

Permit

Environmental Protection Act 1994

Environmental authority P-EA-100424558

This environmental authority is issued by the administering authority under Chapter 5 of the Environmental Protection Act 1994.

Environmental authority number: P-EA-100424558

Environmental authority takes effect on the day the development permit is granted.

Environmental authority holder(s)

Name(s)	Registered address
Queensland Pacific Metals Pty Ltd	Level 17, 307 Queen Street, Brisbane 4000 QLD

Environmentally relevant activity and location details

Environmentally relevant activity/activities	Location(s)
50(1a) – Mineral And Bulk Material Handling - loading or unloading 100t or more of minerals in a day, other than loading or unloading mentioned in item 3, or storing 50,000t or more of minerals within 5km of the highest astronomical tide or 1km of a watercourse.	Part of Lot 791 on EP 2348 Part of Lot 460 on SP242513 Part of Lot 430 on EP1068 Part of Lot 448 on SP126597 Part of Lot 449 on SP126597 Part of Lot 450 on SP126597

Additional information for applicants

Environmentally relevant activities

The description of any environmentally relevant activity (ERA) for which an environmental authority (EA) is issued is a restatement of the ERA as defined by legislation at the time the EA is issued. Where there is any inconsistency between that description of an ERA and the conditions stated by an EA as to the scale, intensity or manner of carrying

out an ERA, the conditions prevail to the extent of the inconsistency.

An EA authorises the carrying out of an ERA and does not authorise any environmental harm unless a condition stated by the EA specifically authorises environmental harm.

A person carrying out an ERA must also be a registered suitable operator under the *Environmental Protection Act 1994* (EP Act).

Contaminated land

It is a requirement of the EP Act that an owner or occupier of contaminated land give written notice to the administering authority if they become aware of the following:

- the happening of an event involving a hazardous contaminant on the contaminated land (notice must be given within 24 hours); or
- a change in the condition of the contaminated land (notice must be given within 24 hours); or
- a notifiable activity (as defined in Schedule 3) having been carried out, or is being carried out, on the contaminated land (notice must be given within 20 business days) that is causing, or is reasonably likely to cause, serious or material environmental harm.

For further information, including the form for giving written notice, refer to the Queensland Government website www.qld.gov.au, using the search term 'duty to notify'.

Take effect

Please note that, in accordance with section 200 of the EP Act, an EA has effect:

- a) if the authority is for a prescribed ERA and it states that it takes effect on the day nominated by the holder of the authority in a written notice given to the administering authority – on the nominated day; or
- b) if the authority states a day or an event for it to take effect – on the stated day or when the stated event happens; or
- c) otherwise – on the day the authority is issued.

However, if the EA is authorising an activity that requires an additional authorisation (a relevant tenure for a resource activity, a development permit under the *Planning Act 2016* or an SDA Approval under the *State Development and Public Works Organisation Act 1971*), this EA will not take effect until the additional authorisation has taken effect.

If this EA takes effect when the additional authorisation takes effect, you must provide the administering authority written notice within 5 business days of receiving notification of the related additional authorisation taking effect.

The anniversary day of this environmental authority is the same day each year as the effective date. The payment of the annual fee will be due each year on this day. An annual return will be due each year on 01 April.

If you have incorrectly claimed that an additional authorisation is not required, carrying out the ERA without the additional authorisation is not legal and could result in your prosecution for providing false or misleading information or operating without a valid environmental authority.

T Gibbs

Signature

3 May 2023

Date

Teale Gibbs
Department of Environment and Science
Delegate of the administering authority
Environmental Protection Act 1994

Enquiries:
Minerals Business Centre
PO Box 7230, Cairns QLD 4870
Phone: (07) 4222 5352
Email: ESCairns@des.qld.gov.au

Obligations under the *Environmental Protection Act 1994*

In addition to the requirements found in the conditions of this environmental authority, the holder must also meet their obligations under the EP Act, and the regulations made under the EP Act. For example, the holder must comply with the following provisions of the Act:

- general environmental duty (section 319)
- duty to notify environmental harm (section 320-320G)
- offence of causing serious or material environmental harm (sections 437-439)
- offence of causing environmental nuisance (section 440)
- offence of depositing prescribed water contaminants in waters and related matters (section 440ZG)
- offence to place contaminant where environmental harm or nuisance may be caused (section 443)

Other permits required

This permit only provides an approval under the *Environmental Protection Act 1994*. In order to lawfully operate you may also require permits / approvals from your local government authority, other business units within the department and other State Government agencies prior to commencing any activity at the site. For example, this may include permits / approvals with your local Council (for planning approval), the Department of Transport and Main Roads (to access state controlled roads), the Department of Resources (to clear vegetation), and the Department of Agriculture and Fisheries (to clear marine plants or to obtain a quarry material allocation).

Conditions of environmental authority

Schedule A – General

Schedule B – Air

Schedule C – Land

Schedule D – Water

Schedule E – Noise and Vibration

Schedule F – Waste Management

Schedule G – Regulated Structures

Schedule H – Maps and Plans

Schedule I – Definitions

Schedule A — General

Conditions for all areas							
A1	The activity operating under this environmental authority must not be conducted contrary to any of the following limitations: a) Nickel laterite (limonite) ore must be managed to prevent the release of contaminants for loading, unloading and associated activities such as transport at berth 4 and 10 as indicated in Figure I1 – Port of Townsville; and b) Nickel laterite ore (limonite) must be stored and managed to prevent the release of contaminants within the wet ore storage shed at the ISF site as shown in Figure I2 – Site Layout; and c) Nickel Laterite (limonite) must be handled and stored as listed in Table A1 - Authorised Activities. Schedule G – Table A1 – Authorised Activities <table> <tr> <th>Authorised Location and/or Activity</th><th>Quantity</th></tr> <tr> <td>Interim Storage Facility</td><td>Storage of no more than 70,000 tonnes at any one time</td></tr> <tr> <td>Stevedoring Activities</td><td>Handling of no more than 1.57 million wet metric tonnes per annum</td></tr> </table>	Authorised Location and/or Activity	Quantity	Interim Storage Facility	Storage of no more than 70,000 tonnes at any one time	Stevedoring Activities	Handling of no more than 1.57 million wet metric tonnes per annum
Authorised Location and/or Activity	Quantity						
Interim Storage Facility	Storage of no more than 70,000 tonnes at any one time						
Stevedoring Activities	Handling of no more than 1.57 million wet metric tonnes per annum						
A2	Notwithstanding any other condition, odours or airborne contaminants must not cause environmental harm to an environmental value for air.						
A3	All reasonable and practicable measures must be taken to prevent or minimise environmental harm caused by the activities.						
A4	Maintenance of plant and equipment The environmental authority holder must: a) install all reasonable and practicable measures, plant and equipment necessary to ensure compliance with the conditions of this environmental authority; and b) maintain such measures, plant and equipment in a proper and efficient condition; and						

