and at break 300%</li> </ul>	

	Infrastructure         Design and construction / installation requirements         I		Infrastructure location
		<ul> <li>Liner fabrication</li> <li>Liners must be fabricated to form the shape of the pond e</li> <li>All seams and joins made on the premises must be contin</li> <li>Panels of the liner must be overlapped by a minimum of the heat welding or mechanical joining</li> </ul>	nuous; 100 mm, prior to
		• Membrane welding materials must be supplied by the line and be identical with the liner membrane	er manufacturer,
		• All seams and joins, where applicable, must be construct watertight over in accordance with manufacturer specification.	
		Shear resistance • Shear resistance must be tested in accordance with AST	M D5321
	Chemical storage (cate	ngory 73)	
4	Fuel storage and delivery areas	<ul> <li>All bulk fuel storage and handling to be constructed in accordance with AS 1940 and and:</li> <li>(a) fitted with leak detection system and alarms;</li> <li>(b) equipped with high level alarms to prevent overflow during operation;</li> <li>(c) designed to be able to transfer potentially contaminated stormwater within but to an oily water separator.</li> </ul>	Storage' and 'Permane Power Plant' location depicted in Figure 1, of Schedule 1
5	Permanent electricity generation fuel storage area	Self-bunded bulk diesel tanks and associated distribution and refilling infrastructure, v capacity of up to 2.6 ML.	with a total At the 'Diesel Storage Tank' location depicted in Figure 8, of Schedule 1.
6	Temporary electricity generation fuel storage area	Self-bunded bulk diesel tanks and associated distribution and refilling infrastructure, v capacity of up to 2.6 ML.	with a total At the 'Hydrocarbon Storage' location depicted in Figure 1, of Schedule 1.
7	NPI Bulk Fuel Farm	<ul> <li>(a) Bulk diesel storage and refilling infrastructure including 5 x 250 kL self-bunded tar total capacity of up to 1.25 ML;</li> <li>(b) Fuel unloading and refueling areas constructed with reinforced concrete slab grac to a low point with collection sump to contain spills and leaks.</li> </ul>	Storage' location
8	Aviation Fuel Storage	<ul> <li>(a) Aviation fuel storage area containing a self-bunded tank with total capacity of 110</li> <li>(b) Fuel unloading and refueling areas constructed with reinforced concrete slab grates to a low point with collection sump to contain spills and leaks.</li> </ul>	

	Infrastructure	Design and construction / installation requirements	Infrastructure location
9	Accommodation Village Fuel Storage	3 x self-bunded bullet style 67 kL diesel tanks and associated distribution and refilling infrastructure, total capacity of 201 kL.	At the 'Hydrocarbon Storage' location depicted in Figure 1, of Schedule 1.
10	Exploration Camp Fuel Storage	<ul> <li>(a) 4 x self-bunded bullet style 110 kL diesel tanks and associated distribution and refilling infrastructure for heavy vehicles;</li> <li>(b) 2 x self-bunded bullet style 55kL diesel tanks and associated distribution and refilling infrastructure for heavy vehicles; and</li> <li>(c) 1 x self-bunded bullet style 50 kL diesel tanks and associated distribution and refilling infrastructure for light vehicles.</li> </ul>	At the 'Hydrocarbon Storage' location depicted in Figure 1, of Schedule 1.
11	Reagents storage area	All components of the reagents mixing and handling facility to be constructed within bunded concrete containment slab equipped with sump pumps. Bunded area to have a minimum capacity of 110% of the largest container stored within it or 25% of the volume of all containers, whichever is larger. Reagent tanks to be equipped with high level alarms to prevent overflow. Storage infrastructure constructed in compliance with AS 1940 and AS 3833.	At the 'MPP' location depicted in Figure 1, of Schedule 1.
12	Waste oil storage	Consisting of three bunded, above ground storage tanks with a total capacity of up to 255 KL. Storage infrastructure constructed in compliance with AS 1940 and AS 3833.	At the 'Hydrocarbon Storage' location depicted in Figure 1, of Schedule 1.
13	Bulk Logistics yard	<ul> <li>Bulk diesel storage and filling facilities for servicing the bulk transportation trucks and consisting of the following:</li> <li>(a) 2 x self bunded bullet style 110 kL diesel tanks and associated distribution and refilling infrastructure</li> <li>(b) Total capacity of 220 kL</li> </ul>	At the 'NPI' location depicted in Figure 1, of Schedule 1.
14	MPP Fuel storage	<ul> <li>Bulk diesel storage for VRM hot gas generators., consisting of the following:</li> <li>(a) 2 x double skinned (i.e., self-bunded) above ground storage tank and associated transfer infrastructure, with a total capacity of 4,000 L (each tank 2,000 L)</li> </ul>	At the 'MPP' location depicted in Figure 1, of Schedule 1.
15	Mobile fuel storage	Self-bunded bulk diesel storage servicing miscellaneous mining operations across the Prescribed Premises, with a total capacity of 0.5ML.	N/A - mobile

	Infrastructure	Design and construction / installation requirements	Infrastructure location	Timeframe
1.	Groundwater monitoring bores	<ul> <li>(a) Groundwater monitoring bores installed at the locations referenced in Table 11 and depicted in Figure 10, of Schedule 1 including shallow and deep nested bores targeting both the shallow sand layer and deeper aquifer at monitoring locations as outlined in Figure 10, as well as three deep groundwater monitoring bores located at the landfill, as per Figure 10.</li> <li>(b) Well design and construction must be in accordance with ASTM D5092/D5092M-16: Standard practice for design and installation of groundwater monitoring bores.</li> <li>(c) Well screens must target the part, or parts, of the aquifer most likely to be affected by contamination.</li> <li>(d) The bores must be logged during the installation of the monitoring wells. A record of the geology encountered during drilling must be described and classified in accordance with Australian Standard AS 1726.</li> </ul>	As depicted in Figure 10, of Schedule 1.	"TSF bores" listed in Table <b>9</b> must be constructed, developed (purged), sampled and determined to be operational at least 12 months prior to deposition of tailings material into the TSF.

 Table 3: Groundwater monitoring infrastructure requirements

## **Compliance reporting**

- **5.** The works approval holder must within 30 calendar days of an item of infrastructure or equipment required by conditions 1 and 3 being constructed and/or installed:
  - (a) undertake an audit of their compliance with the requirements of condition 1;
  - (b) baseline ambient groundwater results according to condition 4; and
  - (c) prepare and submit to the CEO an Environmental Compliance Report on that compliance.
- **6.** The Environmental Compliance Report/s required by condition 5, 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 rows 1 to 5 (inclusive), row 6 to row 8 (inclusive) and row 11 of Table 1, have been constructed in accordance with the relevant requirements specified in condition 1;
  - (b) certification by a person authorised to represent the works approval holder that the items of infrastructure or component(s) thereof, as specified in row 9 and 10 of Table 1, and row 1 of Table 3, have been constructed in accordance with the relevant requirements specified in condition 1;
  - (c) as constructed plans and a detailed site plan for each item of infrastructure or component of infrastructure specified in condition 1;
  - (d) be signed by a person authorised to represent the works approval holder and contains the printed name and position of that person; and
  - (e) 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 Table 1 and/or Table 3 that do not require relocation or rectification and do not constitute a material defect along with the Environmental Compliance Report.
- 7. The works approval holder must, within 60 calendar days of the critical containment infrastructure identified by condition 2 being constructed:
  - (a) undertake an audit of compliance with the requirements of condition 2; and
  - (b) prepare and submit to the CEO a Critical Containment Infrastructure Report on that compliance.
- **8.** The Critical Containment Infrastructure Report/s required by condition 7 must include as a minimum the following:
  - (a) certification by a suitably qualified Tailings Dam Design Engineer or their delegate such that each item of critical containment infrastructure or component thereof, as specified in rows 1 and 2 of Table 2, has or has not been built and installed in accordance with the requirements specified in condition 2, and is fit for its intended purpose;
  - (b) 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 rows 3 to 15 (inclusive) of Table 2, have been constructed in accordance with the relevant requirements specified in condition 2;

- (c) as-constructed plans and a detailed site plan showing the location and dimensions for each item of critical containment infrastructure or component thereof, as specified in condition 2;
- (d) as-constructed permeability of the embankment, foundation, liner around each decant structure and the process water pond;
- (e) photographic evidence of the installation of the infrastructure;
- (f) 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 Table 2 that do not require relocation or rectification and do not constitute a material defect, along with the Critical Containment Infrastructure Report; and
- (g) be signed by a person authorised to represent the works approval holder and contains the printed name and position of that person.

## **Environmental commissioning phase**

#### **Environmental commissioning requirements**

- **9.** The works approval holder may only commence environmental commissioning of the infrastructure in each stage of construction listed in condition 1 once the Environmental Compliance Report has been submitted for that stage of construction in accordance with conditions 5 of this works approval.
- **10.** Any environmental commissioning activities undertaken for an item of infrastructure specified in condition 1 may only be carried out:
  - (a) in accordance with the corresponding commissioning requirements; and
  - (b) for the corresponding authorised commissioning duration,

as set out in Table 4.

#### Table 4: Environmental commissioning requirements

Infrastructure	Commissioning requirements	Authorised commissioning duration
West Musgrave Processing Plant – Infrastructure specified in rows 1 to 5	Environmental commissioning to validate and check integrity and design parameters of tanks, ponds, pipelines, bunds with water and ore. Emission testing during commissioning to determine equipment effectiveness; and ability to comply with time limited operating conditions of this Works Approval.	26 weeks
(inclusive) of Table 1	Dust spray flow rates and droplet sizes adjusted to maximise dust suppression effectiveness.	
	Vacuum, ventilation and baghouse systems, broken bag alarms and dust monitoring system operational when handling ore.	
	Environmental commissioning to validate and check design parameters of facilities with water and ore.	
	Tailings produced to be sent to the TSF, providing the Critical Containment Infrastructure Report required by condition 7 has been assessed as per condition 11, and compliance with commissioning requirements met.	

