Government of Western Australia
Department of Water and Environmental Regulation

Licence

Licence number	L8846/2014/2
Licence holder	Phosphate Resources Ltd
ACN	009 396 543
Registered business address	6 Thorogood Street BURSWOOD WA 6100
Application number	APP-0027822
Internal number	INS-0001767
Duration	10 February 2025 to 09 February 2045
Date of amendment	9 February 2026
Premises details	Christmas Island Phosphates Christmas Island INDIAN OCEAN TERRITORIES WA 6798 Legal description - Being Lot 47 and 48 on Plan 218106, Lot 51 on Plan 218108, Lot 53 on Plan 218110, Lot 197 on Plan 218134, Lot 482 and 488 on Plan 219653, Lot 554 on Plan 221294, Lot 622 on Plan 43303, Lot 637 on Plan 43304, Lot 3001 and 3002 on Plan 41813, and Lot 3022 on Plan 43297, as depicted in Figure 1, Schedule 1 and as defined by the coordinates in Schedule 2

Prescribed premises category description **[Schedule 1, *Environmental Protection Regulations 1987 (WA)(CI)*]**	**Assessed design capacity**
Category 5: Processing or beneficiation of metallic or non-metallic ore: premises on which – (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.	1 200 000 tonnes per annual period
Category 58: Bulk material loading or unloading: premises on which clinker, coal, ore, ore concentrate or any other bulk granular material (other than salt) is loaded onto or unloaded from vessels by an open materials loading system.	1 200 000 tonnes per annual period

This licence is granted to the licence holder, subject to the attached conditions, on 9 February 2026, by:

Grace Heydon

Digitally signed by Grace Heydon
Date: 2026.02.09 09:06:25 +08'00'

GRACE HEYDON
MANAGER, WASTE INDUSTRIES

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

Licence history

Date	Reference number	Summary of changes
2/12/2005	L8099/2006/1	New Licence Application
4/03/2008	L8099/2006/2	Licence Reissue
15/01/2015	L8846/2014/1	Licence Amendment to new format
5/11/2015	L8846/2014/1	Licence amendment to change details on fuel used in dryers
29/04/2016	L8846/2014/1	This notice was given in accordance with section 59B(9) of the *Environmental Protection Act 1986* to the new expiry date of the licence.
23/09/2016	L8846/2014/1	Licence amendment for inclusion of Incinerator conditions
30/01/2018	L8846/2014/1	Amendment Notice 1– Amendments to the Licence as a result of an Inspection undertaken in August 2017.
6/11/2023	L8846/2014/1	Occupier initiated amendment following the outcomes of an operational review of the licence to ensure that the licence reflects the current operations of the premises. DWER initiated licence amendment included to; amalgamate issued amendment notice 1 into the licence, update format, and remove redundant conditions. During this amalgamation of amendment notice no additional risk assessment of the premises was undertaken by DWER.
12/06/2024	L8846/2014/1	DWER initiated licence amendment for the requirement to develop a new ambient air quality monitoring program.
10/02/2025	L8846/2014/2	Licence renewal
9/02/2026	L8846/2014/2	CEO initiated amendment to implement the new air quality monitoring network and update ambient air quality monitoring conditions.

Interpretation

In this licence:

(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 licence:

  (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 licence requires specific conditions to be met but does not provide any implied authorisation for other emissions, discharges, or activities not specified in this licence.

Licence conditions

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

Infrastructure and equipment

1. The licence holder must ensure that the site infrastructure and equipment listed in Table 1 and located at the corresponding infrastructure location is maintained and operated in accordance with the corresponding operational requirement set out in Table 1.

Table 1: Infrastructure and equipment requirements

	Site infrastructure and equipment	Operational requirement	Infrastructure location
1.	Laboratory	a) Waste output from all testing and analysis of phosphate product grade is to be treated prior to disposal. b) Emissions of wastewater from the laboratory must comply with Conditions 21 and 22	As per Figure 2 in Schedule 1 of this licence
Run of Mine Stockpile Area/Mining Equipment Stand Down Area (ROM/LB4)			
2.	Feeders Conveyors Sizer plant Hopper	a) All infrastructure and equipment must be operated and maintained in good working order and as per design/manufacturer specifications.	As per Figure 2 and Figure 3 in Schedule 1 of this licence
Incinerator			
3.	Incinerator 2 x 20 ft sea containers (one for housing incinerator and one for fuel storage) Waste for incineration storage area Sump Oil/water separators Incinerator stack	a) All infrastructure and equipment must be operated and maintained in good working order and as per design/manufacturer specifications. b) Incinerator must be located within a 20 ft sea container on a bunded sealed surface which is maintained in good condition. c) The sea container must be able to be locked to prevent unauthorised access. d) Fire safety extinguishers must be available within the sea container housing the incinerator and accessible at all times. e) The incinerator must achieve moderate (8 m/second) air velocity flow for appropriate particulate matter entrainment into the flue gas leaving the incinerator. f) The incinerator must have a programmable logic control system for temperature control and load timer status. g) Waste to be incinerated must be stored in the designated undercover storage area on a bunded metal base. h) The designated storage area must be maintained so that it is able to withstand a '1-in-20' year ARI rainfall event of 72 hours duration without liquid run on or run off.	As per Figure 2, Figure 6, Figure 7, and Figure 8 in Schedule 1 of this licence

	Site infrastructure and equipment	Operational requirement	Infrastructure location
		i) The designated storage area for waste for incineration is to be kept ordered and marked according to waste type in Table 4, to ensure no mixing of wastes of different types occurs.	
Dryers Precinct			
4.	2 x Rotary kiln dryers Cyclones Baghouses Dryer stack Conveyors Reclaimers Crushers Wet feed bins Rock silos and dust silos	a) All infrastructure and equipment must be operated and maintained in good working order and as per design/manufacturer specifications. b) Any diesel or recycled oils used in the operation of the rotary dryers must contain a maximum sulphur content of less than or equal to 3% m/m. c) All pressure monitors within the baghouse are always maintained and operational.	As per Figure 2 and Figure 3 in Schedule 1 of this licence
Cross Country Conveyors (PS10/C1-05) from dryers to Downhill Silos			
5.	Cross country conveyors Rock silos and dust silos	a) All infrastructure and equipment must be operated and maintained in good working order and as per design/manufacturer specifications.	As per Figure 2 and Figure 4 of Schedule 1 of this licence
Downhill Conveyors (D8-D13) from top of incline to Ship Loading Precinct			
6.	Conveyors D8-D13 Air slides Aeration blowers Bagging machine Dust filters	a) All infrastructure and equipment must be operated and maintained in good working order and as per design/manufacturer specifications.	As per Figure 2 and Figure 4 of Schedule 1 of this licence
Wharf/Ship Loading Precinct (loading and dust bagging area)			
7.	Rock shed Rock Storage Bin Bagging dust silos Conveyors Sampler Sample plant Ship-loaders Northern Drive Assembly Cantilever Slew Southern Drive Assembly Cantilever Slew Choke feeder North Arm (Cantilever) South Arm (Cantilever)	a) All infrastructure and equipment must be operated and maintained in good working order and as per design/manufacturer specifications. b) Conveyors must be enclosed. c) Rock bin must be used for the storage of phosphate rock product. d) Rock bin has a maximum storage capacity of 75,000 metric tonnes. e) Phosphate dust product must be stored in dust silos (up to 2,000 metric tonnes per silo).	As per Figure 2, Figure 4, and Figure 5 of Schedule 1 of this licence

	Site infrastructure and equipment	Operational requirement	Infrastructure location
8.	Weather station (solar powered)	a) Operational following submission of the Environmental Compliance Report in accordance with condition 3. b) Must be operated and maintained in accordance with AS 3580.14. c) Must be equipped with a battery back-up system capable of providing uninterrupted power for a minimum of 48 hours.	Shown as "MET1" in Figure 9, Schedule 1
9.	2 x PM_{10} Real Time Dust Monitors	a) Operational following submission of the Environmental Compliance Report in accordance with condition 3. b) Operated and maintained in accordance with the Air Quality Monitoring Plan, including routine maintenance, calibration, and servicing as specified in the plan, to ensure accurate and reliable data collection. c) Must be equipped with heated particulate inlets to remove condensation in high humidity environments. d) Must be equipped with data logging software and communications systems that enable real-time access to monitoring data.	Shown as "NR1" and "NR2" in Figure 9, Schedule 1
10.	Portable dust monitor	a) Must be available as a spare to cover offsite service, calibration or repair of other units. b) Must be operated and maintained in accordance with the manufacturer's specifications. c) Must be equipped with a heated inlet to remove condensation in high humidity environments.	N/A
11.	2 x Beta Attenuation Monitors (BAMs)	a) Operational following submission of the Environmental Compliance Report in accordance with condition 3. b) Operated and maintained in accordance with AS 3580.9.11 and the Air Quality Monitoring Plan. c) Must be equipped with heated particulate inlets to remove condensation in high humidity environments. d) Must have well maintained wind speed and direction sensors. e) Must be equipped with data logging software and communications systems that enable real-time access to monitoring data.	Shown as "BAM1" and "BAM2" in Figure 9, Schedule 1

2. The Licence Holder must install the equipment specified in Table 2:

(a) in accordance with the corresponding design and installation requirements;

(b) at the corresponding equipment location; and

(c) within the corresponding timeframe set out in Table 2, or within 90 days of obtaining legal access to the land on which equipment will be located, whichever is later.