	c) operate such measures, plant and equipment in a proper and efficient manner; and d) ensure all instruments and devices used for the measurement or monitoring of any parameter under any condition of this environmental authority are properly calibrated.
A5	Monitoring All monitoring and investigations required by this environmental authority must be undertaken by an appropriately qualified person.
A6	Any records kept or created in relation to this environmental authority must be: a) kept for a period of at least five years; and b) provided to the administering authority on request; and c) provided to the administering authority in the format requested.
A7	When required by the administering authority, monitoring must be undertaken in the manner requested by the administering authority to investigate any complaint arising from the activity.
A8	All analyses required under this environmental authority must be carried out by a laboratory that has National Association of Testing Authorities (NATA) certification, or an equivalent certification, for such analyses.
A9	Records must be kept for all bulk material handling activities carried out in accordance with this environmental authority. Records must include but not be limited to: a) the mineral type; and b) a safety data sheet or product assay for the specific mineral; and c) the duration the mineral was handled (including start and finish times and dates); and d) the quantity of mineral handled; and e) whether the activity involved loading or unloading of the mineral; and f) the loading or unloading method used; and g) the location or berth number at which the mineral was handled; and h) for shipping activities, the name of the vessel loaded or unloaded; and i) the train or truck movements.
A10	The activity must be undertaken in accordance with written procedures that: a) identify potential risks to the environment from the activity during routine operations and emergencies; and b) establish and maintain control measures that minimise the potential for environmental harm; and c) ensure plant, equipment and measures are maintained in a proper and effective condition; and d) ensure plant, equipment and measures are operated in a proper and effective manner; and e) ensure that staff are trained and aware of their obligations under the <i>Environmental Protection Act 1994</i>; and f) must be provided to the administering authority upon request.
A11	Transfer of bulk materials and cleaning of all sealed traffic areas and berths must be carried out in a manner that prevents the likelihood of any release of materials to land, the atmosphere or waters.
A12	A housekeeping procedure for activities authorised under this environmental authority must be developed and implemented prior to commencement of operations which must include, but not be limited to: a) completion of periodic inspections of the site including all structures, plant and equipment and trafficked surfaces to identify and remove exposed materials that may be mobilised by wind, water or equipment movement; and

	b) an ongoing cleaning and maintenance schedule to minimise any potential release of materials and other contaminants and ensure there is no build-up of materials or contaminants over time in areas or on equipment where it may be mobilised.
A13	Any breach of a condition of this environmental authority must be reported to the administering authority as soon as practicable, but no later than 24 hours after becoming aware of the breach.
A14	The reporting of breaches required in Condition A13 must include the following details about the breach, as it becomes available: a) Date; and b) Time; and c) Duration; and d) Location; and e) What happened; and f) Why did it happen; and g) Estimated volume and extent of the release; and h) Conditions breached; and i) Actions taken to contain and rectify; and j) Actions to prevent a recurrence.
A15	Risk Management The holder of this environmental authority must develop and implement a risk management system for activities which mirrors the content requirement of the Standard for Risk Management (ISO31000:2018), or the latest edition of an Australian Standard for risk management, to the extent relevant to environmental management.
A16	Notifications of emergencies, incidents and exceptions The holder of this environmental authority must notify the administering authority by written notification within 24 hours, after becoming aware of any emergency or incident which results in the release of contaminants not in accordance, or reasonably expected to be not in accordance with the conditions of this environmental authority.
A17	Complaints The holder of this environmental authority must record all environmental complaints received about the proposed activities including: a) name, address and contact number for of the complainant b) time and date of complaint c) reasons for the complaint d) investigations undertaken e) conclusions formed f) actions taken to resolve the complaint g) any abatement measures implemented h) person responsible for resolving the complaint.
A18	Third Party Reporting The environmental authority holder must: a) ensure that an appropriately qualified third party conducts and documents an audit of compliance with all conditions of this environmental authority by 6 May 2024; and b) ensure that further audits in accordance with condition A18(a) are conducted at intervals not exceeding once every three years from completion of the initial audit.

END OF CONDITIONS FOR SCHEDULE A

Schedule B – Air

Conditions for all areas					
B1	Contaminants must only be released to air from the point source(s) in accordance with Table B1 – Point source air release limits and the associated requirements.				
SCHEDULE B – TABLE B1 – Point source air release limits ⁵					
Release point	Minimum release height (metres)	Minimum velocity (m/sec)	Contaminant release	Maximum release limit	Monitoring Frequency
Stack(s) serving dust extraction system and Baghouse at the shed	4 m above surrounding roof peaks, or 6 m above ground whichever is greater	TBD ¹	Total Solid Particles (TSP)	20 mg/Nm ³ (dry)	Within three months of commissioning of the facility and six-monthly thereafter ³
			Total Solid Particles (TSP)	No limit	Continuous
			Total Heavy Metals ²	1 mg/Nm ³ (dry)	Within three months of commissioning of the facility and six-monthly thereafter ⁴
			Cadmium and its compounds (expressed as Cd)	0.2 mg/Nm ³ (dry)	
Stack serving dust extraction system and Baghouse at the hopper	4 m above surrounding roof peaks, or 6 m above ground whichever is greater	TBD ¹	Total Solid Particles (TSP)	20 mg/Nm ³ (dry)	Within three months of commissioning of the facility and six-monthly thereafter ^{3,4}
			Total Solid Particles (TSP)	No limit	Continuous
			Total Heavy Metals ²	1 mg/Nm ³ (dry)	Within three months of commissioning of the facility and six-monthly thereafter ^{3,4}
			Cadmium and its compounds (expressed as Cd)	0.2 mg/Nm ³ (dry)	
¹ TBD to be nominated through an amendment application pursuant to the <i>Environmental Protection Act 1994</i> and decided, prior to the commencement of activities.					
² Total heavy metals limit is for the total of Type 1 and Type 2 substances (in aggregate) as specified in NSW Protection of the Environment Operations (Clean Air) Regulation. These are as follows:					
• Type 1 substance means the elements antimony, arsenic, cadmium, lead or mercury, or a compound containing 1 or more of those elements. • Type 2 substance means the elements beryllium, chromium, cobalt, manganese, nickel, selenium, tin or vanadium, or a compound containing 1 or more of those elements.					