	Record tonnes of ore processed during commissioning.	
Permanent thermal electricity generation plant	Emission testing during commissioning to determine equipment effectiveness.	26 weeks
Temporary thermal electricity generation plant	Environmental commissioning to ensure plant is operating as per design/manufacturers specifications and operating to ensure optimal performance.	12 weeks
Mining fleet fuel storage area	Tanks, system valves, pumps, pipelines, and other fittings must be tested to ensure integrity and that they are free from leaks. High level alarms and automated shut-offs tested to ensure that they are operational.	10 weeks
Permanent electricity generation fuel storage area	Tanks, system valves, pumps, pipelines, and other fittings must be tested to ensure integrity and that they are free from leaks. High level alarms and automated shut-offs tested to ensure that they are operational.	18 weeks
Temporary electricity generation fuel storage area	Tanks, system valves, pumps, pipelines, and other fittings must be tested to ensure integrity and that they are free from leaks. High level alarms and automated shut-offs tested to ensure that they are operational.	12 weeks

**11.** The works approval holder may only commence environmental commissioning for an item of critical containment infrastructure listed in condition 2:

- (a) where the CEO has notified the works approval holder that the Critical Containment Infrastructure Report for that item of infrastructure as required by condition 7 meets the requirements of that condition; or
- (b) where at least 10 business days have passed after the Critical Containment Infrastructure Report for that item of infrastructure as required by condition 7 has been submitted to the CEO.
- **12.** The works approval holder must ensure that any environmental commissioning activities undertaken for an item of critical containment infrastructure specified in condition 2 may only be carried out:
  - (a) in accordance with the corresponding commissioning requirements; and
  - (b) for the corresponding authorised commissioning duration,

as set out in Table 5.

#### Table 5: Environmental commissioning – critical containment infrastructure

Infrastructure	Commissioning requirements	Authorised commissioning duration
TSF and tailings/ return water pipelines	Vibrating wire piezometers determined to be operational. Tailings and return water pipelines must be hydrotested and pipeline leak detection tested.*	26 weeks
	*Tailings pipeline leak detection equipment is permitted to be off for a period while flow is stabilised in the pipeline. During this time the works approval holder must	

	inspect tailings and return water pipelines at least 12 hourly.
	Record tonnes of tailings deposited and seepage recovery rates during commissioning.
Process water pond	Water level indicators and associated control system alarms tested to ensure that they are operational. Freeboard of 300 mm must be maintained.

**13.** During environmental commissioning, the works approval holder must ensure that the emission specified in Table 6, are discharged only from the corresponding discharge point and only to the corresponding discharge point location.

Table 6: Authorised discharge points during commissioning

Emission	Discharge point	Discharge point location
Minerals Processing Plant dust extraction unit discharge to air	Discharged from a stack via extraction unit and baghouse.	'Dust extraction' as depicted in Figure 6 of Schedule 1
Tailings discharged to containment cells via pipeline	TSF	'TSF' as depicted in Figure 2 of Schedule 1
Permanent Thermal Electricity Generation Plant exhaust to air	Discharged from a stack at each genset unit.	'Thermal Power Station' as depicted in Figure 8 of Schedule 1
Temporary Thermal Electricity Generation Plant exhaust to air	Discharged from a stack at each genset unit.	As depicted in Figure 9 of Schedule 1

#### **Environmental commissioning reporting**

- **14.** The works approval holder must submit to the CEO an Environmental Commissioning Report within 60 calendar days of the completion date of environmental commissioning for each item of infrastructure or critical containment infrastructure specified in conditions 10 and 12.
- **15.** The works approval holder must ensure the Environmental Commissioning Report required by condition 14 of this works approval includes the following:
  - (a) a summary of the environmental commissioning activities undertaken, including timeframes and amount of ore processed;
  - (b) a summary of the environmental performance of each item of infrastructure or equipment as constructed or installed, which at minimum includes records detailing:
    - (i) the amount of tailings disposed to the TSF, depicted in Figure 2 of Schedule 1;
  - (c) a review of the works approval holder's performance and compliance against the conditions of this works approval; and
  - (d) where they have not been met, measures proposed to meet the manufacturer's design specifications and the conditions of this works approval, together with timeframes for implementing the proposed measures

## Time limited operations phase

#### **Commencement and duration**

**16.** The works approval holder may only conduct time limited operations for an item of infrastructure identified in conditions 1 and 2:

- (a) for a period not exceeding 180 calendar days from the completion date of environmental commissioning; or
- (b) until such a time as a licence is granted for that infrastructure in accordance with Division 3, Part V of the *Environmental Protection Act 1986*,

whichever is sooner.

#### Time limited operations requirements and emission limits

**17.** During time limited operations, the works approval holder must ensure that the premises infrastructure and equipment listed in Table 7 and located at the corresponding infrastructure location is maintained and operated in accordance with the corresponding operational requirement set out in that table.

#### Table 7: Infrastructure and equipment requirements during time limited operations

	Site infrastructure and equipment	Operational requirement	Infrastructure location
1.	Minerals Processing Plant	<ul> <li>Record tonnes of ore processed during time limited operation.</li> </ul>	Figure 4 in Schedule 1
		<ul> <li>Vacuum, ventilation and baghouse systems, broken bag alarms and dust monitoring system operational when handling ore.</li> </ul>	
		<ul> <li>Tailings thickener tank must be operated to process tailings to have a solids density of at least 60% (w/w%) prior to discharge of tailings to the TSF.</li> </ul>	
		<ul> <li>Concentrate storage shed doors remain closed during concentrate handling, unless where truck access is required, to minimise dust emissions.</li> </ul>	
		<ul> <li>Daily inspection and cleaning of concentrate storage shed exit road when concentrate is handled.</li> </ul>	
		<ul> <li>Any spills of concentrate on the concentrate storage shed exit road shall be immediately recovered.</li> </ul>	
2.	TSF	• No more than 9.33 million tonnes of tailings deposited to the TSF per annual period in the first 18 months from first deposition and then no more than 12 million tonnes of tailings deposited to the TSF per annual period thereafter.	Figure 2 in Schedule 1
		<ul> <li>Tailings discharged sub-aerially and cyclically into the facility in thin discrete layers.</li> </ul>	
		<ul> <li>Decant pond to be maintained to maximum 5% of the TSF area.</li> </ul>	
		Minimum freeboard of 550 mm maintained.	
		<ul> <li>Record tonnes of wet tailings deposited during time limited operations.</li> </ul>	
		<ul> <li>Continually monitor the measured flow rate on the outflow of the underdrainage system to monitor the performance of the underdrains.</li> </ul>	
		<ul> <li>Seepage collected from underdrainage and sumps must not return to the TSF.</li> </ul>	
		<ul> <li>Continually monitor the measured flow rate on the outflow of the seepage interception trench to monitor the performance of the interception trench.</li> </ul>	
		<ul> <li>Seepage collected from seepage interception trench must not return to the TSF.</li> </ul>	

		Seepage interception trench inspected daily to confirm integrity and operational performance.	
3.	Process water pond and Decant Return Water Pond	Minimum freeboard of 300 mm maintained.	Figure 1 in Schedule 1
4.	Tailings and return water pipelines	<ul><li>Inspected daily to confirm integrity.</li><li>Record spills location and volume.</li></ul>	Figure 2 in Schedule 1
5.	Groundwater monitoring (TSF)	• Monitor groundwater in accordance with condition 25.	Figure 10 in Schedule 1
6.	Tyre storage	• Tyre storage area capable of storing up to 500 tyres in compliance with AS 1940 in an area not accessible by public.	Figure 1 in Schedule 1
7.	Solid waste storage and transfer	<ul> <li>Solid wastes stored within bunded storage areas.</li> <li>Solid wastes stored within the solid waste transfer area and hydrocarbon waste transfer area must be covered.</li> </ul>	Figure 1 in Schedule 1
8.	Permanent Thermal Electricity Generation Plant	<ul> <li>Maintained in accordance with manufacturer specifications and requirements as specified in Table 1;</li> <li>Monitor plant performance, power generation and instantaneous load capacity; and</li> <li>Ensure any spills associated with hazardous materials or hydrocarbons are appropriately contained and cleaned up.</li> </ul>	Figure 1 in Schedule 1
9.	Temporary Thermal Electricity Generation Plant	<ul> <li>Maintained in accordance with manufacturer specifications and requirements as specified in Table 1;</li> <li>Monitor plant performance, power generation and instantaneous load capacity; and</li> <li>Ensure any spills associated with hazardous materials or hydrocarbons are appropriately contained and cleaned up.</li> </ul>	Figure 1 in Schedule 1

**18.** During time limited operations, the works approval holder must ensure that the emission(s) specified in Table 8, are discharged only from the corresponding discharge point(s) and only at the corresponding discharge point location(s).