Table 2: Equipment design and installation requirements

	Equipment	Design and installation requirements	Equipment location	Timeframe
1.	Weather station	(a) One Delta OHM HD52.3D shall be installed under the supervision of an air quality professional. (b) The unit must be powered by a solar energy system and include a battery backup capable of maintaining operation for a minimum of 48 hours.	Shown as "MET1" in Figure 9, Schedule 1	By 31 March 2026
2.	2 x PM_{10} Real Time Dust Monitors	(a) Two Oizom Real Time Dust Monitors utilizing laser/optical particle counter principles are to be installed under the supervision of an air quality professional. (b) The units must be powered by a solar energy system and include a battery backup capable of maintaining operation for a minimum of 48 hours. (c) The units must have an analyser range for PM_{10} of 0 - 5,000 µg/m^3, with resolution of 0.1 µg/m^3 and minimum detection of 1 µg/m^3. (d) The unit must be equipped with heated particulate inlets to remove condensation in high humidity environments.	Shown as "NR1" and "NR2" in Figure 9, Schedule 1	
3.	2 x Beta Attenuation Monitors (BAMs)	(a) Two Focussed Photonics (FPi) BPM-200 shall be installed under the supervision of an air quality professional. (b) Each BAM is to be located within an outdoor air-conditioned secure enclosure. (c) Each BAM must have a heated inlet to remove condensation. (d) BAMs must be powered by mains electricity and equipped with surge protection. (e) Ultrasonic static anemometers are to be installed to monitor wind speed and direction.	Shown as "BAM1" and "BAM2" in Figure 9, Schedule 1	Within 90 days of obtaining legal access to the land on which equipment will be located

3. The Licence Holder must within 90 calendar days of an item of infrastructure required by condition 2 being constructed:

   (a) undertake an audit of their compliance with the requirements of condition 2; and

   (b) prepare and submit to the CEO an Environmental Compliance Report on that compliance.

4. The Environmental Compliance Report required by condition 3, must include as a minimum the following:

   (a) certification by an air quality professional that the equipment or component(s) thereof, as specified in condition 2, have been constructed in accordance with the relevant requirements specified in condition 2;

   (b) evidence that the Licence Holder holds legal access or occupancy rights for the land on which the equipment in Table 2 has been installed;

   (c) photographs of the installation and a detailed site plan for each item of equipment or component of equipment specified in condition 2; and

   (d) be signed by a person authorised to represent the Licence Holder and contains the printed name and position of that person.

5. The Licence Holder must operate and maintain all bunds, concrete hard stands, oil/ water separators, sumps, stormwater culverts, gabions, and dams to design specifications.

6. The Licence Holder must recover, or remove and dispose of spills of hydrocarbons, hydrocarbon contaminated waste or processed phosphate product outside an engineered containment system as soon as reasonably practicable.

7. The Licence Holder must store fuel, oil, or other hydrocarbons within low permeability (10^{-9} metres per second or less) compound(s) designed to contain not less than 110% of the volume of the largest storage vessel or inter-connected system, and at least 25% of the total volume of substances stored in the compound[1].

   Note1: *The Environmental Protection (Unauthorised Discharges) Regulations 2004 (WA)(CI)* make it an offence to discharge certain materials into the environment.

Premises Operation

8. The Licence Holder must manage the operation to ensure that throughput at the premises does not exceed the limits in Table 3.

Table 3: Throughput Limits

Process	Limit
Processing or beneficiation of metallic or non-metallic ore	1,200,000 tonnes (ore) per annual period.
Bulk material loading or unloading	1,200,000 tonnes per annual period.
Incineration (of hydrocarbons or, hydrocarbon contaminated waste)	maximum of 70% of the volume of the 1.7 m^3 furnace per batch.

9. The Licence Holder shall:

(a) dispose of all non-hydrocarbon wastes generated or brought on site, excluding unusable process fines, to a licensed disposal facility;

(b) store any contaminated soils onsite within an impervious, bunded facility prior to disposal of the waste at a licensed facility or suitable disposal facility; and

(c) dispose of all unusable process fines back to the mine as backfill.

10. The Licence Holder shall only accept waste on to the Premises if:

(a) it is of a type listed in Table 4;

(b) the quantity accepted is below any quantity limit listed in Table 4;

(c) it meets any specification listed in Table 4; and

(d) in the case of contaminated solid waste is supported by documentation that demonstrates compliance with the acceptance criteria for Class II landfills.

Table 4: Waste acceptance

	Waste type	Quantity Limit	Specification[1]
1	Light oily rags	20 tonnes combined per annual period	(a) For final disposal to incinerator or licenced facility only.
2	Heavy oily rags		
3	Oil/Fuel Filters		(a) Filters must be drained, crushed, and bagged prior to acceptance. (b) For final disposal to incinerator or licenced facility only.
4	Contaminated (oil) soil/spill absorbents		(a) For final disposal to incinerator or licenced facility only.
5	Grease cartridges		
6	Grease		
7	Oily Sludge		
8	Empty metal sample tins		
9	Black plastic		(a) Excludes polyvinyl chloride products. (b) For final disposal to incinerator or licenced facility only.
10	Other oily wastes		(a) Excludes mercury thermometers, solvents paint, chemicals, batteries, mobile phones, ink cartridges, tyres, computer and computer accessories, glass, aluminium cans, products containing Sulphur nitrogen, and toxic metals. (b) For final disposal to incinerator or licenced facility only.

Note 1: Additional requirements for the acceptance of controlled waste (including asbestos and tyres) are set out in the *Environmental Protection (Controlled Waste) Regulations 2004*.

11. The Licence Holder must ensure that where waste does not meet the waste acceptance criteria set out in condition 10 it is removed from the Premises or, where that is not possible, the Licence Holder shall contact the CEO to agree on a course of action in relation to the waste.

12. The Licence Holder must ensure that all hydrocarbon contaminated waste accepted at the premises for incineration is:

(a) bagged and segregated by its type specified in Table 4 to ensure no mixing of different types of wastes;

(b) stored within the designated covered, bunded storage area as specified in Table 1, prior to incineration; and

(c) all waste must be stored in leak-proof containers with lids or in lidded waste bins.

13. The Licence Holder shall ensure that wastes accepted onto the Premises are only subjected to the process(es) set out in Table 5 and in accordance with any process limits described in that Table.

Table 5: Waste Processing

Waste type(s)	Process	Process limits[1]
All wastes for incineration	Handling and disposal of waste	• Shall only take place within the incinerator location as defined within Schedule 1: Maps; • Incinerator to be housed within a lockable, enclosed metal structure placed on a concrete base; • Ensure incinerator preheat temperature is no less than 1,000 °C in secondary chamber; • Secondary combustion chamber temperature is to be no less than 980 °C when waste is incinerated; • Stack temperature to be no less than 400+ °C during incineration; • Minimum of two second residence time of gas; • No incineration of putrescible wastes, radioactive wastes, mercury thermometers, solvents, chemicals, batteries, paint, mobile phones, ink cartridges, tyres, computers or computer accessories, glass, aluminium cans or polyvinyl chloride products or products containing sulphur, nitrogen or toxic metals to occur; • Ensure incineration of waste is carried out in accordance with the manufacturer's specifications for waste type segregation and uniform waste feed; • Minimum cool down period prior to ash removal is at least 3 hours; and • Ensure that all residual waste ash generated from the incineration process is disposed of to a licenced facility able to dispose of the waste type generated.

14. The Licence Holder shall undertake the management action specified in Table 6 in the case of an event listed in Table 6.