	³This stack monitoring must be conducted using Australian Standards AS 4323.2 (Method 2: Determination of total particulate matter—Isokinetic manual sampling— Gravimetric method). ⁴This stack monitoring must be conducted using US EPA Method 29 (Determination of Metals Emissions from Stationary Sources). ⁵ Associated requirements a) The release of contaminants from a point source must be directed vertically upwards without any impedance or hindrance; b) Monitoring must be undertaken during a release and at the authorised release points, frequency and for the contaminants specified in Table 1; c) Monitoring must be undertaken when emissions are expected to be representative of actual operating conditions for the sample period. d) All monitoring devices must be effectively calibrated and maintained in accordance with the manufacturer's instructions and Australian and international standards. e) Air Monitoring must be in accordance with the current edition of the administering authority's Air Quality Sampling Manual. If monitoring requirements are not described in the department's Air Quality Sampling Manual, monitoring protocols must be in accordance with a method as approved by New South Wales EPA, or United States EPA. f) Monitoring provision for the release points (stack) listed in Table 1 must comply with the Australian Standard AS 4323.1 - 1995 "Stationary source emissions Method 1: Selection of sampling positions". g) All air emission stack monitoring must be conducted by an experienced person or body which holds current National Association of Testing Authorities (NATA). h) The following tests must be performed for each required determination specified in Table 1: i. gas velocity and volume flow rate; ii. temperature and water vapour concentration. i) During the sampling period the following additional information must be gathered: i. any typical factors that may influence air pollutant emissions; ii. reference to the actual test methods and accuracy.
B2	Three months prior to commencement of activities the holder of this approval must develop, implement and keep records of a Stack Emission Monitoring Program (SEMP) to monitor and record the release of contaminants from the release points at the frequency shown and for the contaminants identified in Table B1 – Release Points . A copy of the SEMP must be provided to the administering authority on request.
B3	All effluent gases, dust and vapours released to the atmosphere as specified in Table B1 – Release Points must be treated via a baghouse prior to release.
B4	Where pollution control systems are installed to treat dust and vapours from the approved activities, they must: a) be maintained and operated in accordance with the manufacturer's operating instructions, efficiency standards, and specifications; b) for fabric filter dust collectors; i. retain replacement bags on site at all times. ii. have at all times, a monitoring system including an alarm, installed and operating to alert of filter medium breakthrough, and iii. be designed and maintained to meet manufactures specifications when one cell is isolated, and iv. meet emission limits stipulated in Table B1 – Release Points. v. have a standby power supply system installed to ensure continuous operation of the air pollution control
B5	The baghouse must be fitted with a device to monitor the pressure and flow rate of air to the unit and to indicate by both visual and audible alarm functions if pressure or air flow failure to the unit occurs.
B6	Where monitoring of air pollution control equipment indicates impaired operational performance, standby systems must operate to ensure continuous operation of the air pollution control system.
B7	Where standby systems cannot operate, the activities serviced by the air pollution control systems must be safely shut down as soon as practicable, unless otherwise agreed by the administering authority.
B8	All collected material removed from the filter bags must be reused at the site or disposed of to a facility that can lawfully accept such waste.

B9	The environmental authority holder must monitor and record all quality characteristics required by and in accordance with Table B2 – Ambient Air Quality Trigger Values and Limits and Table B3 – Dust Deposition Trigger Values and Limits .					
B10	The activity must not cause or contribute to any exceedance of the air quality limits identified in Table B2 – Ambient Air Quality Trigger Values and Limits or Table B3 – Dust Deposition Trigger Values and Limits at or beyond the Port of Townsville boundary as depicted in Figure I1 – Port of Townsville .					
SCHEDULE B – TABLE B2 – Ambient Air Quality Trigger Values and Limits ⁹						
Quality Characteristic	Limit/type measurement period	Monitoring equipment	Monitoring frequency	Monitoring locations	Trigger Level	Air Quality limit
Particulate Matter less than 10 µm in aerodynamic diameter (PM10)	Rolling 24 hour average based on one hour averages	Tapered Element Oscillating Microbalance (TEOM) ³	Continuous ⁶	At minimum, monitoring must be carried out concurrently at three locations, including locations indicated in Figure I1 or any other alternative location agreed to in writing by the administering authority.	NA	50 µg/m ³ _{1,8}
	Calendar year average				NA	25 µg/m ³ ⁸
Total suspended particulate matter (TSP)	Rolling 24 hour average based on one hour averages					At minimum, monitoring must be carried out concurrently at the two locations 1 and 2 depicted in Figure I1, including the locations in Figure I1 or any other alternative location agreed to in writing by the administering authority
	Calendar year average	High Volume Air Sampler (HVAS)	One in every six days	At minimum, monitoring must be carried out	NA	90 µg/m ³ ¹

					concurrently at three locations, including locations indicated in Figure I1 or any other alternative Location agreed to in writing by the administering authority.		
	Arsenic and its compounds measured as the total metal content in PM10 fraction				At minimum, monitoring must be carried out concurrently at three locations, including locations indicated in Figure I1 or any other alternative location agreed to in writing by the administering authority.	NA	0.006 $\mu\text{g}/\text{m}^3$ ¹
	Cadmium and its compounds measured as the total metal content in PM10 fraction				At minimum, monitoring must be carried out concurrently at three locations, including locations indicated in Figure I1 or any other alternative location agreed to in writing by the administering authority.	NA	0.005 $\mu\text{g}/\text{m}^3$ ¹
	Copper and its compounds				At minimum, monitoring must be carried out concurrently at the two locations 1 and 2 depicted in Figure I1, including the locations in Figure I1 or any other alternative Location agreed to in writing by the administering authority.	5 $\mu\text{g}/\text{m}^3$ ²	NA
	Lead and its compounds	Rolling 24 hour average based on one hour averages	Continuous Metals Analyser ⁵	Continuous ⁶	At minimum, monitoring must be carried out concurrently at the two locations 1 and 2 depicted in Figure I1, including the locations in Figure I1 or any other alternative Location agreed to in writing by the administering authority.	0.65 $\mu\text{g}/\text{m}^3$ ⁴	NA

	Lead and its compounds measured as the total metal content in total suspended particulates (TSP)	Rolling three month average based on one month averages	High Volume Air Sampler (HVAS)	One in every six days	At minimum, monitoring must be carried out concurrently at three locations, including locations indicated in Figure I1 or any other alternative Location agreed to in writing by the administering authority.	0.3 µg/m ³ ⁴	0.5 µg/m ³ ¹
		Rolling 12 month average based on one month averages				0.25 µg/m ³	0.5 µg/m ³
		Calendar year average				NA	0.5 µg/m ³ ¹
	Nickel and its compounds measured as the total metal content in PM10 fraction					NA	0.02 µg/m ³ ¹
	Nickel and its compounds					0.2 µg/m ³ ²	NA
	Zinc and its compounds	Rolling 24 hour average based on one hour averages	Continuous Metals Analyser ⁵	Continuous ⁶	At minimum, monitoring must be carried out concurrently at the two locations 1 and 2 depicted in Figure I1, including the locations in Figure I1 or any other alternative location agreed to in writing by the administering authority.	12 µg/m ³ ²	NA
¹ Limits based on Environmental Protection (Air) Policy 2019. ² Department of Environment and Science trigger based on a no worsening effect on the air environment from the activity. ³ A non TEOM instrument may be used if it can be demonstrated to meet equivalent detection limits and measurement accuracy. If a conversion factor is necessary to enable interpretation of data against HVAS results, this must be provided to the administering authority on request. ⁴ Trigger is based on the Ambient Air Lead Guideline Value Derivation for Glencore's Port of Townsville Operations report dated 19 January 2017. ⁵ An example of a Continuous Metals Analyser is an X-ray Fluorescence (XRF) method analyser such as an X-act or similar provided it uses a Total Suspended Particulates inlet. ⁶ Continuous monitoring is monitoring that captures data equal to at least 75 percent of the total possible data required in any period (excluding during natural disaster events such as cyclones) of: a) twelve (12) calendar months; and							

- b) three (3) calendar months; and
- c) twenty four (24) hours.

⁷ Locations must be representative of actual operating and meteorological conditions for the sample frequency period.