#### Table 8: Authorised discharge points during time limited operations

Emission	Discharge point	Discharge point location
Minerals Processing Plant dust extraction and discharge to air	Discharged from a VRM and crushing circuit stacks via extraction units and baghouses.	'Dust extraction' as depicted in Figure 7 of Schedule 1
Tailings discharged to containment cells via pipeline	TSF	'TSF' as depicted in Figure 2 of Schedule 1
Permanent Thermal Electricity Generation Plant exhaust to air	Discharged from a stack at each genset unit.	'Thermal Power Station' as depicted in Figure 8 of Schedule 1
Temporary Thermal Electricity Generation Plant exhaust to air	Discharged from a stack at each genset unit.	As depicted in Figure 9 of Schedule 1

- **19.** During time limited operations, the works approval holder must ensure the instantaneous load capacity of 60MW is not exceeded during periods where both the temporary and permanent thermal electricity generation plants are operated simultaneously.
- **20.** During time limited operations, the works approval holder must record the following data monthly for the site water balance:
  - (a) site rainfall;
  - (b) evaporation rate;
  - (c) tailings return water recovery volumes;
  - (d) seepage recovery volumes;
  - (e) estimate of seepage losses; and
  - (f) wet tonnes of tailings deposited.
- **21.** The works approval must ensure that there is no discharge of abstracted groundwater from within the premises to the environment from the date of initial disposal of tailings to the TSF.

### Monitoring during time limited operations

- 22. During the first 30 days of time limited operations, the works approval holder must collect at least 10 individual representative tailings samples, including pore water, to determine the likely behaviour of elements under a range of leaching conditions, and may include, but not be limited to:
  - (a) testing using the LEAF Test Method 1313 pH-dependent leaching test;
  - (b) geotechnical characterisation of tailings including: particle size distribution, volume of solids, settling test (drained and undrained), air drying test and hydraulic conductivity of the same tailings tested in (a);
  - (c) testing for the parameters listed in Table 11, excluding standing water level; and
  - (d) all test results shall be collated and provided in a report to the CEO within one week after receipt of the laboratory report.
- **23.** The works approval holder must monitor groundwater during time limited operations for concentrations of the identified parameters in accordance with Table 9.

Monitoring location	Parameter	Unit	Frequency	Averaging period
TSF bores:	pH <sup>1</sup>	-	Quarterly from date of	Spot sample
TSF1S – TSF12S; TSF1D – TSF12D;	Electrical Conductivity, EC	µS/cm	compliance with condition 9.	
MMB-01;	Total Dissolved Solids, TDS	mg/L		
MMB-03; MMB-05S; MMB-05D;	Major ions (Na+, K+, Ca <sup>2+</sup> , Mg <sup>2+</sup> , HCO <sub>3</sub> <sup>-</sup> , Cl <sup>-</sup> , SO <sub>4</sub> <sup>2-</sup> , NO <sub>3</sub> <sup>-</sup> , NO <sub>2</sub> <sup>-</sup> and NH <sub>4</sub> <sup>+</sup> )	mg/L		
MMB-06S;	Aluminium, Al	mg/L		
MMB-06D;	Arsenic, As	mg/L		
MMB-07S; and	Antimony, Sb	mg/L		

 Table 9: Monitoring of groundwater during time limited operations

MMB-07D;	Barium, Ba	mg/L		
MMB-09;	Cadmium, Cd	mg/L	-	
MMB-10S; and MMB-10D as	Chromium, Cr	mg/L		
depicted in Figure 10 of Schedule 1.	Cobalt, Co	mg/L		
of Schedule 1.	Copper, Cu	mg/L		
	Fluoride, F	mg/L		
	Iron, Fe	mg/L		
	Lead	mg/L		
	Manganese, Mn	mg/L		
	Molybdenum, Mo	mg/L	-	
	Nickel, Ni	mg/L	-	
	Nitrogen (Total)	mg/L	-	
	Selenium, Se	mg/L	-	
	Silver, Ag	mg/L	-	
	Thallium, TI	mg/L		
	Uranium, U	mg/L		
	Vanadium, V	mg/L		
	Zinc, Zn	mg/L		
	Standing water level	mbgl, mRL	Monthly	Spot sample

Note 1: In-field, non-NATA accredited analysis permitted

- **24.** In the event that the trigger values defined in Table 10 are exceeded at groundwater monitoring bores, as depicted in Figure 10 of Schedule 1, the works approval must:
  - (a) install and operate groundwater abstraction bores for the purpose of reducing risk of groundwater mounding; and
  - (b) extend the length of the existing interception trench or construct an additional interception trench (or part thereof) upstream of embankments (along the outer embankment/s) or install; and/or
  - (c) treat the supernatant pond locations with chemicals or clay to reduce the hydraulic conductivity of the supernatant decant pond; and/or
  - (d) further thicken tailings prior to deposition; and/or
  - (e) other method as agreed with the CEO in writing for the purpose of minimising impacts from seepage,

within 3 months of identifying the trigger value exceedance.

Table 10: Trigger values

Monitoring location	Parameter	Units	Trigger value
TSF1S – TSF12S	Standing water level	mbgl	4
	pH <sup>1</sup>	-	7-8.5
TSF1D – TSF12D	Electrical Conductivity, EC	µS/cm	4,500
	Total Dissolved Solids, TDS	mg/L	2,850
MMB-10S	HCO <sub>3</sub>	mg/L	<180
	NO <sub>3</sub>	mg/L	130
MMB-10D	NH <sub>4</sub>	mg/L	1.5
	SO <sub>4</sub>	mg/L	405
	Aluminium, Al	µg/L	55
	Arsenic, As	µg/L	13
	Barium, Ba	µg/L	54
	Cadmium, Cd	µg/L	2
	Chromium, Cr	µg/L	3.3
	Cobalt, Co	µg/L	1.4
	Copper, Cu	µg/L	3
	Fluoride, F	mg/L	2
	Lead, Pb	µg/L	3.4
	Manganese, Mn	µg/L	1,900
	Molybdenum, Mo	µg/L	34
	Nickel, Ni	µg/L	11
	Nitrogen (Total)	mg/L	31
	Selenium, Se	µg/L	11
	Silver, Ag	µg/L	0.06
	Thallium, Tl	µg/L	2
	Uranium, U	µg/L	7.3
	Vanadium, V	µg/L	34
	Zinc, Zn	µg/L	49

Note 1: Represents an acceptable range for pH. Any excursion above or below this range would represent a trigger exceedance for the purpose of instigating management action under this condition.

- **25.** The works approval holder must include the following information in the report referred to in condition 27 in relation to any exceedances of any of the trigger values identified in that condition:
  - (a) the measurement or concentration recorded in relation to the exceedance, including any laboratory reports;
  - (b) the time and date when the exceedance was identified;
  - (c) whether any known environmental impact occurred as a result of the exceedance and, if so, what that impact was and where the impact occurred;
  - (d) the details of the management action(s) taken pursuant with condition 26 in response to the exceedance;
  - (e) the details and result of any investigation undertaken into the cause of the exceedance; and
  - (f) the details of any action or specified measures that have been taken, or will be

taken, to prevent the exceedance occurring again and for the purpose of minimising the likelihood of pollution or environmental harm.

**26.** The works approval holder must ensure that standing water levels measured at groundwater monitoring bores TSF1S to TSF12S (inclusive), as depicted in Figure 10 of Schedule 1, do not rise above 2 metres below ground level.

#### **Compliance reporting**

- 27. The works approval holder must submit to the CEO a report on tailings deposition during commissioning and 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.
- **28.** The works approval holder must ensure the report required by condition 27 includes the following:
  - (a) A summary of the time limited operations, including timeframes and volume of tailings deposited per month;
  - (b) The ambient groundwater monitoring results obtained during time limited operations under Table 11;
  - (c) A summary of the environmental performance of TSF as constructed or installed (as applicable), which includes records detailing:
    - (i) volume of tailings deposited;
    - (ii) tailings density;
    - (iii) tailings solids density;
    - (iv) TSF water balance where the rate of evaporation is not assumed to be the same as the pan evaporation rate;
    - (v) monthly records of tailings level at TSF in mRL;
    - (vi) a review of performance and compliance against the conditions of the works approval and the Environmental Commissioning Report; and
    - (vii) 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.; and
  - (d) Information required by condition 25, if applicable.

## **Records and reporting (general)**

- **29.** 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.

- **30.** 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 conditions 1, 2 and 3;
  - (b) any maintenance of infrastructure that is performed in the course of complying with condition 19;
  - (c) any monitoring specified within condition 22;
  - (d) monitoring programmes undertaken in accordance with conditions 4, and 23; and
  - (e) complaints received under condition 29.
- **31.** The books specified under condition 30 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 11 have the meanings defined.

### Table 11: Definitions

Term	Definition	
annual period	a 12 month period commencing from 1 July until 30 June of the immediately following year.	
AHD	Australian Height Datum	
ANZG 2018	Means the Department of Agriculture, Water and the Environment, 2018, Australian and New Zealand guidelines (ANZG) for fresh and marine water quality	
AS 1726	Australian Standard 1726:2017 Geotechnical site investigations.	
AS 1940	Australian/New Zealand Standard 1940:2017 The storage and handling of flammable and combustible liquids.	
AS 3833	Australian/New Zealand Standard 3833:2007 The storage and handling of mixed classes of dangerous goods, in packages and intermediate bulk containers.	
AS 5667	Australian/New Zealand Standard 5667.1:1998 Water Quality – Sampling	
ASTM D5092/D5092M-16	ASTM D5092/D5092M-16: Standard practice for design and installation of groundwater monitoring bores.	
BOD	Biological Oxygen Demand	
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	
critical containment means the items of infrastructure listed in condition 2.		
Critical Containment means a report to satisfy the CEO that works of critical contain infrastructure Report infrastructure have been constructed in accordance with the approval.		
Department	means the department established under section 35 of the <i>Public</i> Sector Management Act 1994 and designated as responsible for the administration of Part V Division 3 of the EP Act.	