Table 6: Management actions

Emission point	Event/ action reference	Event	Management action
Incinerator (As per Schedule 1: Maps)	EA1	Failure or malfunction or abnormal operation period (including emission of black smoke)	1. Shut down incinerator. 2. Restore normal operation of failed equipment or replace the failed equipment prior to re-introducing feed. 3. Assess temperature operation of chamber/s during failure, malfunction or abnormal operation period. 4. The Licence Holder must record the beginning and end of the Abnormal Operation period and any actions undertaken to rectify the issue.
	EA2	Start up	1. Must not load waste into the incinerator until preheat temperature of at least 1,000 °C is reached.
Wash down bays; oil/ water separators	EA3	Failure or malfunction or abnormal operation period resulting in elevated hydrocarbon sampling	1. Ensure no discharge of wastewater is released from wash down bays by locking outflow pipe in 'closed' position or transferring contained wastewater from the sump to an impermeable holding facility; 2. Assess and undertake maintenance or upgrades on the treatment process prior to reloading the system. 3. Transfer wastewater back through the system and re-sample to ensure parameter limits are being achieved. 4. Once parameter sampling limits are achieved, treated wastewater may be discharged from the wash down bay sump.
Hydrocarbon contaminated storm/waste water from bunded facilities	EA4	Hydrocarbon contaminated stormwater or spills within bunded structures	1. Remove all contaminated storm water held within bunds after each rainfall event and process them through an oil/ water separator (or similar) or recycling facility. 2. Apply absorbency material to contain and remove hydrocarbon spills when they occur and dispose of all contaminated materials appropriately.

15. Following the cessation of emissions/operation under condition 14, the Licence Holder shall not restart operation of the process until:

(a) the problem has been rectified; and

(b) the Licence Holder has recorded the actions taken to maintain compliance with the Licence.

16. The Licence Holder must, prior to initiating burning of fuels with a sulphur content above 1.5% m/m in the rotary driers, develop and implement an Air Quality Monitoring and Investigation Programme for sulphur emissions from the dryer stack. The monitoring programme should be conducted over a six month period and include, but not limited to:

(a) Continuous monitoring of sulphur emissions from the A1 dryer stack;

(b) An assessment of the monitoring data against relevant standards;

(c) Recording and investigation of any odour complaints received and determination of their source;

(d) Investigation of the potential impacts, from the change in sulphur content, at the nearest sensitive receptor/s; and

(e) Commencement and completion dates for the monitoring programme.

17. The Licence Holder must within two months of commencing the burning of fuel with sulphur content above 1.5% m/m in the rotary dryers:

(a) Install a sulphur dioxide (SO2) probe (in accordance with Australian Standard AS/NZS 4323.1) within the A1 – dryer stack, for continuous monitoring purposes.

18. The Licence Holder must, within one month after the completion date of the air quality monitoring programme in condition 16, submit a report to the CEO on the outcomes of the Air Quality Monitoring and Investigation Programme with any corrective actions undertaken to mitigate/manage emissions, if required.

Emissions and discharges

General

19. The Licence Holder shall record and investigate the exceedance of any descriptive or numerical limit specified in conditions 20, 21, 22 and 23 of this Licence.

Point source emissions to air

20. The Licence Holder shall ensure that where waste is emitted to air from the emission points in Table 7, and identified in Figure 6 in Schedule 1, it is done so in accordance with the conditions of this Licence.

Table 7: Emission points to air

Emission point reference on Map of emission points	Emission Point (Source)	Emission point height (m)	Source, including any abatement
A1 - Kiln stack	Rotary dryer no. 5 (KLN5)	30.9	Kiln via the baghouses.
	Rotary dryer no. 6 (KLN6)		
A2 – Incinerator stack	Incinerator stack	20.0	Hot Hearth ‘HSH 100’ incinerator stack placed on the secondary chamber discharge point. Incinerator with a minimum 2 second gas residence time in secondary chamber and incorporates a fully programmable logic control system for temperature control and load timer status (continuous).

Emissions to land

21. The Licence Holder shall ensure that where waste is emitted to land from the emission points in Table 8 and identified on the map of emission points in Figure 6, of Schedule 1, it is done so in accordance with the conditions of this Licence.

Table 8: Emissions to land

Emission point reference	Emission point reference on Map of emission points	Description	Source including abatement
Outlet pipes from laboratory	L1	Wastewater generated from laboratory testing of product.	Wastewater from laboratory sinks sent through buffering/stabilising tank and testing completed prior to release to ground.
Outlet pipes from the workshops, wash down bay areas, storage areas and oil/ water separator.	L2	Pipes removing wastewater from operations and workshop areas.	Wastewater discharged via fuel/oil traps/ separators or silt traps.

22. The Licence Holder shall not cause or allow emissions to land greater than the limits listed in Table 9.

Table 9: Emission limits to land

Emission point reference	Parameter	Limit (including units)	Averaging period
Outlet pipes from the laboratory (L1)	pH[1]	6.0-8.5 pH	Monthly
Outlet pipes from the workshops, wash down bays/ areas, oil/ water separators (L2)	Total Recoverable Hydrocarbons (TRH)	≤ 10 ppm	Monthly

Note 1: In-situ non-NATA monitoring permitted

Fugitive emissions

23. The Licence Holder shall implement and adhere to the dust management strategies as defined within the Environmental Management Plan.

Monitoring

24. The Licence Holder must ensure that:

(a) all water samples are collected and preserved in accordance with AS/NZS 5667.1;

(b) all wastewater samples are collected in accordance with AS/NZS 5667.10; and

(c) all laboratory samples are submitted to and tested by a laboratory with current NATA accreditation for the parameters being measured unless indicated otherwise in the relevant table.

25. The Licence Holder must ensure that:

(a) monthly monitoring is undertaken at least 15 days apart;

(b) quarterly monitoring is undertaken at least 45 days apart;

(c) six monthly monitoring is undertaken at least 5 months apart; and

(d) annual monitoring is undertaken at least 9 months apart.

26. The Licence Holder must ensure that all monitoring equipment used on the Premises to comply with the conditions of this Licence is calibrated in accordance with the manufacturer's specifications.

27. The Licence Holder must, where the requirements for calibration cannot be practicably met, or a discrepancy exists in the interpretation of the requirements, bring these issues to the attention of the CEO accompanied with a report comprising details of any modifications to the methods.

Monitoring of point source emissions to air

28. The Licence Holder must undertake the monitoring in Table 10 according to the specifications in that table.

Table 10: Monitoring of point source emissions to air

Emission point reference	Parameter	Units	Frequency[1]	Method
A1 & A2	Volumetric flow rate	m^3/min	Biannually	USEPA Method 2
	Cadmium	g/min $\mu g/m^3$		USEPA Method 29
	Chromium (III)			USEPA Method 29
	Lead			USEPA Method 29
	Nickel			USEPA Method 29
	Oxides of Nitrogen (NO_x)			USEPA Method 7E
	Carbon monoxide (CO)			USEPA Method 10
	Sulphur dioxide (SO_2)			USEPA Method 6C or B8
	Polycyclic aromatic hydrocarbons (PAHs)			USEPA SW-846 Method 0010
	Total volatile organic compounds (VOCs)			USEPA Method 18
	Particulates (PM^{10})	mg/m^3		USEPA Method 201/ AS 4323.2
	Particulates ($PM^{2.5}$)			USEPA Method 201/ AS 4323.2
A2	Mercury	g/min $\mu g/m^3$	Biannually	USEPA Method 29
	Arsenic			USEPA Method 29
	Total Chlorine			USEPA 26A
	BTEX			Not specified
	Zinc			Not specified
	Copper			Not specified
	Total Aluminium			Not specified
	Dioxins or furans			USEPA Method 23

Note 1: Monitoring shall be undertaken to reflect normal operating conditions and any limits or conditions on inputs or production.

Monitoring of emissions to land

29. The Licence Holder shall undertake the monitoring in Table 11 according to the specifications in that table.

Table 11: Monitoring of emissions to land

Emission point reference	Monitoring point	Parameter	Units	Frequency
Outlet pipes from the laboratory (L1)	Buffer tank prior to discharge to holding tanks	pH	pH[1]	Monthly
Outlet pipes from the workshops, wash down bays, oil/ water separator (L2)	Circulation exit point into the wash down bay sump	Total Recoverable Hydrocarbons (TRH)	mg/L	

Note 1: In-situ non-NATA monitoring permitted

Monitoring of inputs and outputs

30. The Licence Holder shall undertake the monitoring in Table 12 according to the specifications in that table.

Table 12: Monitoring of inputs/outputs

Input	Parameter	Units	Averaging period	Frequency
Diesel fuel or other fuel oils	Volume	Litres (L)	Monthly	Each refuelling event.
Waste accepted for incineration	Waste Type	N/A	N/A	Each load accepted at the premises
	Quantity	Kilograms (kg)	Monthly	
Waste incinerated	Waste Type	N/A	N/A	Each load disposed of to the incinerator
	Quantity	Kilograms (kg)	Monthly	
Ash removed from the incinerator	Quantity	Kilograms (kg)	Monthly	Each time the incinerator is emptied
Ash removed off-site	Quantity	Kilograms (kg)	Monthly	Each load removed from the premises

Ambient environmental quality monitoring

31. The Licence Holder shall undertake the monitoring in Table 13 according to the specifications in that table and record any results.