⁸ The administering authority will give due consideration to natural events (such as bushfires, dust storms, and cyclones) when determining compliance with this limit.

⁹Associated monitoring requirements:

- a) All monitoring devices must be effectively calibrated and maintained in accordance with the manufacturer's instructions and/or relevant Australian Standard.
- b) Air monitoring must be in accordance with the current edition of the administering authority's Air Quality Sampling Manual.
- c) Monitoring and sample analysis must be in accordance with the most recent edition of the following:
 - i. Australian Standard AS/NZS 3580.1.1 - Methods for siting and analysis of ambient air. Part 1.1: Guide to siting air monitoring equipment;
 - ii. Australian Standard AS/NZ 3580.9.3- Methods for sampling and analysis of ambient air Method 9.3: Determination of suspended particulate matter—Total suspended particulate matter (TSP)—High volume sampler gravimetric method;
 - iii. Australian Standard AS 3580.9.6 'Ambient air - Particulate matter - Determination of suspended particulate PM10 high-volume sampler with size-selective inlet -Gravimetric method;
 - iv. Australian Standard AS3580.9.15 'Methods for sampling and analysis of ambient air - Determination of suspended particulate matter - Particulate metals high or low volume sampler gravimetric collection - Inductively coupled plasma (ICP) spectrometric method'
 - v. Australian Standard AS/NZS 3580.10.1 - Methods for sampling and analysis of ambient air. Method 10.1: Determination of particulate matter-Deposited matter-Gravimetric method; and
 - vi. Any alternative method of monitoring which may be permitted by the 'Air Quality Sampling Manual' as published from time to time by the administering authority.

SCHEDULE B – TABLE B3 – Dust Deposition Trigger Values and Limits

Quality Characteristic	Limit type /measurement period	Monitoring frequency	Monitoring locations	Trigger level
Arsenic and its compounds as arsenic ²	Calendar year average	Monthly ¹	At minimum, monitoring must be carried out concurrently at three (3) locations, including the locations indicated in Figure I1 or any alternative location agreed to in writing by the administering authority.	4 µg/m ² /day
Cadmium and its compounds as cadmium ²				2 µg/m ² /day
Lead and its compounds as lead ²				100 µg/m ² /day
Dust deposition (total insoluble matter)	Monthly Average			120 mg/m ² /day

¹ Australian Standard AS/NZS 3580.10.1 - Methods for sampling and analysis of ambient air. Method 10.1: Determination of particulate matter-Deposited matter-Gravimetric method.

² Metal analysis is to be carried out in accordance with the methodology in appendix A of AS/NZS3580.10.1.

B11	Air quality monitoring, including for dust and individual volume source emissions from the activity, must be undertaken in accordance with the latest edition of: - the relevant Australian Standards; or - a method approved by any other Australian, European or North American jurisdiction/EPAs (if monitoring requirements are not described in the Australian Standards).
B12	By 31 March each year, the environmental authority holder must have an appropriately qualified person produce a report that, as a minimum: - determines whether compliance with Condition B10 has been achieved for the previous calendar year; and - provides a review of the effectiveness of the monitoring program¹ required by Condition B13. ¹Note - a collective review under the collaborative Port of Townsville monitoring program may be used to satisfy this requirement.
B13	Three months before commencement of activities, the environmental authority holder must develop, document, implement, and comply with an operational (near field) air quality monitoring program for all activities involving the loading or unloading of bulk material. This program must as a minimum: - Be developed by an appropriately qualified person; and - Identify and include sufficient monitoring locations that provide results representative of the emissions; and - Include operational trigger levels and appropriate corrective management response actions to minimise the release of contaminants; and - Include the use of continuous, real time air quality monitoring; and - Maximise data and monitoring equipment availability; - Incorporate any recommendations arising from the report prepared pursuant to condition B12; and - Be utilised as part of any investigation undertaken pursuant to condition B14.
B14	If monitoring required by the environmental authority shows exceedance of any air quality limit specified in Table B2 – Ambient Air Quality Trigger Values and Limits and/or Table B3 – Dust Deposition Trigger Values and Limits at the air monitoring locations as depicted in Figure I1 – Port of Townsville boundary monitoring locations, the environmental authority holder must complete an investigation to identify the potential cause of the exceedance taking into account all available monitoring data, and: - if the investigation shows that the exceedance is not caused or contributed to by the environmental authority holders activities then no further action is required and this must be advised to the administering authority within ten (10) business days. - if the investigation shows that the exceedance is caused or contributed to by the environmental authority holders activities, provide a written report to the administering authority within three (3) months of the date of the monitoring results showing an exceedance, outlining: - the potential for environmental harm being caused or likely to be caused by the exceedance; and - details of the investigation carried out including a review of the measures and procedures for the control of airborne emissions; and - actions taken or to be taken to minimise environmental harm. <i>Note: Where no operations have occurred within the relevant period or operations have not included material that contains the quality characteristic of the trigger value exceeded then no action is required of the environmental authority holder.</i>
B15	If the environmental authority holder or an authorised person observes a visible release of dust emissions to the atmosphere from bulk material during loading, unloading, handling or storage activities, the environmental authority holder must: Immediately review and, where necessary, adjust operational controls.

	b) If visible releases of dust emissions continue or are repetitive then: i. cease all relevant activities; and ii. review applicable measures for the control of airborne emissions; and iii. prior to recommencing activities, implement any reasonable identified improvements to the measures for the control of airborne emissions.
Conditions for the Interim Storage Facility - ISF	
B16	Measures for the control of airborne emissions from the storage of bulk material must be documented; and installed, maintained and operated in a manner that prevents the release of the material to the environment and to ensure no contribution to an exceedance of the air quality triggers and limits identified in Table B1 - Point source air release limits at or beyond the Port of Townsville boundary as depicted in Figure I1 – Port of Townsville. 1. Bulk material must be handled and stored within a building that must include, but not be limited to the following measures: a) cover all necessary openings and vents in the building (other than doorways and access ways) with filter media or other equivalent dust control measures; and b) ensure cladding of the building is securely affixed and free of any unnecessary holes; and c) installation and operation of a filtered bag house at the storage shed; and d) fit all doorways and access ways in the building with doors; and e) keep all doors in the building closed except when being used for access or egress; and f) maintain the interior of the storage facility under negative air pressure sufficient to prevent release of bulk material from the building; and g) maintain all doors, doorways and access ways in the building in such a condition that doors, when closed, provide a seal against the release of bulk material to the environment.
Conditions for the Port of Townsville loading/unloading activities	
B17	Measures for the control of airborne emissions from the loading and unloading of bulk material must be documented; and installed, maintained and operated in a manner that prevents the release of material to the environment to ensure no exceedance of the air quality triggers and limits identified in Table B2 – Ambient Air Quality Trigger Values and Limits or Table B3 – Dust Deposition Trigger Values and Limits at or beyond the Port of Townsville boundary as depicted in Figure I1 – Port of Townsville. a) ensuring that the moisture content of the bulk material is maintained as high as practicable* at the point of loading or unloading; and b) implementation of operational practices to minimise any potential reduction in bulk material moisture content; and c) minimising the exposure of the bulk material to the effects of wind; and d) must be designed to achieve leading best practice design; and e) dust extraction systems; and f) dust suppression systems (e.g. misting sprays); and/or¹; g) dust control systems (e.g. dust extraction/filtration system).¹. ¹An appropriately qualified person must design, install, test and commission all dust control and dust suppression systems specific to the product and for the specific method of handling (e.g. grab and hopper, rotainer, ship loader). The design must take into consideration the dustiness, the Dust Extinction Moisture (DEM) level, and the dust/moisture relationship for the specific bulk material as determined by the relevant Australian and International Standards. * Consideration for Transportable moisture limit (TML) maritime safety requirements when determining practicable. Note: Relevant controls a) to g) may be applied at any point within the handling stream including upstream of the loading or unloading point to effectively control emissions.