Term	Definition
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 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	Environmental Protection Act 1986 (WA).
EP Regulations	Environmental Protection Regulations 1987 (WA).
Inert Waste Type(s) 1, 2 and 3	has the same meaning given to those terms under the Landfill Waste Classification and Waste Definitions (December 2019)
LEAF Test Method 1313	refers to Test Method 1313: Liquid-Solid Partitioning as a Function of Extract pH Using a Parallel Batch Extraction Procedure
mbgl	metres below ground level
MPP	Mineral Processing Plant
mRL	metres relative level
NATA	National Association of Testing Authorities
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.
Putrescible waste	has the same meaning given to that term under the Landfill Waste Classification and Waste Definitions (December 2019)
Special Wastes Type (s) 1, 2 and 3	has the same meaning given to those terms under the Landfill Waste Classification and Waste Definitions (December 2019)
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.
TSF	tailings storage facility

Term	Definition
TSS	Total Suspended Solids
VRM	Vertical Roller Mill
waste	has the same meaning given to that term under the EP Act.
WMP	West Musgrave Project
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: Map of the boundary of the prescribed premises







Figure 3: Tailings storage facility underdrainage design







Figure 5: Tailings storage facility underdrainage and seepage trench design



Figure 6: Minerals Processing Plant layout





Figure 8: Design Layout of Permanent Thermal Electricity Generation Plant



Figure 9: Design Layout of Temporary Thermal Electricity Generator Plant



Figure 10: Groundwater monitoring bore locations
# **Schedule 2: Premises boundary**

The premises boundary is defined by the coordinates in Table 12.

#### ID Longitude (I) ID ID Longitude (I) Latitude (I) Longitude (I) Latitude (I) Latitude (I) 180326 127.7054 -26.2243 180362 127.6505 -26.2254 180398 127.6438 -26.2296 180327 127.7013 -26.2259 180363 127.6501 -26.2253 180399 127.6438 -26.2299 180328 127.6966 -26.23 180364 127.6498 -26.2252 180400 127.6438 -26.2301 180329 127.692 -26.2387 180365 127.6495 -26.2252 180401 127.6439 -26.2302 180330 127.6891 -26.246 180366 127.6492 -26.2252 180402 127.6439 -26.2305 180331 127.6796 -26.2432 180367 127.6489 -26.2251 180403 127.644 -26.2307 180332 127.6441 127.6786 -26.243 180368 127.6486 -26.2251 180404 -26.2311 180333 127.6778 -26.2427 180369 127.6483 -26.2252 180405 127.6442 -26.2313 180334 127.6773 -26.2426 180370 127.6482 -26.2252 180406 127.6443 -26.2316 180335 127.6772 -26.2426 180371 127.6478 -26.2252 180407 127.6445 -26.2319 180336 127.6771 -26.2425 180372 127.6476 -26.2253 180408 127.6446 -26.2321 180337 180409 127.6448 127.6761 -26.2423 180373 127.6474 -26.2253 -26.2323 180338 127.6743 -26.2418 180374 127.6472 -26.2254 180410 127.645 -26.2326 180339 127.6693 -26.2404 180375 -26.2255 180411 127.6452 -26.2328 127.6469 180340 127.6637 -26.2376 180376 127.6467 -26.2256 180412 127.6455 -26.233 180341 127.6587 -26.2339 180377 127.6465 -26.2257 180413 127.6458 -26.2332 180342 127.6588 127.6463 127.646 -26.2328 180378 -26.2258 180414 -26.2334 180343 127.6588 -26.2325 180379 -26.2259 180415 127.6509 -26.2364 127.646 127.6588 127.6513 180344 -26.2322 180380 127.6458 -26.226 180416 -26.2366 180345 127.6587 -26.2319 180381 127.6456 -26.2262 180417 127.6516 -26.2367 180346 127.6587 -26.2316 180382 127.6455 -26.2263 180418 127.6518 -26.2369 180347 127.6586 -26.2313 180383 127.6453 -26.2265 180419 127.6521 -26.237 180348 127.6585 180384 127.6451 180420 127.6525 -26.231 -26.2266 -26.2371 180349 127.6583 -26.2308 180385 127.645 -26.2268 180421 127.6528 -26.2371 127.6582 180350 -26.2305 180386 127.6449 -26.2269 180422 127.6531 -26.2372 180351 127.658 -26.2302 180387 127.6447 -26.2271 180423 127.6535 -26.2372 127.6538 180352 127.6578 -26.23 180388 127.6445 -26.2273 180424 -26.2372 180353 127.6576 -26.2298 180389 127.6444 -26.2275 180425 127.6541 -26.2372 -<u>26</u>.2371 180354 127.6574 180390 127.6444 127.6552 -26.2296 -26.2277 180426 180355 127.6572 -26.2294 180391 127.6442 -26.2279 180427 127.6606 -26.2412 180356 127.6569 -26.2292 180392 127.6441 -26.2281 180428 127.6609 -26.2413 180357 127.6566 -26.229 180393 127.644 -26.2283 180429 127.6611 -26.2414 180358 127.6517 -26.2259 180394 127.644 -26.2285 180430 127.6633 -26.2426 180359 127.6646 127.6514 -26.2258 180395 127.6439 -26.2288 180431 -26.2432 180360 127.667 127.6511 -26.2256 180396 127.6439 -26.229 180432 -26.2445 180361 127.6508 -26.2255 180397 127.6438 -26.2293 180433 127.6673 -26.2446

# Table 12: Premises boundary coordinates

ID	Longitude (I)	Latitude (I)	ID	Longitude (I)	Latitude (I)	ID	Longitude (I)	Latitude (I)
180434	127.6676	-26.2447	180474	127.6132	-26.3199	180514	127.6149	-26.3318
180435	127.6785	-26.2476	180475	127.613	-26.3206	180515	127.6151	-26.331
180436	127.6627	-26.2508	180476	127.6126	-26.3222	180516	127.6155	-26.3296
180437	127.6624	-26.2509	180477	127.6125	-26.3222	180517	127.6162	-26.3274
180438	127.6622	-26.251	180478	127.6124	-26.3226	180518	127.6189	-26.3183
180439	127.66	-26.2517	180479	127.612	-26.324	180519	127.6235	-26.3221
180440	127.6593	-26.2519	180480	127.6119	-26.3243	180520	127.6245	-26.3229
180441	127.6564	-26.2528	180481	127.6114	-26.3262	180521	127.6246	-26.323
180442	127.6564	-26.2528	180482	127.6086	-26.3355	180522	127.6247	-26.323
180443	127.6559	-26.2531	180483	127.608	-26.3371	180523	127.6257	-26.3238
180444	127.6554	-26.2534	180484	127.6068	-26.3402	180524	127.6278	-26.3255
180445	127.6506	-26.2579	180485	127.6036	-26.3463	180525	127.6287	-26.3262
180446	127.6496	-26.2601	180486	127.6033	-26.3467	180526	127.631	-26.328
180447	127.6466	-26.2646	180487	127.6031	-26.3472	180527	127.6315	-26.3293
180448	127.6452	-26.2661	180488	127.6024	-26.3483	180528	127.6324	-26.3321
180449	127.6442	-26.2678	180489	127.6068	-26.3506	180529	127.6323	-26.3361
180450	127.644	-26.2681	180490	127.6081	-26.3483	180530	127.6324	-26.3366
180451	127.644	-26.2682	180491	127.6081	-26.3482	180531	127.6325	-26.337
180452	127.6439	-26.2684	180492	127.6082	-26.3482	180532	127.6328	-26.3374
180453	127.6419	-26.2732	180493	127.6085	-26.3476	180533	127.6331	-26.3378
180454	127.6386	-26.2813	180494	127.6089	-26.3467	180534	127.6334	-26.3381
180455	127.6343	-26.288	180495	127.6093	-26.346	180535	127.6339	-26.3383
180456	127.6324	-26.2905	180496	127.61	-26.3446	180536	127.6343	-26.3384
180457	127.6283	-26.2959	180497	127.6111	-26.3426	180537	127.6348	-26.3384
180458	127.6265	-26.2984	180498	127.6113	-26.3422	180538	127.6353	-26.3384
180459	127.6259	-26.2991	180499	127.6114	-26.3421	180539	127.6358	-26.3383
180460	127.6254	-26.2998	180500	127.6114	-26.342	180540	127.6362	-26.3381
180461	127.6251	-26.3002	180501	127.6115	-26.3418	180541	127.6366	-26.3378
180462	127.6219	-26.3044	180502	127.6118	-26.3411	180542	127.6369	-26.3375
180463	127.6206	-26.3062	180503	127.612	-26.3406	180543	127.6371	-26.3371
180464	127.6202	-26.3067	180504	127.6121	-26.3403	180544	127.6373	-26.3367
180465	127.6172	-26.3106	180505	127.6133	-26.3371	180545	127.6373	-26.3361
180466	127.6128	-26.307	180506	127.6134	-26.3369	180546	127.6374	-26.332
180467	127.6094	-26.3103	180507	127.6134	-26.3368	180547	127.6373	-26.3313
180468	127.6098	-26.3106	180508	127.6135	-26.3366	180548	127.6373	-26.3312
180469	127.6115	-26.312	180509	127.6135	-26.3366	180549	127.6364	-26.3281
180470	127.6148	-26.3147	180510	127.6137	-26.336	180550	127.6362	-26.3278
180471	127.6135	-26.319	180511	127.6141	-26.3343	180551	127.6362	-26.3278
180472	127.6134	-26.3192	180512	127.6145	-26.3331	180552	127.6355	-26.3259
180473	127.6133	-26.3195	180513	127.6149	-26.3318	180553	127.6352	-26.3254