Table 13: Monitoring of ambient air quality

Monitoring point reference and location	Parameter	Reportable limit	Units[1]	Averaging period	Frequency	Method
PM_{10} Real Time Dust Monitors (NR1 and NR2)	Dust as particulates PM_{10}	N/A	µg/m^3	10 minutes	Continuous	Manufacturer-specified near-reference method
BAM1 and BAM2	Dust as particulates PM_{10}	≥50	µg/m^3	24 hrs (measured from midnight to midnight)	Continuous	AS 3580.9.11
		N/A	µg/m^3	1 hr	Continuous	AS 3580.9.11

32. The Licence Holder shall notify the CEO in writing, in accordance with condition 41, of any ambient air quality monitoring result from BAM1 or BAM2 that exceeds the reportable limit of 50 µg/m^3 (24-hour average) for PM_{10}, as specified in Table 13.

33. The Licence Holder shall undertake the meteorological monitoring in Table 14 according to the specifications in that table.

Table 14: Meteorological monitoring

Monitoring station & location	Parameter	Units	Height (m)	Method
Wharf Precinct at the "MET1" location shown in Schedule 1, Figure 9	Wind speed	m/s	10	AS 3580.14
	Wind direction	Degrees	10	
	Wind direction standard deviation	Degrees	10	
	Air temperature	°C	10	
	Differential air temperature	°C	10 and 2	
	Relative humidity	%	> 2	
	Barometric pressure	hPa	Not specified	
	Rainfall	mm	> 0.3	

Specified actions

34. The Licence Holder must complete;

(a) the action reference specified in Column 1,

(b) for the specific actions specified in Column 2, and

(c) by the date of completion in Column 3,

in Table 15.

Table 15: Specified actions

Action	Specified action	Date of completion
1	The Licence Holder must prepare and submit to the CEO a revised Air Quality Monitoring Plan that includes: (a) PM_{10} concentration trigger levels developed based on baseline ambient air quality monitoring data, to support proactive management actions aimed at preventing exceedance of the 24-hour average PM_{10} standard of 50 $\mu g/m^3$, as specified in the National Environmental Protection (ambient Air Quality) Measure (NEPM). (b) A description of management actions to be implemented in response to exceedance of the PM_{10} trigger levels, including operational controls and mitigation measures to reduce particulate emissions and prevent further exceedances.	Date 12 months from completion of the installation of all equipment listed in Condition 2 , Table 2.

34B. (a) The CEO may direct the Licence Holder to amend the document specified in Row 1 of Table 15 if:

(i) the CEO considers that the matters specified in the document are insufficient to meet the requirements specified in Table 15, and has afforded the Licence Holder an opportunity in writing of no less than 7 days to show cause why a direction to amend the documents should not be made; or

(ii) the Licence Holder requests that the CEO give such a direction;

(b) The Licence Holder must comply with a direction given under condition 34B(a) by submitting, within the time specified in the direction, an amended document in accordance with the direction.

34C. The Licence Holder must implement the document specified in Row 1 of Table 15 where the CEO has notified the Licence Holder that the document as required by Row 1 of Table 15 meets the corresponding requirements of Table 15.

Records and reporting

35. The licence holder must record the following information in relation to complaints received by the licence 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 licence holder to investigate or respond to any complaint.

36. The Licence Holder shall establish and maintain a materials spillage register that shall record instances of material spillage due to equipment failure and contain details such as time, date, type and volume of material spilled, as well as time and date of spillage clean-up.

37. The licence holder must:

(a) undertake an audit of their compliance with the conditions of this licence during the preceding annual period; and

(b) prepare and submit to the CEO an Annual Audit Compliance Report in the approved form by 29 August each year.

38. The licence holder must maintain accurate and auditable books including the following records, information, reports, and data required by this licence:

(a) the calculation of fees payable in respect of this licence;

(b) any maintenance of infrastructure that is performed in the course of complying with condition 1 of this licence;

(c) monitoring programs undertaken in accordance with conditions 28, 29, 30, 31 and 33 of this licence; and

(d) complaints received under condition 35 of this licence.

39. The books specified under condition 38 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 licence holder for the duration of the licence; and

(d) be available to be produced to an inspector or the CEO as required.

40. The licence holder must:

(a) prepare an environmental report that provides information in accordance with Table 16 for the preceding annual period, and

(b) submit the environmental report to the CEO by 29 August each year.

Table 16: Environmental reporting requirements

Condition or table (if relevant)	Requirement	Format or form[1]
-	Summary of project operation, any changes to site boundaries and premises map.	None specified
-	Summary of measures taken to suppress and manage dust emissions	None specified
-	Summary of performance of all stormwater features and any actions undertaken to rectify concerns identified and including management, monitoring and measurement against the performance criteria within the Environmental Management Plan.	None specified
-	Summary of any failure or malfunction of any pollution control equipment and any environmental incidents that have occurred during the annual period and any action/s taken.	None specified
-	Explanation of the monitoring results for all monitoring parameters	None specified
14 & 15	Summary of any management actions undertaken as a result of events listed in Table 6.	None specified

Condition or table (if relevant)	Requirement	Format or form[1]
1 (4.b)	Confirmation of sulphur content of fuels used in rotary dryer/s.	None specified
1 (4.c)	Summary of baghouse pressure monitor failures and action/s taken.	None specified
26	Summary of annual equipment calibration	None specified
28	Monitoring of point source emissions to air	None specified
29	Monitoring emissions to land	None specified
30	Summary of monthly inputs/outputs, including a summary on the incineration efficiency for different waste types	None specified
31	Monitoring of ambient air quality	None specified
33	Summary of meteorological monitoring	None specified
37	Compliance	None specified
35	Complaints summary	None specified
36	Spillage summary	None specified
41	Summary of limit exceedances	None specified

Notification

41. The Licence Holder shall ensure that the parameters listed in Table 17 are notified to the CEO in accordance with the notification requirements of the table.

Table 17: Notification requirements

Condition or table (if relevant)	Parameter	Notification requirement[1]	Format or form
-	Breach of any limit specified in the Licence	As soon as practicable but no later than 5pm of the next working day	None specified
16	Commencement of burning high sulphur fuel	Within 7 days of commencement of burning fuel with sulphur content above 1.5% m/m.	None specified
31 and 32	An exceedance of the reportable limit of 50 µg/m^3 (24-hour average for PM_{10}) recorded by BAM1 or BAM2	Within 72 hours of the exceedance being detected. Notification information is to include: • Date and time of exceedance • Measured value • Actions taken to mitigate or cease the emission.	None specified

Note 1: Notification requirements in the Licence shall not negate the requirement to comply with s72 of the act

Definitions

In this licence, the terms in Table 18 have the meanings defined.