B18	The environmental authority holder must ensure all continuous monitoring results required by the conditions of this environmental authority are reviewed regularly during bulk material loading and unloading to ensure compliance with condition B10 .
B19	The environmental authority holder must develop and implement and document an ambient air quality and dust deposition monitoring program* at least three months prior to commencement of operations to ensure compliance with the conditions of this environmental authority. *Note – the environmental authority holder may elect to participate in a collaborative Port of Townsville monitoring program as an alternative to, or in addition to the monitoring program identified above, provided the collaborative program meets the requirements of this environmental authority, and copies of all records are kept by the environmental authority holder of the results and findings of this program.
B20	The environmental authority holder must make air monitoring data as required in Table B2 – Ambient Air Quality Trigger Values and Limits and Table B3 – Dust Deposition Trigger Values and Limits of this environmental authority publicly available in a prominent position on the company website or a suitable third parties website, within 14 days of obtaining the data. Note: Monitoring data that has not been validated following commissioning of monitoring equipment required for compliance with condition B10 is not subject to this condition for 30 calendar days or until validated whichever is the sooner.
B21	The environmental authority holder must ensure all continuous air monitoring data as required in Table B2 – Ambient Air Quality Trigger Values and Limits of this environmental authority is electronically available to the administering authority on a daily basis.

END OF CONDITIONS FOR SCHEDULE B

Schedule C — Land

Conditions for all areas	
C1	Contaminants must not be released to land.
Conditions for the Interim Storage Facility - ISF	
C2	Treatment and management of acid sulfate soils must comply with the latest edition of the <i>Queensland acid sulfate soil technical manual</i> (available on the Queensland government website).
C3	Prepare a Rehabilitation Plan prior to cessation of the activity that details, but is not limited to, measures and actions to be taken in relation to and provide upon request: a) potential for erosion is minimised; b) the quality of water, including seepage, released from the site does not cause environmental harm; c) potential for environmental nuisance caused by dust is minimised; d) the water quality of any residual water body does not have potential to cause environmental harm; e) the contaminant concentrations on the former ore stockpile site and wet storage shed are in accordance with the 'National Environmental Protection (Assessment of Soil Contamination) Measure 1999; f) Progressively monitor the rehabilitation and undertake maintenance to ensure that the site is left safe, stable and non-polluting; g) Includes final sign off on rehabilitation to the satisfaction of the Port of Townsville Limited.

END OF CONDITIONS FOR SCHEDULE C

Schedule D — Water

Conditions for all areas					
D1	Contaminants must not be released to waters.				
D2	Any spillage of wastes, contaminants or other materials must be cleaned up as quickly as practicable and using methods that prevent the release of wastes, contaminants or materials to air, any stormwater drainage system or receiving waters.				
D3	The release of treated stormwater to waters must only occur from the release point specified in Table D1. Authorised Release Point. SCHEDULE D – TABLE D1 – Authorised Release Point				
	Release Point (RP)	Location (decimal degrees) GDA2020		Monitoring Point	Receiving waters description
		Latitude	Longitude		
	A	-19.253765 S	146.840545 E	Spillway of retention basin	Unnamed tributary to Cleveland Bay
D4	The release of treated stormwater to waters must not exceed the release limits stated in Table D2 when measured at the release point specified in Table D1 Authorised Release Point. SCHEDULE D – TABLE D2 – Release Limits				
	Quality characteristic	Unit	Release limit⁷	Monitoring frequency	
	Arsenic	µg/L	12 ³	Daily during release via 24h-composite sampling for the first 3 days and then weekly	
	Cadmium		0.7 ¹		
	Lead		4.4 ¹		
	Cobalt		1 ⁴		
	Copper		1.31 ¹		
	Chromium		4.4 ¹		
	Nickel		7 ¹		
	Ammonia N		910 ⁴		
	Nitrate + Nitrite N		For interpretation purposes only		
	Nitrogen (total)				
	Total P				
	Filterable reactive phosphorous (FRP)				
	Manganese				
	Vanadium		80 ⁵		
	Zinc		100 ⁴		
		15 ¹			

	Aluminium		37 ⁶		
	Iron		For interpretation purposes		
	Sulphate				mg/L
	Electrical conductivity				µS/cm
	pH	pH units	7-8.5		
	Turbidity	NTU	For interpretation purposes only		
	TSS	mg/L	15 ²		
¹ Ross River Basin and Magnetic Island Environmental Values and Water Quality Objectives ² GBRMPA Water Quality Guidelines for the Great Barrier Reef Marine Park 2010 ³ Golding et al. (2022) Toxicity of arsenic(V) to temperate and tropical marine biota and the derivation of chronic marine water quality guideline values – Guideline value for long-term protection of 95% of marine biota ⁴ Limits based on ANZG 2018 default guideline trigger levels for slightly–moderately disturbed systems, 95% species protection for marine water ⁵ Low reliability guideline value for marine waters (ANZG, 2018) ⁶ Draft technical brief (July 2022) Toxicant default guideline values for aquatic ecosystem protection – Aluminium in marine water - Guideline value for 95% species protection. ⁷ Measured as Total and Dissolved.					
D5	The hourly quantity of water discharged from release point A must be measured and recorded using a calibrated flow meter, or another method approved by the administrative authority.				
D6	The controlled release of treated stormwater must be conducted in a way and at a rate that does not cause: a) re-suspension of particles; or b) erosion of bed or banks of receiving waters; or c) landscape damage; or d) ponding of the water; or e) vegetation damage.				
D7	Releases to waters must not produce any slick or other visible evidence of oil or grease, nor contain visible floating oil, grease, scum, litter or other visually objectionable matter.				
D8	Notification of Exceedance Event If an exceedance in accordance with Condition D4 is identified, the holder of the environmental authority must notify the administering authority, in writing, within twenty-four (24) hours of receiving the result.				
D9	The environmental authority holder must, within twenty-eight (28) days of a release that is not compliant with the conditions of this environmental authority, provide a report to the administering authority detailing: a) the reason for the release; b) the location of the release; c) the total volume of the release and which (if any) part of this volume was non-compliant; d) the total duration of the release and which (if any) part of this period was non-compliant; e) all water quality monitoring results (including all laboratory analysis); f) identification of any environmental harm as a result of the non-compliance; g) all calculations; and h) any other matters pertinent to the water release event.				