ID	Longitude (I)	Latitude (I)	ID	Longitude (I)	Latitude (I)	ID	Longitude (I)	Latitude (I)
80554	127.6348	-26.325	180594	127.6537	-26.2617	180634	127.7022	-26.2314
180555	127.6347	-26.3249	180595	127.6538	-26.2614	180635	127.7021	-26.2315
180556	127.6294	-26.3207	180596	127.6541	-26.2612	180636	127.7022	-26.2314
180557	127.6291	-26.3205	180597	127.6545	-26.2608	180637	127.7041	-26.2297
180558	127.6286	-26.3201	180598	127.6551	-26.2602	180638	127.7062	-26.2289
180559	127.628	-26.3196	180599	127.6555	-26.2598	180639	127.7089	-26.2284
180560	127.6272	-26.319	180600	127.6577	-26.2577	180640	127.7114	-26.2271
180561	127.6266	-26.3185	180601	127.6586	-26.2569	180641	127.7161	-26.2249
180562	127.6259	-26.3179	180602	127.6607	-26.2562	180642	127.7188	-26.224
180563	127.6256	-26.3177	180603	127.6627	-26.2556	180643	127.7188	-26.2162
180564	127.6247	-26.317	180604	127.6638	-26.2552	180644	127.7194	-26.202
180565	127.6243	-26.3167	180605	127.6668	-26.2546	180645	127.7199	-26.1998
180566	127.6232	-26.3157	180606	127.6674	-26.2545	180646	127.7287	-26.1999
180567	127.6209	-26.3138	180607	127.6721	-26.2535	180647	127.7293	-26.1998
180568	127.6222	-26.3121	180608	127.6723	-26.2535	180648	127.7297	-26.1997
180569	127.6341	-26.2963	180609	127.6726	-26.2534	180649	127.7302	-26.1995
180570	127.6382	-26.2909	180610	127.6788	-26.2515	180650	127.7305	-26.1992
180571	127.6383	-26.2907	180611	127.682	-26.2513	180651	127.7305	-26.1992
80572	127.6384	-26.2906	180612	127.685	-26.2511	180652	127.7309	-26.1989
180573	127.6394	-26.289	180613	127.6852	-26.2511	180653	127.731	-26.1987
180574	127.6402	-26.2878	180614	127.6853	-26.2511	180654	127.7311	-26.1985
180575	127.643	-26.2835	180615	127.6855	-26.2511	180655	127.7312	-26.1982
180576	127.6432	-26.2832	180616	127.6921	-26.2505	180656	127.7312	-26.1981
180577	127.6432	-26.2831	180617	127.6923	-26.2502	180657	127.7313	-26.1977
180578	127.6435	-26.2823	180618	127.6943	-26.2472	180658	127.7312	-26.1972
180579	127.6445	-26.2799	180619	127.6955	-26.245	180659	127.7311	-26.1968
180580	127.6451	-26.2785	180620	127.6966	-26.2406	180660	127.7309	-26.1964
80581	127.6453	-26.2779	180621	127.6977	-26.2386	180661	127.7306	-26.1961
180582	127.646	-26.2764	180622	127.6994	-26.2368	180662	127.7302	-26.1958
80583	127.6461	-26.2759	180623	127.7	-26.2355	180663	127.7301	-26.1957
180584	127.6463	-26.2756	180624	127.7	-26.2355	180664	127.7298	-26.1956
180585	127.6464	-26.2752	180625	127.7	-26.2353	180665	127.7293	-26.1954
180586	127.6478	-26.2718	180626	127.7	-26.2336	180666	127.7287	-26.1954
80587	127.6481	-26.2712	180627	127.7	-26.2335	180667	127.7196	-26.1953
180588	127.6486	-26.2699	180628	127.7	-26.2334	180668	127.7179	-26.1953
180589	127.6521	-26.2642	180629	127.7002	-26.2333	180669	127.7144	-26.1911
180590	127.6522	-26.2641	180630	127.7003	-26.2333	180670	127.7143	-26.191
180591	127.6526	-26.2634	180631	127.701	-26.2333	180671	127.7143	-26.1909
180592	127.653	-26.2627	180632	127.7018	-26.2317	180672	127.7142	-26.1908
180593	127.6532	-26.2624	180633	127.7021	-26.2315	180673	127.7141	-26.1907

ID	Longitude (I)	Latitude (I)	ID	Longitude (I)	Latitude (I)	ID	Longitude (I)	Latitude (I)
180674	127.714	-26.1906	180714	127.7055	-26.1584	180754	127.7642	-26.1297
180675	127.714	-26.1905	180715	127.7055	-26.1583	180755	127.7646	-26.1297
180676	127.7139	-26.1903	180716	127.7055	-26.1582	180756	127.7646	-26.1297
180677	127.7102	-26.1824	180717	127.7054	-26.1581	180757	127.7646	-26.1297
180678	127.7101	-26.1823	180718	127.7054	-26.158	180758	127.7975	-26.1297
180679	127.7101	-26.1822	180719	127.7018	-26.1405	180759	127.823	-26.1057
180680	127.71	-26.1821	180720	127.7007	-26.1294	180760	127.8343	-26.0761
180681	127.71	-26.182	180721	127.7012	-26.1294	180761	127.8357	-26.0758
180682	127.71	-26.1818	180722	127.7022	-26.1294	180762	127.8364	-26.0756
180683	127.7099	-26.1817	180723	127.705	-26.1294	180763	127.8365	-26.0756
180684	127.7099	-26.1816	180724	127.7056	-26.1294	180764	127.837	-26.0754
180685	127.7099	-26.1815	180725	127.7066	-26.1294	180765	127.8381	-26.075
180686	127.7099	-26.1814	180726	127.7076	-26.1294	180766	127.839	-26.0747
180687	127.7099	-26.1812	180727	127.7083	-26.1294	180767	127.84	-26.0743
180688	127.7099	-26.1811	180728	127.7087	-26.1294	180768	127.8413	-26.0738
180689	127.7098	-26.181	180729	127.71	-26.1294	180769	127.8413	-26.0738
180690	127.7099	-26.1809	180730	127.7104	-26.1294	180770	127.8419	-26.0735
180691	127.7099	-26.1807	180731	127.7113	-26.1294	180771	127.8423	-26.0734
180692	127.7099	-26.1806	180732	127.7123	-26.1294	180772	127.8461	-26.072
180693	127.7099	-26.1805	180733	127.713	-26.1294	180773	127.8496	-26.0707
180694	127.7099	-26.1804	180734	127.7186	-26.1295	180774	127.8528	-26.0696
180695	127.7112	-26.1739	180735	127.7191	-26.1295	180775	127.8534	-26.0693
180696	127.7112	-26.1737	180736	127.7245	-26.1295	180776	127.8547	-26.0689
180697	127.7112	-26.1735	180737	127.7255	-26.1295	180777	127.8555	-26.0685
180698	127.7113	-26.1733	180738	127.7274	-26.1295	180778	127.8574	-26.0675
180699	127.7113	-26.1732	180739	127.7282	-26.1295	180779	127.8586	-26.0669
180700	127.7113	-26.173	180740	127.7317	-26.1295	180780	127.8606	-26.0659
180701	127.7113	-26.1728	180741	127.7337	-26.1295	180781	127.8617	-26.0653
180702	127.7113	-26.1726	180742	127.7344	-26.1295	180782	127.8626	-26.0649
180703	127.7112	-26.1724	180743	127.7443	-26.1296	180783	127.863	-26.0647
180704	127.7112	-26.1723	180744	127.746	-26.1296	180784	127.8653	-26.0635
180705	127.7112	-26.1721	180745	127.7466	-26.1296	180785	127.8657	-26.0633
180706	127.7112	-26.1719	180746	127.7489	-26.1296	180786	127.8672	-26.0625
180707	127.7111	-26.1717	180747	127.751	-26.1296	180787	127.8682	-26.0639
180708	127.7111	-26.1715	180748	127.7529	-26.1296	180788	127.8704	-26.0669
180709	127.711	-26.1714	180749	127.7532	-26.1296	180789	127.8709	-26.0676
180710	127.7109	-26.1712	180750	127.7558	-26.1296	180790	127.8709	-26.0676
180711	127.7109	-26.171	180751	127.7574	-26.1296	180791	127.8725	-26.07
180712	127.7056	-26.1586	180752	127.7575	-26.1296	180792	127.8744	-26.0728
180713	127.7056	-26.1585	180753	127.7632	-26.1297	180793	127.8745	-26.0729