Table 18: Definitions

Term	Definition
ACN	Australian Company Number.
Air Quality Monitoring Plan	means the document titled *Air Quality Monitoring Plan Version 002*, Document No. ENV-Plan-002 (or any subsequent revision) that outlines the monitoring network, equipment specifications, maintenance and calibration schedules, data validation procedures, and trigger level methodology. The plan may be updated from time to time, provided that any revisions are approved in writing by the CEO.
air quality professional	means a person who: a) holds a Bachelor of Science qualification, or an Air Quality Science-related tertiary level qualification; or b) has a minimum of at least 5 years' experience working in the field of air quality monitoring and assessment.
Annual Audit Compliance Report (AACR)	means a report submitted in a format approved by the CEO (relevant guidelines and templates may be available on the Department's website).
annual period	a 12 month period commencing from 1 July until 30 June of the immediately following year.
ARI	means Average Recurrence Interval, defined by the Bureau of Meteorology as *"the average, or expected, value of the periods between exceedances of a given rainfall total accumulated over a given duration."*
AS 3580.1.1	means the Australian Standard AS/NZS 3580.1.1.2007 *Methods for sampling and analysis of ambient air – Guide to siting air monitoring equipment.*
AS 3580.9.11	Means the Australian Standard AS 3580.9.11 *Methods for sampling and analysis of ambient air - Determination of suspended particulate matter - PM10 beta attenuation monitors.*
AS 3580.14	means the Australian Standard AS 3580.14 *Methods for sampling and analysis of ambient air - Meteorological monitoring for ambient air quality monitoring applications.*
AS 4323.1	means the Australian Standard AS4323.1 *Stationary Source Emissions Method 1: Selection of sampling positions.*
AS/NZS 5667.1	means the Australian Standard AS/NZS 5667.1 *Water Quality – Sampling – Guidance of the Design of sampling programs, sampling techniques and the preservation and handling of samples.*

Term	Definition
AS/NZS 5667.10	means the Australian Standard AS/NZS 5667.10 *Water Quality – Sampling – Guidance on sampling of waste waters.*
biannually	means twice a year, with at least 5 months between monitoring events.
books	has the same meaning given to that term under the EP Act.
CEO	means Chief Executive Officer of the Department. "submit to / notify the CEO" (or similar), means either: Director General Department administering the *Environmental Protection Act 1986* Locked Bag 10 Joondalup DC WA 6919 or: info@dwer.wa.gov.au
Department	means the department established under section 35 of the *Public Sector Management Act 1994* (WA) and designated as responsible for the administration of the EP Act, which includes Part V Division 3.
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 Management Plan	means the current version of the Christmas Island Phosphates (CIP) Environmental Management Plan as submitted to the Minister for Territories.
Fugitive emissions	means all emissions not arising from point sources identified in conditions 17 and 18.
EP Act	*Environmental Protection Act 1986* (WA)
EP Regulations	*Environmental Protection Regulations 1987* (WA)
licence	refers to this document, which evidences the grant of a licence by the CEO under section 57 of the EP Act, subject to the specified conditions contained within.
licence holder	refers to the occupier of the premises, being the person specified on the front of the licence as the person to whom this licence has been granted.
NATA	means the National Association of Testing Authorities, Australia.
NATA accredited	means in relation to the analysis of a sample that the laboratory is NATA accredited for the specified analysis at the time of the analysis.
NEPM	means the *National Environment Protection (Ambient Air Quality) Measure.*

Term	Definition
Normal operating conditions	means any operation of a particular process (including abatement equipment) excluding start-up, shut-down and upset conditions, in relation to stack sampling or monitoring.
PM	means total particulate matter including both solid fragments of material and miniscule droplets of liquid.
PM_{10}	means particles with an aerodynamic diameter of less or equal to 10 μm.
Polyvinyl chloride products	means synthetic plastic polymer products also known as PVC.
premises	refers to 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 licence.
prescribed premises	has the same meaning given to that term under the EP Act.
waste	has the same meaning given to that term under the EP Act.
Schedule 1	means Schedule 1 of this Licence unless otherwise stated.
Schedule 2	means Schedule 2 of this Licence unless otherwise stated.
shut-down	means the period when plant or equipment is brought from normal operating conditions to inactivity.
spot sample	means a discrete sample representative at the time and place at which the sample is taken.
stack test	means a discrete set of samples taken over a representative period at normal operating conditions.
start-up	means the period when plant or equipment is brought from inactivity to normal operating conditions.
USEPA	means United States (of America) Environmental Protection Agency.
waste cake	means waste solids generated from the hydrocarbon recycling process (separation/filtration) undertaken by Indian Ocean Oil Company (W5975/2016/1) under Category 39 for the premises.

END OF CONDITIONS

Schedule 1: Maps

Premises map

The boundary of the prescribed premises is shown in the map below.