D10	Sediment quality must be monitored and recorded by the environmental authority holder either by participating in an existing and relevant sediment monitoring program or by developing and implementing a sediment monitoring program for the activities. If the environmental authority holder develops and implements its own program, the program must be designed in accordance with: a) the relevant Australian standards; and b) the most recent version of the administering authority's 'Monitoring and Sampling Manual Environmental Protection (Water) Policy'.
D11	Prior to the commencement of construction, an Erosion and Sediment Control Plan must be developed by an appropriately qualified person and implemented for all stages of the activities on the site to minimise erosion and the release of sediment to receiving waters and contamination of stormwater.
D12	A Receiving Environment Monitoring Program (REMP) must be developed prior to construction and implemented by the environmental authority holder either by participating in Port of Townsville receiving environment monitoring or by developing and implementing a REMP for the activities. The REMP is to monitor and record the effects of the activities on the receiving environment with the aim of identifying and describing the extent of any adverse impacts on local environmental values and to monitor any changes in the receiving water. A copy of the REMP and any update or variation of the REMP must be provided to the administering authority prior to its implementation and due consideration given to any comments made on the REMP by the administering authority. <i>Note: For the purposes of the REMP, the receiving environment includes the waters and connected waterways of the Ross River, and the waters immediately adjacent to the Port of Townsville in Ross Creek and Cleveland Bay.</i>
D13	The REMP required by condition D12 must address (but not necessarily be limited to) the following: a) be prepared in accordance with the latest version of the administering authority's guideline Receiving environment monitoring program guideline (ESR/2016/2399); and b) identify, describe and monitor any adverse impacts to surface water environmental values, quality, and flows; and c) assess the long-term condition or state of surface waters, sediment, and aquatic ecosystem health; and d) include sufficient monitoring locations to achieve the objectives of the REMP pursuant to condition D12, including a monitoring location within the mangrove lined channel that holds permanent water; and e) identify and describe all environmental values of the receiving environment; and f) assess the receiving environment monitoring results against water and sediment quality objectives; and g) include an assessment of the potential impacts of the activity including consideration of all releases from the site against the Table D2 – Release Limits and propose appropriate mitigation measures; and h) assess the status of and any change to aquatic ecosystem health including aquatic flora and fauna within and immediately surrounding the project area; and i) assess the status of and any change to riparian vegetation health within and immediately surrounding the project area; and j) apply procedures and/or guidelines from ANZG 2018 and other relevant standards and guideline documents; and k) describe sampling and analysis methods and quality assurance and control; and l) incorporate stream flow and hydrological information in the interpretations of water quality and biological data.

D14	A REMP Annual Report must be prepared annually by 1 August and submitted to the administering authority on request.
D15	The REMP Annual Report required by condition D14 must: a) be prepared by an appropriately qualified person; and b) outline the findings of the REMP, including but not limited to: i. an assessment of releases and potential releases from the site; and ii. an assessment of long-term upstream water quality; and iii. an assessment of the long-term condition or state of surface waters, sediment and aquatic ecosystem health; and iv. recommendations for further investigation or actions; and v. recommendations for changes or improvements to the monitoring program; and vi. potential changes to management of the authorised activity to minimise impacts; and vii. all monitoring results; and viii. a description of all conclusions formed.
D16	Water monitoring and sampling must be carried out in accordance with the requirements of the latest edition of the <i>Monitoring and sampling manual</i> (available on the Queensland government website) unless otherwise approved by the administering authority.
D17	The following information must be recorded in relation to all water monitoring required under the conditions of this environmental authority: a) the date on which the sample was taken; and b) the time at which the sample was taken; and c) the monitoring point at which the sample was taken; and d) the release volume and duration on an hourly basis for all release periods; and e) the release flow rate at the time of sampling for each release point; and f) the results of all monitoring and details of any exceedances of the conditions of this environmental authority.
D18	The information recorded under condition D17 must be submitted annually to the administering authority in the specified electronic format via the Queensland Government's Water Tracking and Electronic Reporting System (WaTERS).
D19	A first flush containment system must be designed by an appropriately qualified person, that has capacity to contain at least 63.2% AEP at 15 minutes of rainfall.
D20	A first flush containment system must be installed, operated and maintained until such time as the water is confirmed to meet the discharge requirements specified in Table D2 – Release Limits .
D21	No releases of the first flush rainfall water, wheel wash water or any other water that has potentially been in contact with contaminants is authorised to be released from any treatment system until the requirements of condition D22 have been demonstrated to the satisfaction of the administering authority and confirmed in writing.
D22	The holder of the environmental authority must demonstrate through a site-specific trial, the successful establishment and operation of a treatment system to remove contaminants to meet the discharge criteria specified in this licence in Table D2 – Release Limits based on actual site data. The trial and findings must be documented and include, but not be limited to, an assessment of the following: a) sediment and metal trapping efficiency; and b) nutrient removal efficiency; and c) vegetation establishment; and

	d) demonstrated ability to meet the discharge criteria specified in this licence in Table D2 – Release Limits; and e) conclusions in relation to longevity of performance; f) the ongoing maintenance requirements to ensure performance; g) contingency arrangements; h) ongoing testing program to monitor performance; and i) certification of the report and findings by an appropriately qualified person.
D23	A copy of the report required under condition D22 must be provided to the administering authority and due consideration given to any comments made by the administering authority.
D24	Prior to commencement of operations, a Water Management Plan must be developed by an appropriately qualified person and implemented for all stages of the activity.
D25	The Water Management Plan must: a) provide for effective water management of actual and potential environmental impacts resulting from the activity; and b) include: i. a monitoring program for quality of water in water storages, including for all criteria in Table D2 – Release Limits; and ii. a study of the source of contaminants; and iii. a water balance for the site; and iv. a water management system for the site; and v. measures to minimise contamination of water; and vi. proposed actions for exceedances of the bioretention system design capacity; and vii. contingency procedures for incidents and emergencies; and viii. a program for monitoring and review of the effectiveness of the water management plan.
D26	The Water Management Plan must be reviewed annually by 1 August. The review must be documented and: a) include a statement that the Water Management Plan has been reviewed by an appropriately qualified person; and b) assess the plan against the requirements under condition D25; and c) include recommended actions to ensure actual and potential environmental impacts are effectively managed; and d) provide details and timelines of the actions to be taken; and e) identify any amendments made to the Water Management Plan.
D27	A copy of the Water Management Plan must be kept up to date following each annual review and must be provided to the administering authority on request.