ID	Longitude (I)	Latitude (I)	ID	Longitude (I)	Latitude (I)	ID	Longitude (I)	Latitude (I)
180794	127.8745	-26.0729	180834	127.8725	-26.1026	180874	127.8978	-26.0903
180795	127.8777	-26.0772	180835	127.8731	-26.1033	180875	127.898	-26.0903
180796	127.8791	-26.079	180836	127.8738	-26.1039	180876	127.899	-26.0902
180797	127.8796	-26.0797	180837	127.8747	-26.1043	180877	127.899	-26.0902
180798	127.88	-26.0802	180838	127.8749	-26.1044	180878	127.9015	-26.0898
180799	127.8804	-26.0807	180839	127.8756	-26.1046	180879	127.9035	-26.0894
180800	127.8812	-26.0818	180840	127.8759	-26.1046	180880	127.9046	-26.0892
180801	127.8826	-26.0836	180841	127.8766	-26.1047	180881	127.9054	-26.089
180802	127.8829	-26.0841	180842	127.8776	-26.1046	180882	127.906	-26.0888
180803	127.8831	-26.0843	180843	127.8785	-26.1043	180883	127.9115	-26.086
180804	127.8832	-26.0845	180844	127.8785	-26.1043	180884	127.934	-26.0749
180805	127.8835	-26.0869	180845	127.8792	-26.104	180885	127.9344	-26.0747
180806	127.8835	-26.0879	180846	127.8804	-26.1034	180886	127.9352	-26.0742
180807	127.8835	-26.088	180847	127.8809	-26.1031	180887	127.9358	-26.0735
180808	127.8832	-26.0886	180848	127.8811	-26.103	180888	127.9363	-26.0727
180809	127.8829	-26.0892	180849	127.8818	-26.1025	180889	127.9365	-26.0719
180810	127.8822	-26.09	180850	127.8821	-26.1023	180890	127.9366	-26.071
180811	127.8813	-26.0911	180851	127.8831	-26.1012	180891	127.9366	-26.0701
180812	127.88	-26.0919	180852	127.8841	-26.1002	180892	127.9364	-26.0698
180813	127.8794	-26.0922	180853	127.8853	-26.0995	180893	127.9363	-26.0693
180814	127.8782	-26.0929	180854	127.8874	-26.0983	180894	127.9358	-26.0685
180815	127.8781	-26.0929	180855	127.8875	-26.0982	180895	127.9352	-26.0678
180816	127.8774	-26.0935	180856	127.8881	-26.0978	180896	127.9347	-26.0674
180817	127.8771	-26.0937	180857	127.8882	-26.0977	180897	127.9345	-26.0672
180818	127.8767	-26.0941	180858	127.8886	-26.0974	180898	127.9336	-26.0668
180819	127.8759	-26.0949	180859	127.8887	-26.0972	180899	127.9327	-26.0665
180820	127.8751	-26.0957	180860	127.8911	-26.0943	180900	127.932	-26.0665
180821	127.8741	-26.0963	180861	127.8912	-26.0942	180901	127.9317	-26.0664
180822	127.8739	-26.0964	180862	127.8916	-26.0937	180902	127.9307	-26.0665
180823	127.8731	-26.0969	180863	127.8922	-26.0925	180903	127.9298	-26.0668
180824	127.8725	-26.0976	180864	127.8924	-26.0922	180904	127.9293	-26.067
180825	127.8725	-26.0976	180865	127.8925	-26.092	180905	127.9268	-26.0682
180826	127.8721	-26.0983	180866	127.8926	-26.0917	180906	127.9241	-26.0695
180827	127.872	-26.0984	180867	127.8932	-26.0903	180907	127.922	-26.0706
180828	127.8718	-26.0992	180868	127.8933	-26.09	180908	127.9215	-26.0708
180829	127.8717	-26.1001	180869	127.8935	-26.09	180909	127.9209	-26.0711
180830	127.8717	-26.101	180870	127.894	-26.0901	180910	127.9195	-26.0718
180831	127.8718	-26.1011	180871	127.8942	-26.0901	180911	127.9192	-26.0719
180832	127.872	-26.1018	180872	127.8953	-26.0902	180912	127.9173	-26.0729
180833	127.8723	-26.1023	180873	127.8968	-26.0903	180913	127.915	-26.074

ID	Longitude (I)	Latitude (I)	ID	Longitude (I)	Latitude (I)	ID	Longitude (I)	Latitude (I)
80914	127.9104	-26.0763	180954	127.8844	-26.0668	180994	127.9827	-26.032
180915	127.9099	-26.0765	180955	127.8847	-26.0666	180995	127.9826	-26.0175
180916	127.903	-26.0799	180956	127.8847	-26.0666	180996	127.9653	-26.0177
180917	127.9018	-26.0805	180957	127.9089	-26.0671	180997	127.9653	-25.9999
180918	127.8997	-26.0809	180958	127.906	-26.0625	180998	127.9788	-25.9997
180919	127.8977	-26.0813	180959	127.8953	-26.0623	180999	127.9761	-25.9938
180920	127.8958	-26.0812	180960	127.8954	-26.0534	181000	127.965	-25.9935
180921	127.8943	-26.0805	180961	127.9004	-26.0524	181001	127.9649	-25.9933
180922	127.8914	-26.0793	180962	127.9166	-26.0358	181002	127.9644	-25.9925
80923	127.8905	-26.0781	180963	127.9175	-26.0356	181003	127.9638	-25.9918
80924	127.89	-26.0774	180964	127.9184	-26.0352	181004	127.9631	-25.9912
80925	127.8893	-26.0765	180965	127.9192	-26.0346	181005	127.9622	-25.9908
80926	127.8883	-26.0752	180966	127.9198	-26.0339	181006	127.9613	-25.9905
80927	127.8869	-26.0734	180967	127.9203	-26.0332	181007	127.9604	-25.9905
80928	127.8867	-26.0731	180968	127.9205	-26.0323	181008	127.9579	-25.9904
80929	127.8866	-26.0729	180969	127.9207	-26.0314	181009	127.957	-25.9904
80930	127.8868	-26.0729	180970	127.9206	-26.0306	181010	127.9674	-25.975
80931	127.8872	-26.0727	180971	127.9204	-26.0301	181011	127.9607	-25.9689
80932	127.8874	-26.0725	180972	127.9269	-26.0207	181012	127.944	-25.9823
80933	127.8875	-26.0723	180973	127.9272	-26.0044	181013	127.9349	-25.9849
80934	127.8875	-26.072	180974	127.9316	-26.003	181014	127.923	-25.9759
80935	127.8876	-26.0716	180975	127.9331	-26.0025	181015	127.9201	-25.9641
80936	127.8875	-26.0712	180976	127.9351	-26.0018	181016	127.9214	-25.9601
80937	127.8873	-26.0708	180977	127.9553	-26.0144	181017	127.9152	-25.9581
80938	127.8872	-26.0704	180978	127.9553	-26.0273	181018	127.915	-25.9612
80939	127.8868	-26.0698	180979	127.9553	-26.0279	181019	127.9122	-25.9854
80940	127.8864	-26.0693	180980	127.9554	-26.0288	181020	127.908	-25.9993
80941	127.8864	-26.0692	180981	127.9556	-26.0294	181021	127.9063	-26.005
80942	127.8862	-26.069	180982	127.9557	-26.0296	181022	127.9045	-26.0035
80943	127.8859	-26.0688	180983	127.9558	-26.0298	181023	127.8982	-26.0026
80944	127.8858	-26.0686	180984	127.9561	-26.0304	181024	127.8969	-26.0189
80945	127.8857	-26.0683	180985	127.9567	-26.0311	181025	127.894	-26.022
80946	127.8855	-26.0679	180986	127.9575	-26.0316	181026	127.8937	-26.0215
80947	127.8853	-26.0677	180987	127.9584	-26.0321	181027	127.8929	-26.0201
80948	127.8848	-26.0674	180988	127.9593	-26.0323	181028	127.8898	-26.0148
80949	127.8843	-26.0672	180989	127.9596	-26.0324	181029	127.8895	-26.0144
80950	127.884	-26.0671	180990	127.9603	-26.0324	181030	127.8889	-26.0137
80951	127.8839	-26.067	180991	127.9612	-26.0323	181031	127.8882	-26.0132
80952	127.8837	-26.067	180992	127.9619	-26.0328	181032	127.8877	-26.0129
80953	127.8841	-26.0669	180993	127.966	-26.0325	181033	127.8873	-26.0127