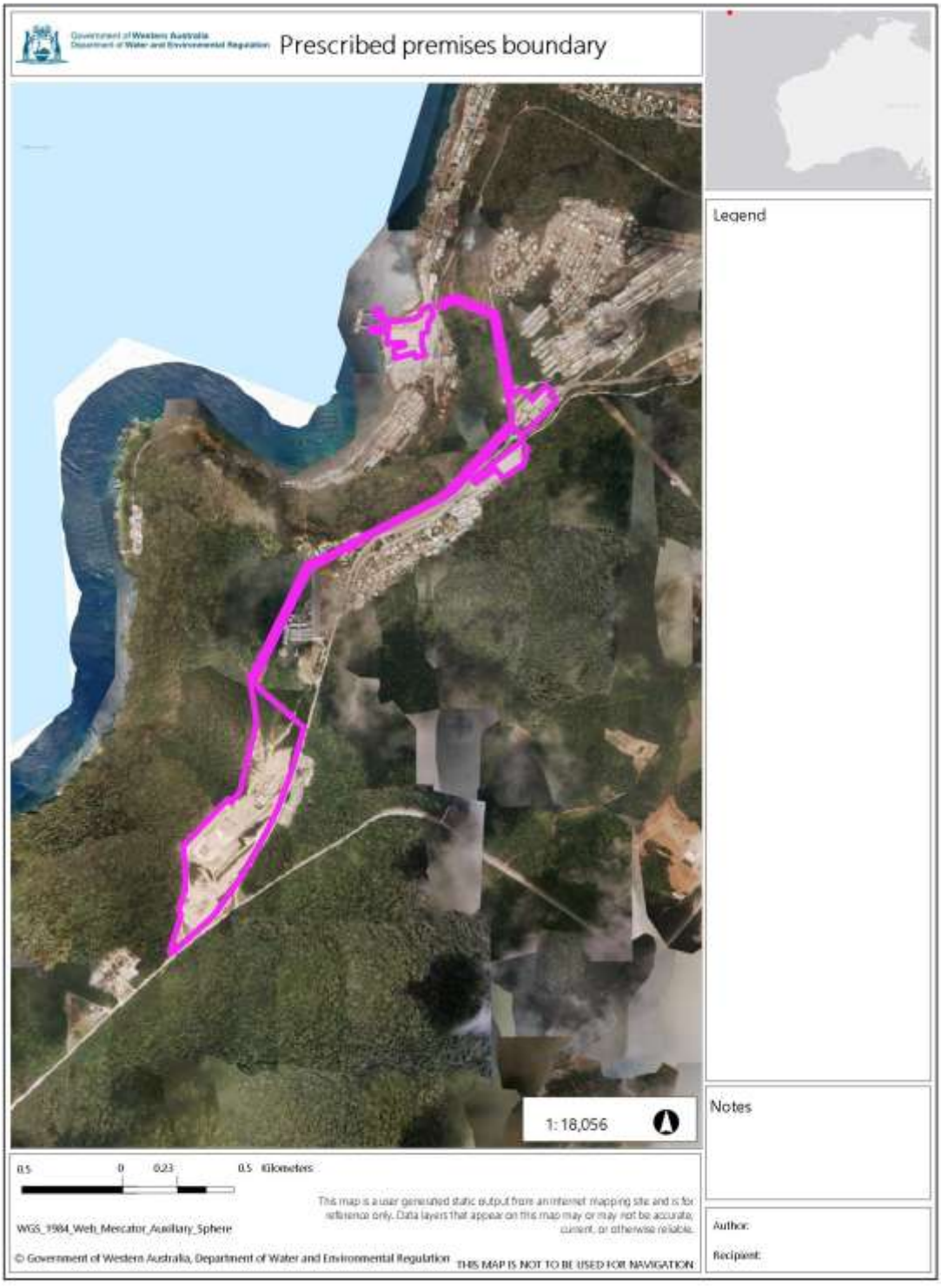

Figure 1: Premises Map

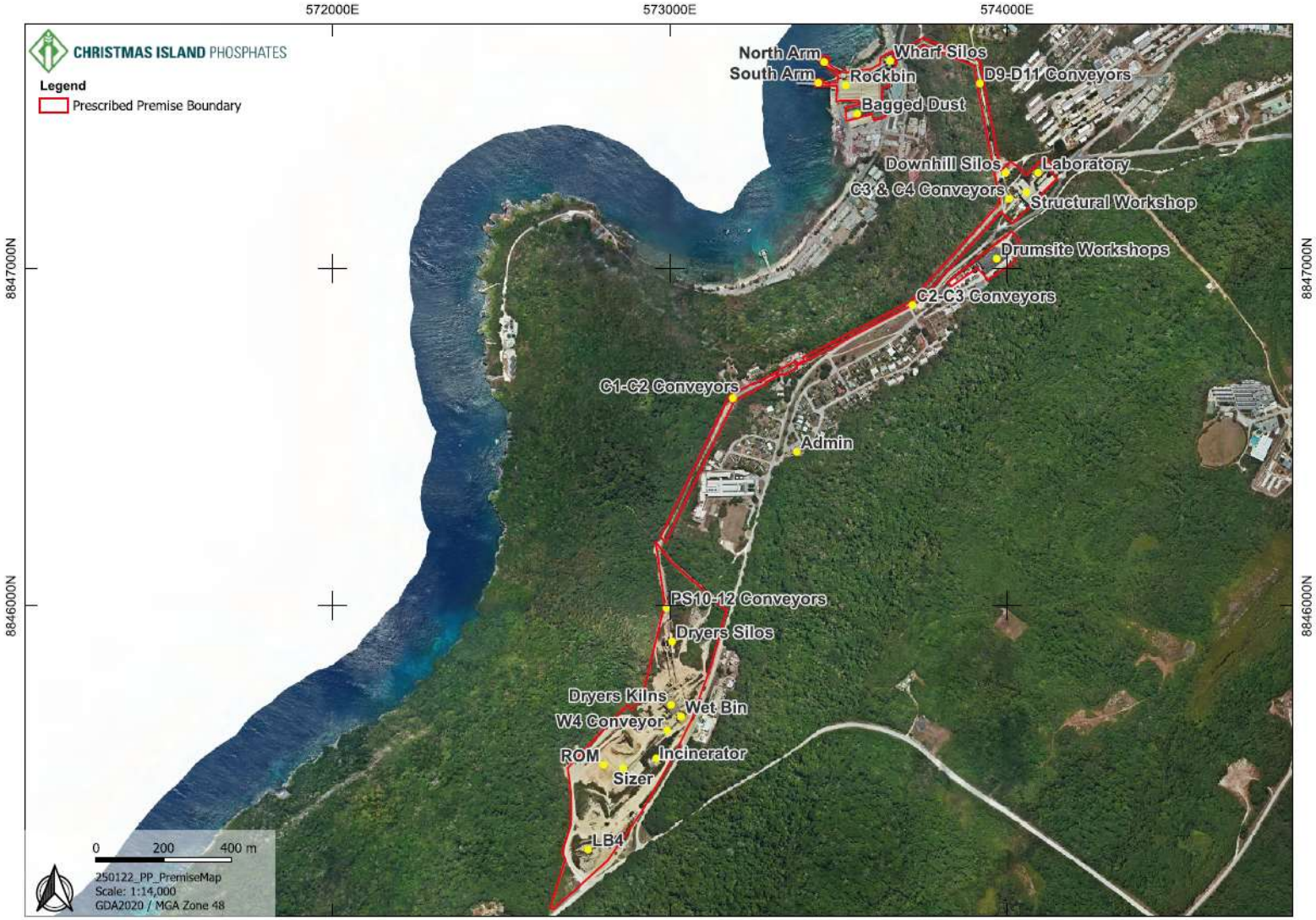

Figure 2: Premises Map

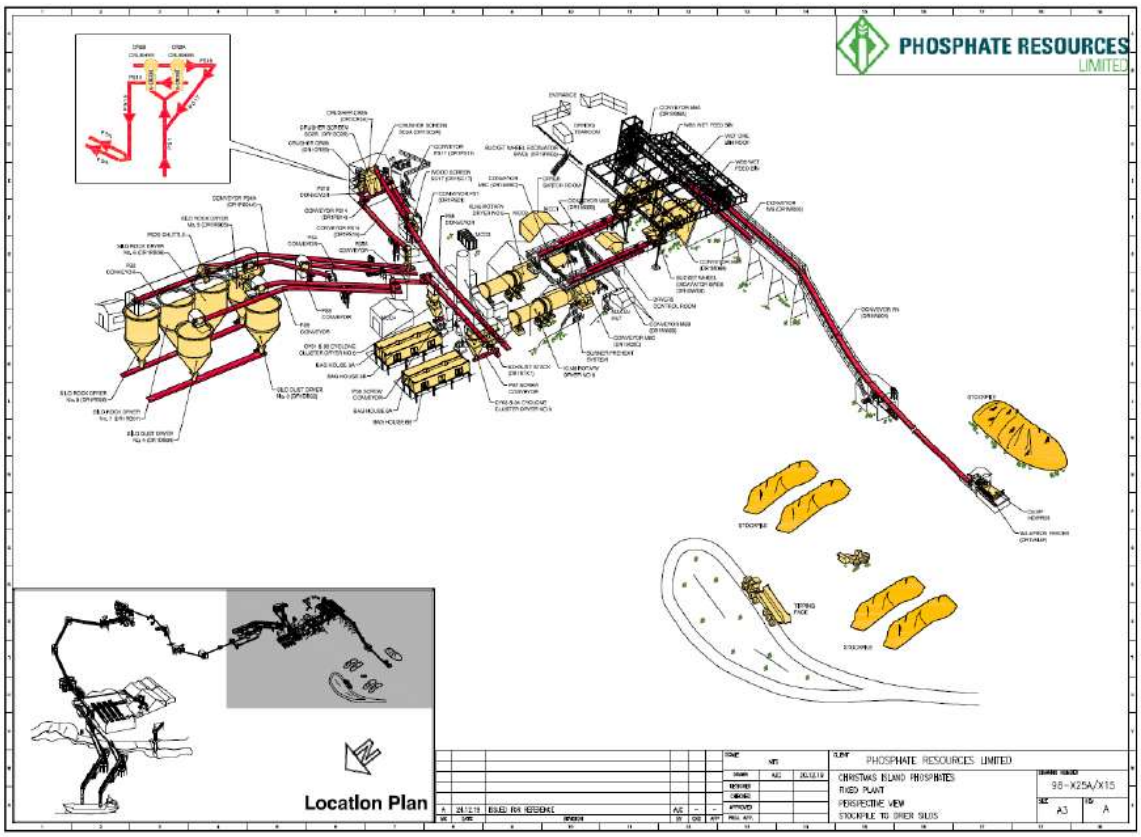

Figure 3: Map of Premises process and emission points

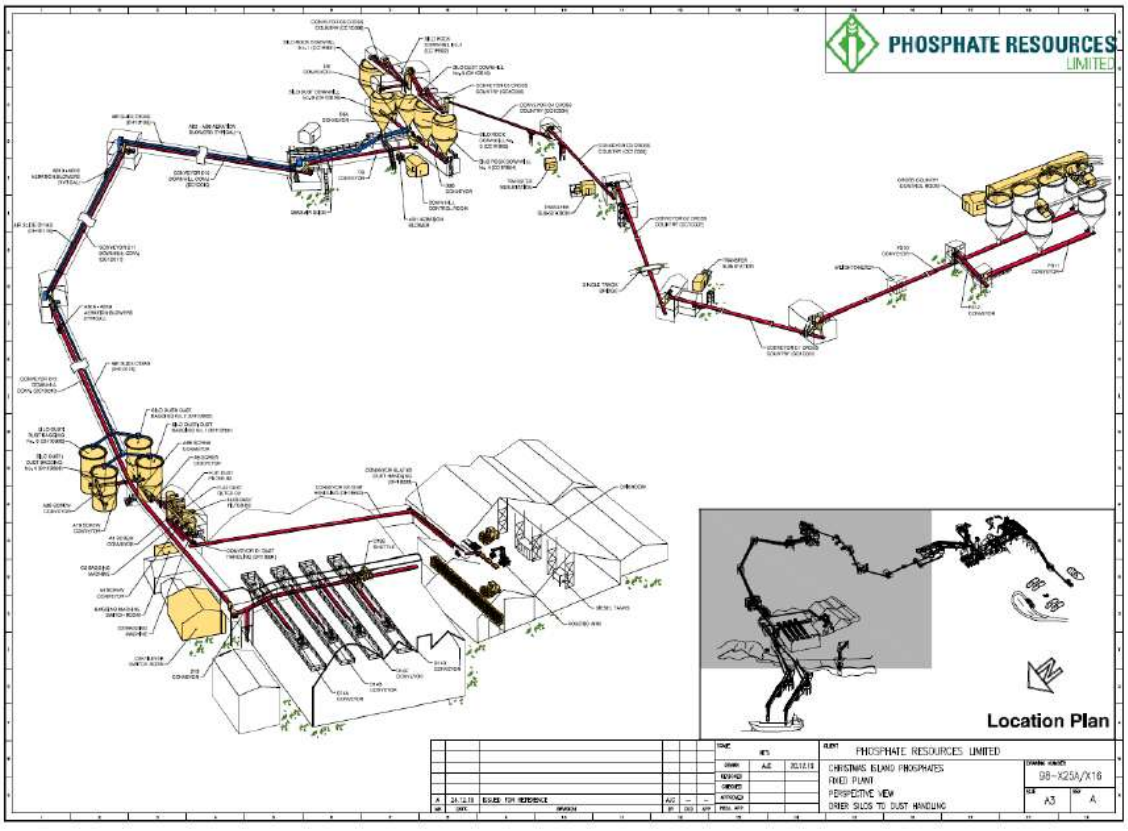

Figure 4: Map of Premises process: conveyer and laboratory locations

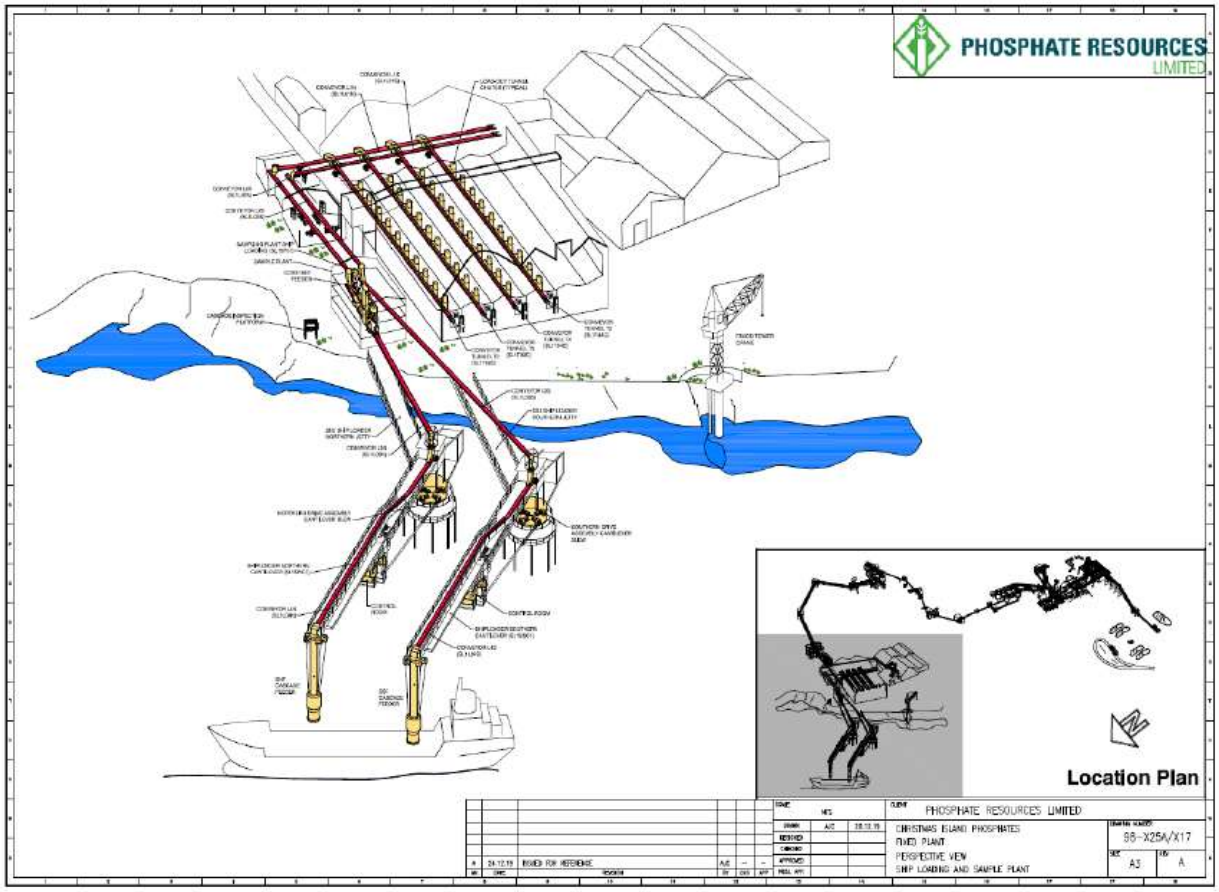

Figure 5: Map of premise process: cantilever arms and rock shed

Figure 6: Map of monitoring points

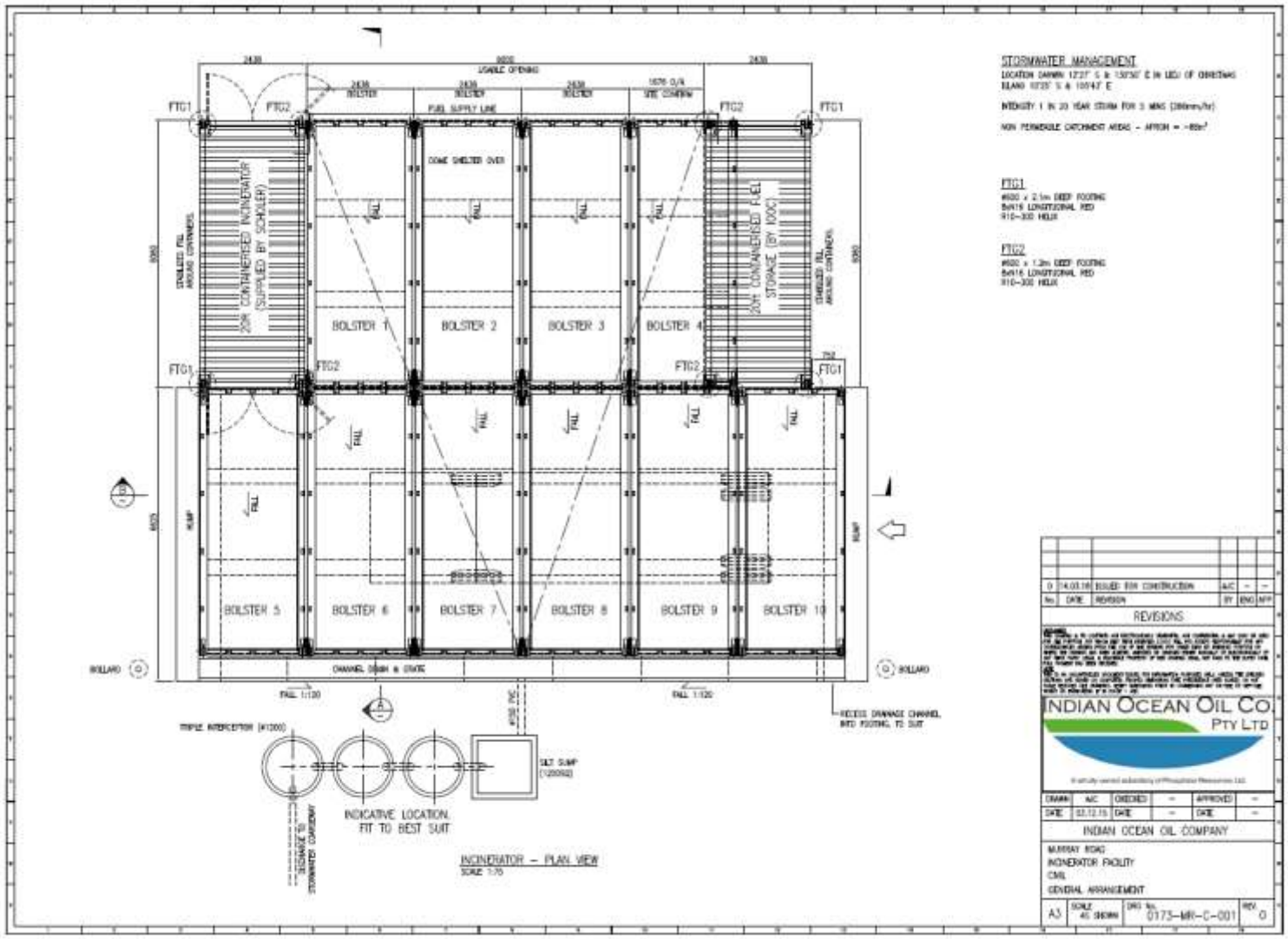

Figure 7: Map of incinerator layout

Figure 8: Map of incinerator location

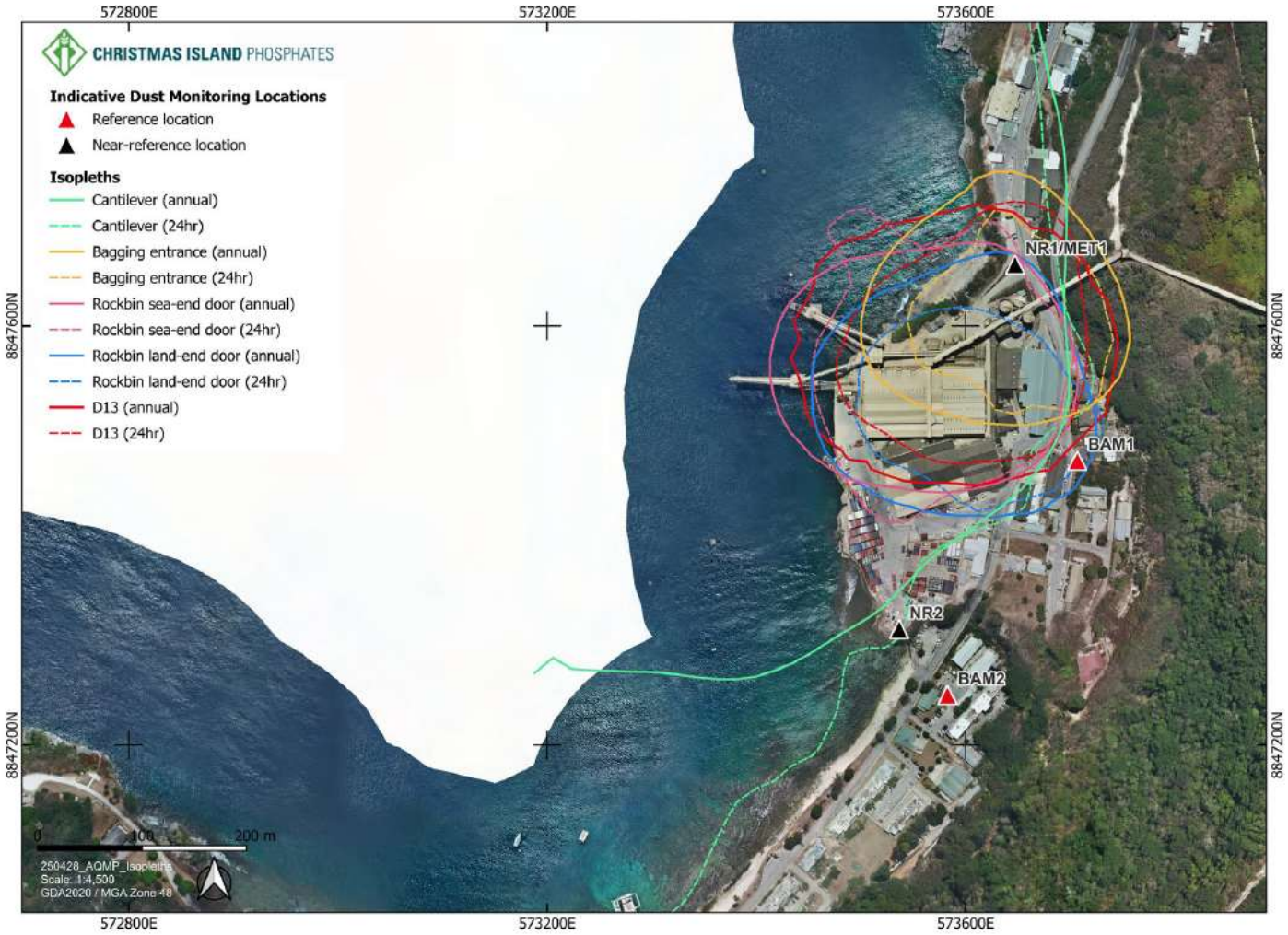

Figure 9: **Monitoring locations**

Schedule 2: Premises boundary

The corners of the premises boundary are the coordinates listed in Table 19.

Table 19: Premises boundary coordinates (GDA2020)

	Easting	Northing		Easting	Northing
Area 1 – ROM, Processing, Incinerator					
1.	572644.515	8845102.613	13.	573004.002	8846130.368
2.	572690.460	8845249.756	14.	573168.343	8845986.504
3.	572680.314	8845269.005	15.	573122.208	8845822.729
4.	572705.974	8845348.376	16.	573065.994	8845666.864
5.	572707.059	8845444.597	17.	573015.517	8845562.968
6.	572697.136	8845519.706	18.	572961.483	8845467.560
7.	572848.892	8845680.866	19.	572915.641	8845388.888
8.	572872.990	8845706.456	20.	572815.841	8845246.197
9.	572885.681	8845693.336	21.	572747.296	8845183.795
10.	572918.506	8845731.617	22.	572719.894	8845158.849
11.	572985.159	8846006.950	23.	572656.395	8845102.614