END OF CONDITIONS FOR SCHEDULE D

Schedule E — Noise and Vibration

Conditions for all areas																																							
E1	Noise generated by the activity must not cause environmental nuisance to any sensitive place or commercial place.																																						
E2	For the Port of Townsville, noise from activities authorised under this environmental authority must not exceed the levels specified in Table E1 - Noise limits at any nuisance sensitive or commercial place. SCHEDULE E – TABLE E1 – Noise Limits <table> <tr> <th rowspan="3">Noise level dB(A) measured as:</th><th colspan="2">Day</th><th colspan="2">Evening</th><th>Night</th></tr> <tr> <th colspan="2">7am – 6pm</th><th colspan="2">6pm – 10pm</th><th>10pm – 7am</th></tr> <tr> <th>Week Days</th><th>Weekends and Public Holidays</th><th>Week Days</th><th>Weekends and Public Holidays</th><th>Any day</th></tr> <tr> <td>LAeq, adj, 1 hour</td><td>50</td><td>42</td><td>42</td><td>37</td><td>37</td></tr> <tr> <td>LA1, adj, 1 hour</td><td>65</td><td>52</td><td>47</td><td>42</td><td>42</td></tr> <tr> <td>LAMax</td><td></td><td>50</td><td></td><td>50</td><td>50</td></tr> </table> Note: Noise objectives based on acoustic quality objective, Environmental Protection Policy (Noise) 2019					Noise level dB(A) measured as:	Day		Evening		Night	7am – 6pm		6pm – 10pm		10pm – 7am	Week Days	Weekends and Public Holidays	Week Days	Weekends and Public Holidays	Any day	LAeq, adj, 1 hour	50	42	42	37	37	LA1, adj, 1 hour	65	52	47	42	42	LAMax		50		50	50
Noise level dB(A) measured as:	Day		Evening		Night																																		
	7am – 6pm		6pm – 10pm		10pm – 7am																																		
	Week Days	Weekends and Public Holidays	Week Days	Weekends and Public Holidays	Any day																																		
LAeq, adj, 1 hour	50	42	42	37	37																																		
LA1, adj, 1 hour	65	52	47	42	42																																		
LAMax		50		50	50																																		
E3	When requested by the administering authority, or as a result of a complaint, noise monitoring must be undertaken and the results must be notified within fourteen (14) days to the administering authority following completion of monitoring.																																						
E4	All noise monitoring which is conducted as per Condition E3 must be completed in accordance with the following noise monitoring requirements: a) All noise monitoring must be conducted in accordance with the administering authority's most recent version of the Noise Measurement Manual; b) Source noise levels must be expressed as component noise levels for the purposes of comparison with noise limits; c) All noise monitoring devices must be calibrated in accordance with the most recent version of the Australian Standard. d) Monitoring must be carried out at a place or places relevant to the potentially affected sensitive or commercial place, as agreed upon with the administering authority; and e) Monitoring location(s) must be relevant to the matter(s) under investigation.																																						
E5	If the administering authority's request for noise monitoring is in relation to a complaint and results exceed the limits in Table E1 - Noise limits, then the environmental authority holder must: a) address the complaint including the use of appropriate dispute resolution if required; and b) implement noise abatement measures so that emissions of noise from the activity do not result in further environmental nuisance.																																						

END OF CONDITIONS FOR SCHEDULE E

Schedule F – Waste Management

Conditions for all areas	
F1	All waste generated in carrying out the activity must be lawfully reused, recycled or lawfully transported to a facility that can lawfully accept the waste.

END OF CONDITIONS FOR SCHEDULE F

Schedule G – Water Structures

Conditions for the Interim Storage Facility - ISF	
G1	Assessment of consequence category The consequence category of any structure must be assessed by an appropriately qualified and experienced person in accordance with the 'Manual for Assessing Consequence Categories and Hydraulic Performance of Structures (ESR/2016/1933)' or its successor at the following times: a) prior to the design and construction of the structure, including any modification of the structure; or b) prior to any change in its purpose or the nature of its stored contents.
G2	Where a structure is reassessed and determined to be a regulated structure, or where any other change is identified to an existing regulated structure, an amendment application pursuant to the <i>Environmental Protection Act 1994</i> must be submitted to seek authorisation for a regulated structure.
G3	A consequence assessment report and certification must be prepared for any structure assessed and the report may include a consequence assessment for more than one structure.
G4	Certification must be provided by the appropriately qualified and experienced person who undertook the assessment, in the form set out in the most recent version of the 'Manual for Assessing Consequence Categories and Hydraulic Performance of Structures (ESR/2016/1933)' or its successor.
G5	The Bioretention Basin should be designed taking into consideration the following requirements: a) The inlet should be designed to capture the first flush of stormwater runoff; and b) the outlet should be designed to release the treated stormwater at a controlled rate to prevent downstream flooding; and c) The basin should be lined with a HDPE liner sufficient to prevent the release of contaminants to land and waters from the structure. d) The liner should be thick enough to prevent punctures, tears, or damage from equipment used during maintenance activities; and e) Regular maintenance to ensure the liner is functioning properly. This includes conducting regular inspections, repairing damage, and conducting leak testing.

END OF CONDITIONS FOR SCHEDULE G

Schedule H – Definitions

Key terms and/or phrases used in this document are defined in this section. Where a term is not defined, the definition in the *Environmental Protection Act 1994*, its regulations or environmental protection policies must be used. If a word remains undefined it has its ordinary meaning.

activity means the environmentally relevant activities, whether resource activities or prescribed activities, to which the environmental authority relates.

administering authority means the Department of Environment and Science or its successors or predecessors.

Annual Exceedance Probability or **AEP** the probability that at least one event in excess of a particular magnitude will occur in any given year.

ANZECC 2000 means Australian and New Zealand Environment Conservation Council Marine and Freshwater Quality Guidelines.

appropriately qualified person means a person who has professional qualifications, training, skills or experience relevant to the nominated subject matter and can give authoritative assessment, advice and analysis on performance relating to the subject matter using the relevant protocols, standards, methods or literature.

bulk material means unpackaged and loose bulk ore.

calendar year average means the average over a period of 12 months beginning on 1 January.

certification, certifying or **certified** by a suitably qualified and experienced person in relation to a design plan or an annual report regarding dams/structures, means that a statutory declaration has been made by that person and, when taken together with any attached or appended documents referenced in that declaration, all of the following aspects are addressed and are sufficient to allow an independent audit at any time:

- a) exactly what is being certified and the precise nature of that certification;
- b) the relevant legislative, regulatory and technical criteria on which the certification has been based;
- c) the relevant data and facts on which the certification has been based, the source of that material, and the efforts made to obtain all relevant data and facts; and
- d) the reasoning on which the certification has been based using the relevant data and facts, and the relevant criteria.

commercial place/premises means a place used as a workplace, an office or for business or commercial purposes and includes a place within the curtilage of such a place reasonably used by persons at that place.

contaminant A contaminant can be a gas, liquid or solid; or an odour; or an organism (whether alive or dead), including a virus; or energy, including noise, heat, radioactivity and electromagnetic radiation; or a combination of contaminants

environmental nuisance as defined in Chapter 1 of the *Environmental Protection Act 1994*.

first flush is the initial surface runoff of a rainstorm based on the Intensity-Frequency-Duration (IFD) chart for Townsville. The first flush containment system must have the capacity to capture and contain at least the first 20mm of rainfall to prevent the discharge of contaminants into the stormwater system.

hazard category means a category, either low, significant or high, into which a dam/structure is assessed as a result of the application of tables and other criteria in the Manual for Assessing Hazard Categories and Hydraulic Performance of Dams.

land does not include waters.

lead concentrate means any mineral concentrate product where the composition of the product includes greater than 21% by weight of lead.

lead containing products means any bulk mineral concentrate product that contains lead at 1% by weight or greater.

measures means the broadest interpretation and includes plant, equipment, physical objects, monitoring, procedures, actions, directions and competencies.