ID	Longitude (I)	Latitude (I)	ID	Longitude (I)	Latitude (I)	ID	Longitude (I)	Latitude (I)
181034	127.8864	-26.0125	181074	127.8325	-26.0513	181114	127.7899	-26.0841
181035	127.8854	-26.0124	181075	127.8321	-26.0516	181115	127.7899	-26.084
181036	127.8844	-26.0125	181076	127.8315	-26.052	181116	127.7899	-26.084
181037	127.884	-26.0126	181077	127.831	-26.0524	181117	127.7899	-26.084
181038	127.8837	-26.0126	181078	127.8304	-26.0528	181118	127.7899	-26.084
181039	127.8837	-26.0126	181079	127.8296	-26.0533	181119	127.7899	-26.084
181040	127.8752	-26.0134	181080	127.8295	-26.0536	181120	127.7899	-26.084
181041	127.8732	-26.0183	181081	127.829	-26.055	181121	127.7899	-26.0839
181042	127.8672	-26.0183	181082	127.8287	-26.0557	181122	127.7899	-26.0839
181043	127.8581	-26.0281	181083	127.828	-26.0576	181123	127.7899	-26.0839
181044	127.8436	-26.0159	181084	127.828	-26.0625	181124	127.7899	-26.0839
181045	127.8388	-26.0176	181085	127.8283	-26.0646	181125	127.7899	-26.0839
181046	127.8388	-26.0176	181086	127.8284	-26.0657	181126	127.7899	-26.0839
181047	127.8375	-26.0164	181087	127.8286	-26.0667	181127	127.7899	-26.0839
181048	127.8338	-26.0128	181088	127.8293	-26.0678	181128	127.7899	-26.0839
181049	127.8372	-25.9988	181089	127.8293	-26.0678	181129	127.7898	-26.0839
181050	127.8485	-25.9911	181090	127.8274	-26.0682	181130	127.7898	-26.0838
181051	127.8485	-25.9841	181091	127.8274	-26.0682	181131	127.7898	-26.0838
181052	127.8547	-25.9758	181092	127.8274	-26.0682	181132	127.7898	-26.0838
181053	127.8595	-25.9577	181093	127.8234	-26.069	181133	127.7898	-26.0838
181054	127.8532	-25.9563	181094	127.8231	-26.0691	181134	127.7898	-26.0838
181055	127.8507	-25.9659	181095	127.8229	-26.0691	181135	127.7898	-26.0803
181056	127.8485	-25.9737	181096	127.8227	-26.0692	181136	127.7926	-26.0771
181057	127.8399	-25.9865	181097	127.819	-26.0703	181137	127.7921	-26.0769
181058	127.8286	-25.9954	181098	127.8184	-26.0704	181138	127.7904	-26.0761
181059	127.8307	-26.0097	181099	127.818	-26.0706	181139	127.7831	-26.0727
181060	127.8273	-26.017	181100	127.8179	-26.0706	181140	127.7802	-26.0737
181061	127.8322	-26.0216	181101	127.8145	-26.0719	181141	127.7783	-26.0743
181062	127.8471	-26.0296	181102	127.8144	-26.072	181142	127.7779	-26.0744
181063	127.8488	-26.0356	181103	127.8141	-26.0721	181143	127.7755	-26.0752
181064	127.838	-26.0396	181104	127.7944	-26.0823	181144	127.7745	-26.0755
181065	127.8399	-26.0432	181105	127.7942	-26.0824	181145	127.7739	-26.076
181066	127.842	-26.043	181106	127.795	-26.0827	181146	127.7699	-26.0794
181067	127.8484	-26.0406	181107	127.7924	-26.0849	181147	127.7682	-26.0831
181068	127.8484	-26.0407	181108	127.7906	-26.0842	181148	127.7677	-26.0843
181069	127.8407	-26.0458	181109	127.79	-26.0845	181149	127.7674	-26.0868
181070	127.8365	-26.0487	181110	127.7899	-26.0841	181150	127.7673	-26.088
181071	127.8363	-26.0488	181111	127.7899	-26.0841	181151	127.767	-26.0908
181072	127.8342	-26.0502	181112	127.7899	-26.0841	181152	127.7664	-26.0907
181073	127.8335	-26.0506	181113	127.7899	-26.0841	181153	127.7664	-26.0907

ID	Longitude (I)	Latitude (I)	ID	Longitude (I)	Latitude (I)	ID	Longitude (I)	Latitude (I)
181154	127.7663	-26.0907	181194	127.7574	-26.0884	181234	127.734	-26.0805
181155	127.7662	-26.0906	181195	127.7573	-26.0883	181235	127.7274	-26.0647
181156	127.7661	-26.0906	181196	127.7572	-26.0883	181236	127.7266	-26.0627
181157	127.766	-26.0906	181197	127.7571	-26.0883	181237	127.7261	-26.0613
181158	127.7659	-26.0906	181198	127.757	-26.0882	181238	127.7244	-26.0573
181159	127.7658	-26.0906	181199	127.7569	-26.0882	181239	127.724	-26.0563
181160	127.7656	-26.0906	181200	127.7568	-26.0881	181240	127.7231	-26.0542
181161	127.7655	-26.0906	181201	127.7567	-26.0881	181241	127.7231	-26.0541
181162	127.7654	-26.0906	181202	127.7566	-26.0881	181242	127.7231	-26.0541
181163	127.7653	-26.0906	181203	127.7565	-26.088	181243	127.7217	-26.0509
181164	127.7652	-26.0906	181204	127.7564	-26.088	181244	127.7186	-26.0508
181165	127.7651	-26.0906	181205	127.7563	-26.088	181245	127.7177	-26.0508
181166	127.765	-26.0906	181206	127.7562	-26.0879	181246	127.7159	-26.0508
181167	127.7649	-26.0906	181207	127.7561	-26.0879	181247	127.7122	-26.0508
181168	127.7648	-26.0906	181208	127.756	-26.0879	181248	127.711	-26.0508
181169	127.7647	-26.0906	181209	127.7559	-26.0879	181249	127.7105	-26.0508
181170	127.7646	-26.0906	181210	127.7558	-26.0879	181250	127.7102	-26.0508
181171	127.7645	-26.0906	181211	127.7557	-26.0878	181251	127.7061	-26.0508
181172	127.7645	-26.0906	181212	127.7556	-26.0878	181252	127.7062	-26.0505
181173	127.7638	-26.0907	181213	127.7554	-26.0878	181253	127.7065	-26.0493
181174	127.7611	-26.0911	181214	127.7553	-26.0878	181254	127.7067	-26.0487
181175	127.7608	-26.0912	181215	127.7552	-26.0878	181255	127.7067	-26.0487
181176	127.7606	-26.0909	181216	127.7551	-26.0878	181256	127.7084	-26.0468
181177	127.7606	-26.0909	181217	127.755	-26.0878	181257	127.7101	-26.0438
181178	127.7604	-26.0907	181218	127.7549	-26.0878	181258	127.7097	-26.039
181179	127.7603	-26.0906	181219	127.7547	-26.0878	181259	127.7087	-26.0341
181180	127.7602	-26.0905	181220	127.7522	-26.0879	181260	127.7087	-26.034
181181	127.76	-26.0904	181221	127.7501	-26.088	181261	127.7087	-26.034
181182	127.7592	-26.0897	181222	127.748	-26.0873	181262	127.7093	-26.0317
181183	127.759	-26.0896	181223	127.7472	-26.087	181263	127.7094	-26.0314
181184	127.7582	-26.0889	181224	127.7443	-26.0861	181264	127.7106	-26.0289
181185	127.7581	-26.0888	181225	127.7434	-26.0858	181265	127.712	-26.0259
181186	127.758	-26.0888	181226	127.743	-26.0857	181266	127.7127	-26.0245
181187	127.7579	-26.0887	181227	127.7429	-26.0856	181267	127.7132	-26.0196
181188	127.7579	-26.0887	181228	127.7427	-26.0856	181268	127.7133	-26.0185
181189	127.7578	-26.0886	181229	127.7398	-26.0848	181269	127.7134	-26.0173
181190	127.7577	-26.0886	181230	127.7382	-26.0844	181270	127.7126	-26.0151
181191	127.7576	-26.0885	181231	127.7355	-26.0837	181271	127.7115	-26.0122
181192	127.7576	-26.0885	181232	127.7339	-26.0832	181272	127.7114	-26.012
181193	127.7575	-26.0884	181233	127.7339	-26.0832	181273	127.7086	-26.0061

ID	Longitude (I)	Latitude (I)	ID	Longitude (I)	Latitude (I)	ID	Longitude (I)	Latitude (I)
181274	127.7085	-26.0058	181314	127.6685	-25.8974	181354	127.6519	-25.8736
181275	127.7077	-26.0012	181315	127.6685	-25.8972	181355	127.6518	-25.8735
181276	127.705	-25.9969	181316	127.6685	-25.8971	181356	127.6507	-25.8717
181277	127.7046	-25.9917	181317	127.6685	-25.8969	181357	127.6489	-25.8726
181278	127.7028	-25.99	181318	127.6684	-25.8967	181358	127.6501	-25.8744
181279	127.7027	-25.99	181319	127.6684	-25.8965	181359	127.6502	-25.8745
181280	127.7027	-25.99	181320	127.6684	-25.8963	181360	127.6503	-25.8747
181281	127.7026	-25.9895	181321	127.6674	-25.8916	181361	127.6504	-25.8748
181282	127.6996	-25.982	181322	127.6674	-25.8914	181362	127.6505	-25.875
181283	127.699	-25.9804	181323	127.6673	-25.8913	181363	127.6506	-25.8751
181284	127.6966	-25.9768	181324	127.6673	-25.8911	181364	127.6508	-25.8753
181285	127.6957	-25.9754	181325	127.6672	-25.8909	181365	127.6509	-25.8754
181286	127.6924	-25.9721	181326	127.6672	-25.8908	181366	127.651	-25.8755
181287	127.692	-25.9718	181327	127.6671	-25.8906	181367	127.6512	-25.8757
181288	127.6921	-25.9638	181328	127.667	-25.8904	181368	127.6513	-25.8758
181289	127.6871	-25.9581	181329	127.6669	-25.8903	181369	127.6579	-25.8811
181290	127.683	-25.9552	181330	127.6668	-25.8901	181370	127.658	-25.8812
181291	127.6763	-25.9536	181331	127.6668	-25.89	181371	127.6581	-25.8813
181292	127.6726	-25.9507	181332	127.6667	-25.8898	181372	127.6582	-25.8814
181293	127.665	-25.9453	181333	127.6666	-25.8897	181373	127.6583	-25.8815
181294	127.6648	-25.9451	181334	127.665	-25.8876	181374	127.6584	-25.8816
181295	127.6623	-25.9427	181335	127.6648	-25.8872	181375	127.6585	-25.8817
181296	127.6625	-25.9388	181336	127.6603	-25.8809	181376	127.6586	-25.8818
181297	127.662	-25.9241	181337	127.6602	-25.8807	181377	127.6586	-25.8819
181298	127.662	-25.924	181338	127.6601	-25.8806	181378	127.6649	-25.8906
181299	127.6621	-25.9169	181339	127.66	-25.8804	181379	127.6649	-25.8907
181300	127.6621	-25.9167	181340	127.6598	-25.8803	181380	127.665	-25.8908
181301	127.6643	-25.9111	181341	127.6597	-25.8802	181381	127.6651	-25.8909
181302	127.6647	-25.91	181342	127.6596	-25.88	181382	127.6651	-25.891
181303	127.6667	-25.9038	181343	127.6594	-25.8799	181383	127.6652	-25.8911
181304	127.6674	-25.9018	181344	127.6593	-25.8798	181384	127.6652	-25.8913
181305	127.6673	-25.9014	181345	127.6526	-25.8744	181385	127.6653	-25.8914
181306	127.6682	-25.8989	181346	127.6525	-25.8743	181386	127.6653	-25.8915
181307	127.6683	-25.8987	181347	127.6524	-25.8743	181387	127.6654	-25.8916
181308	127.6683	-25.8985	181348	127.6524	-25.8742	181388	127.6654	-25.8917
181309	127.6684	-25.8984	181349	127.6523	-25.8741	181389	127.6654	-25.8918
181310	127.6684	-25.8982	181350	127.6522	-25.874	181390	127.6654	-25.8919
181311	127.6684	-25.898	181351	127.6521	-25.8739	181391	127.6664	-25.8966
181312	127.6684	-25.8978	181352	127.652	-25.8738	181392	127.6664	-25.8968
181313	127.6685	-25.8976	181353	127.6519	-25.8737	181393	127.6664	-25.8969