12.	572957.232	8846190.271			
Area 2 – Conveyors, Downhill, Workshops					
1.	573697.889	8847652.791	29.	573330.278	8846686.989
2.	573751.003	8847682.481	30.	573282.746	8846662.300
3.	573918.461	8847615.367	31.	573285.767	8846657.023
4.	573980.733	8847289.523	32.	573191.529	8846608.165
5.	574009.118	8847316.534	33.	573172.555	8846569.501
6.	574043.036	8847294.115	34.	573129.911	8846481.932
7.	574054.514	8847274.471	35.	573111.021	8846443.058
8.	574111.647	8847329.194	36.	573093.380	8846406.794
9.	574123.119	8847317.275	37.	573002.414	8846220.018
10.	574134.687	8847305.254	38.	572987.031	8846188.477
11.	574123.009	8847294.070	39.	572972.166	8846203.629

12.	574138.541	8847277.882	40.	573176.466	8846622.868
13.	574148.440	8847267.563	41.	573233.502	8846652.437
14.	574103.204	8847221.843	42.	573244.154	8846657.957
15.	574101.011	8847214.452	43.	573249.683	8846656.584
16.	574070.661	8847185.329	44.	573323.839	8846695.792
17.	574016.044	8847132.926	45.	573324.056	8846699.394
18.	573982.859	8847167.630	46.	573335.523	8846705.348
19.	573835.649	8847006.538	47.	573374.470	8846725.529
20.	573748.488	8846911.115	48.	573378.610	8846717.542
21.	573719.334	8846891.177	49.	573398.136	8846727.660
22.	573493.423	8846774.112	50.	573393.997	8846735.648
23.	573494.070	8846772.863	51.	573413.486	8846745.749
24.	573470.753	8846760.773	52.	573711.328	8846900.209
25.	573374.238	8846710.757	53.	573978.817	8847192.904
26.	573377.458	8846704.541	54.	573900.863	8847600.879
27.	573352.169	8846691.435	55.	573752.412	8847660.383