µg/L means micrograms per litre.

mg/L means milligrams per litre.

NATA means National Association of Testing Authorities, Australia.

new mineral product or bulk material means any mineral product or bulk material not previously handled by the environmental authority holder in the previous 12 months. Does not include the same product or material from a different mine or supplier.

records include breach notifications, written procedures, analysis results, monitoring reports, monitoring results, monitoring data, and monitoring programs required under a condition of this authority.

receiving environment means all groundwater, surface water, land, and sediments that are not disturbed areas authorised by this environmental authority.

receiving waters means all groundwater and surface water that are not disturbed areas authorised by this environmental authority.

reference site (or analogue site) may reflect the original location, adjacent area or another area where rehabilitation success has been completed for a similar biodiversity. Details of the reference site may be as photographs, computer generated images and vegetation models etc.

regulated structure means any regulated dam or levee.

rehabilitation the process of reshaping and revegetating land to restore it to a stable landform and in accordance with the acceptance criteria set out in this environmental authority and, where relevant, includes remediation of contaminated land.

release event means a surface water discharge from water storages or contaminated areas on the licensed place.

rolling 12 month average based on one month averages means the average of the previous 12 months for each month of the year.

rolling three month average based on one month averages means the average of the previous 3 months for each month of the year.

rolling 24 hour average based on one hour averages means the average of the previous 24 hours for each hour of the day.

self-sustaining means an area of land which has been rehabilitated and has maintained the required acceptance criteria without human intervention for a period nominated by the administering authority.

sensitive place includes the following and includes a place within the curtilage of such a place reasonably used by persons at that place:

- a) a dwelling, residential allotment, mobile home or caravan park, residential marina or other residential premises; or
- b) a motel, hotel or hostel; or
- c) a kindergarten, school, university or other educational institution; or
- d) a medical centre or hospital; or
- e) a protected area under the *Nature Conservation Act 1992*, the *Marine Parks Act 2004* or a World Heritage Area; or
- f) a public thoroughfare, park or garden; or
- g) for noise, a place defined as a sensitive receptor for the purposes of the Environmental Protection (Noise) Policy 2008.

significant increase means:

- a) an increase of greater than 10% in volume of any product, other than lead containing products, from that handled per year in any of the previous 5 consecutive calendar years; or
- b) an increase in the volume of lead containing products to that previously modelled; or
- c) an increase of greater than 10% in total volume of lead containing product handled per year in any of the previous 5 consecutive calendar years.

water quality means the chemical, physical and biological condition of water.

waters includes river, stream, lake, lagoon, pond, swamp, wetland, unconfined surface water, unconfined water, natural or artificial watercourse, bed and bank of any waters, dams, non-tidal or tidal waters (including the sea), stormwater channel, stormwater drain, roadside gutter, stormwater run-off, and groundwater and any part thereof.

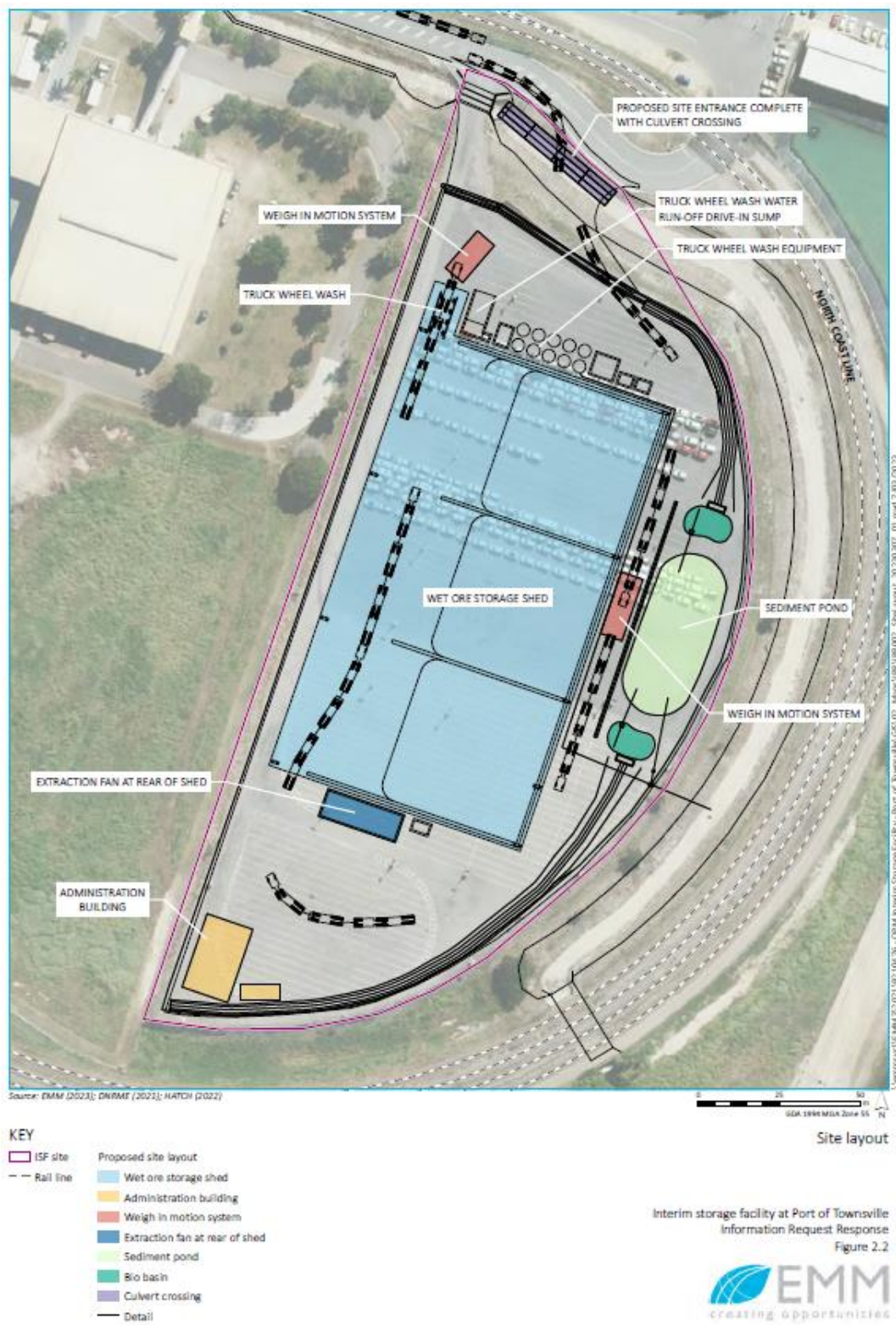
END OF DEFINITIONS FOR SCHEDULE H

Schedule I – Maps and Plans

Figure I1 - Port of Townsville



Figure I2 – Site Layout.



END OF CONDITIONS FOR SCHEDULE I

END OF ENVIRONMENTAL AUTHORITY