ID	Longitude (I)	Latitude (I)	ID	Longitude (I)	Latitude (I)	ID	Longitude (I)	Latitude (I)
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181395	127.6665	-25.8971	181435	127.6901	-25.9725	181475	127.7048	-26.0481
181396	127.6665	-25.8973	181436	127.6902	-25.9727	181476	127.7046	-26.0488
181397	127.6665	-25.8974	181437	127.6904	-25.9729	181477	127.7042	-26.0501
181398	127.6665	-25.8975	181438	127.6909	-25.9733	181478	127.7042	-26.0501
181399	127.6665	-25.8976	181439	127.6941	-25.9764	181479	127.7041	-26.0508
181400	127.6664	-25.8978	181440	127.6949	-25.9777	181480	127.7002	-26.0507
181401	127.6664	-25.8979	181441	127.6972	-25.9812	181481	127.6992	-26.0507
181402	127.6664	-25.898	181442	127.6977	-25.9826	181482	127.6978	-26.0507
181403	127.6664	-25.8981	181443	127.7007	-25.9901	181483	127.695	-26.0507
181404	127.6663	-25.8982	181444	127.7009	-25.9907	181484	127.693	-26.0507
181405	127.6663	-25.8984	181445	127.7011	-25.9909	181485	127.6915	-26.0507
181406	127.6653	-25.9014	181446	127.7013	-25.9912	181486	127.6909	-26.0507
181407	127.6654	-25.9017	181447	127.7026	-25.9924	181487	127.6857	-26.0506
181408	127.6648	-25.9033	181448	127.703	-25.9971	181488	127.681	-26.0506
181409	127.6627	-25.9095	181449	127.703	-25.9972	181489	127.6784	-26.0506
181410	127.6624	-25.9105	181450	127.7031	-25.9975	181490	127.6763	-26.0506
181411	127.6602	-25.9162	181451	127.7032	-25.9977	181491	127.6729	-26.0506
181412	127.6602	-25.9164	181452	127.7058	-26.0018	181492	127.672	-26.0506
181413	127.6602	-25.9164	181453	127.7066	-26.0062	181493	127.6715	-26.0506
181414	127.6601	-25.9168	181454	127.7067	-26.0067	181494	127.6715	-26.051
181415	127.66	-25.924	181455	127.7096	-26.0127	181495	127.6714	-26.0624
181416	127.66	-25.9241	181456	127.7096	-26.0128	181496	127.6713	-26.0763
181417	127.6605	-25.9388	181457	127.7107	-26.0157	181497	127.6712	-26.0799
181418	127.6603	-25.9429	181458	127.7114	-26.0175	181498	127.6712	-26.0865
181419	127.6603	-25.9432	181459	127.7113	-26.0184	181499	127.6711	-26.0878
181420	127.6603	-25.9434	181460	127.7112	-26.0194	181500	127.6711	-26.0886
181421	127.6604	-25.9436	181461	127.7107	-26.024	181501	127.6711	-26.0948
181422	127.6607	-25.9438	181462	127.7102	-26.0252	181502	127.6711	-26.0973
181423	127.6634	-25.9464	181463	127.7088	-26.0282	181503	127.671	-26.0984
181424	127.6637	-25.9466	181464	127.7075	-26.0308	181504	127.6714	-26.1041
181425	127.6713	-25.9521	181465	127.7074	-26.0312	181505	127.6712	-26.1174
181426	127.6751	-25.955	181466	127.7068	-26.0337	181506	127.6734	-26.1201
181427	127.6752	-25.9551	181467	127.7067	-26.034	181507	127.6792	-26.1241
181428	127.6755	-25.9552	181468	127.7067	-26.0343	181508	127.6842	-26.1265
181429	127.6757	-25.9553	181469	127.7077	-26.0392	181509	127.6855	-26.1272
181430	127.6821	-25.9568	181470	127.7081	-26.0434	181510	127.6872	-26.128
181431	127.6857	-25.9594	181471	127.7067	-26.0458	181511	127.6894	-26.129
181432	127.6901	-25.9644	181472	127.7051	-26.0477	181512	127.6899	-26.1294
181433	127.69	-25.972	181473	127.705	-26.0477	181513	127.6899	-26.1295

ID	Longitude (I)	Latitude (I)	ID	Longitude (I)	Latitude (I)	ID	Longitude (I)	Latitude (I)
181514	127.6899	-26.1295	181554	127.7092	-26.1724	181594	127.7076	-26.1952
181515	127.6909	-26.1316	181555	127.7092	-26.1725	181595	127.7071	-26.1954
181516	127.6911	-26.1321	181556	127.7092	-26.1726	181596	127.7067	-26.1956
181517	127.6922	-26.1344	181557	127.7093	-26.1727	181597	127.7063	-26.1958
181518	127.6922	-26.1344	181558	127.7093	-26.1729	181598	127.706	-26.1962
181519	127.6923	-26.1347	181559	127.7093	-26.173	181599	127.7057	-26.1966
181520	127.6924	-26.1348	181560	127.7093	-26.1731	181600	127.7056	-26.197
181521	127.6925	-26.1351	181561	127.7093	-26.1732	181601	127.7055	-26.1974
181522	127.6926	-26.1352	181562	127.7092	-26.1733	181602	127.7056	-26.1979
181523	127.6927	-26.1355	181563	127.7092	-26.1735	181603	127.7057	-26.1983
181524	127.6928	-26.1356	181564	127.7092	-26.1736	181604	127.7059	-26.1987
181525	127.693	-26.1358	181565	127.7079	-26.1801	181605	127.7063	-26.199
181526	127.693	-26.136	181566	127.7079	-26.1802	181606	127.7066	-26.1993
181527	127.6931	-26.1361	181567	127.7079	-26.1804	181607	127.7071	-26.1995
181528	127.6932	-26.1362	181568	127.7079	-26.1806	181608	127.7075	-26.1997
181529	127.6933	-26.1363	181569	127.7079	-26.1808	181609	127.7081	-26.1997
181530	127.6934	-26.1366	181570	127.7078	-26.181	181610	127.7145	-26.1998
181531	127.6935	-26.1367	181571	127.7079	-26.1812	181611	127.7144	-26.2032
181532	127.6937	-26.1369	181572	127.7079	-26.1813	181612	127.7143	-26.2048
181533	127.6938	-26.137	181573	127.7079	-26.1815	181613	127.7143	-26.2057
181534	127.694	-26.1373	181574	127.7079	-26.1817	181614	127.7142	-26.2067
181535	127.6941	-26.1374	181575	127.7079	-26.1819	181615	127.7142	-26.208
181536	127.6943	-26.1376	181576	127.708	-26.1821	181616	127.7141	-26.209
181537	127.6943	-26.1377	181577	127.708	-26.1823	181617	127.714	-26.2107
181538	127.6953	-26.1387	181578	127.7081	-26.1824	181618	127.714	-26.2122
181539	127.6966	-26.1403	181579	127.7081	-26.1826	181619	127.7139	-26.2125
181540	127.7007	-26.1448	181580	127.7082	-26.1828	181620	127.7139	-26.2127
181541	127.7034	-26.1583	181581	127.7083	-26.183	181621	127.7138	-26.2161
181542	127.7035	-26.1585	181582	127.7083	-26.1831	181622	127.7138	-26.2162
181543	127.7035	-26.1586	181583	127.7121	-26.1911	181623	127.7138	-26.2162
181544	127.7036	-26.1588	181584	127.7122	-26.1912	181624	127.7138	-26.2176
181545	127.7036	-26.1589	181585	127.7123	-26.1914	181625	127.7138	-26.2197
181546	127.7037	-26.1591	181586	127.7124	-26.1916	181626	127.7138	-26.2208
181547	127.7037	-26.1593	181587	127.7125	-26.1917	181627	127.7113	-26.222
181548	127.709	-26.1717	181588	127.7126	-26.1919	181628	127.7113	-26.2243
181549	127.709	-26.1718	181589	127.7127	-26.1921	181629	127.7102	-26.2243
181550	127.7091	-26.1719	181590	127.7128	-26.1922	181630	127.709	-26.2243
181551	127.7091	-26.172	181591	127.7154	-26.1953	181631	127.7054	-26.2243
181552	127.7092	-26.1721	181592	127.7085	-26.1952			
181553	127.7092	-26.1722	181593	127.7082	-26.1952			