28.	573337.926	8846684.058	56.	573701.551	8847631.951
Area 3 – Drumsite Workshops					
1.	574024.183	8847021.286	7.	573911.520	8847001.098
2.	573939.489	8846963.656	8.	573834.406	8846946.346
3.	573935.542	8846971.180	9.	573825.296	8846959.694
4.	573938.122	8846972.913	10.	573895.991	8847017.568
5.	573931.863	8846979.544	11.	574014.206	8847109.646
6.	573929.716	8846981.819	12.	574034.216	8847083.320
Area 4 – Ship Loading					
1.	573446.654	8847628.632	21.	573523.239	8847436.602
2.	573470.644	8847628.633	22.	573520.767	8847475.184
3.	573470.645	8847606.142	23.	573562.547	8847487.081
4.	573503.227	8847578.144	24.	573559.451	8847497.913

5.	573520.692	8847588.107	25.	573507.641	8847497.207
6.	573524.256	8847579.922	26.	573492.644	8847493.473
7.	573558.327	8847587.593	27.	573496.382	8847540.504
8.	573563.493	8847588.741	28.	573448.391	8847540.109
9.	573594.003	8847590.010	29.	573431.523	8847538.483
10.	573623.072	8847605.575	30.	573430.293	8847561.944
11.	573624.612	8847625.098	31.	573453.112	8847559.144
12.	573659.423	8847643.355	32.	573453.183	8847550.146
13.	573673.252	8847608.169	33.	573475.920	8847550.334
14.	573653.788	8847576.862	34.	573494.017	8847550.486
15.	573650.761	8847541.012	35.	573496.882	8847550.506
16.	573629.106	8847534.840	36.	573499.437	8847568.334
17.	573628.632	8847489.473	37.	573492.516	8847574.261
18.	573639.993	8847449.390	38.	573461.453	8847600.862
19.	573604.451	8847438.986	39.	573446.657	8847608.140
20.	573598.628	8847458.265			