

P-EA-100222169 Permit

Environmental Protection Act 1994

Environmental authority P-EA-100222169

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

Environmental authority number: P-EA-100222169

Environmental authority takes effect on the date that your related development approval (2112-26590 SRA) takes effect. This is the take effect date.

The anniversary date of this environmental authority is the same day each year as the take effect date. The payment of the annual fee will be due each year on this day.

Environmental authority holder(s)

Name(s)	Registered address
North Queensland Bulk Ports Corporation Limited	Level 1 324 Queen St BRISBANE CITY QLD 4000 Australia

Environmentally relevant activity and location details

Environmentally relevant activity/activities	Location(s)
ERA 16 - Extraction and Screening 1(d) - Dredging, in a year, the following quantity of material - more than 1,000,000t	126/SP123776
ERA 16 - Extraction and Screening 1(d) - Dredging, in a year, the following quantity of material - more than 1,000,000t	95/SP231132
ERA 16 - Extraction and Screening 1(b) - Dredging, in a year, the following quantity of material - more than 10,000t but not more than 100,000t	143/SP121683
ERA 16 - Extraction and Screening 1(b) - Dredging, in a year, the following quantity of material - more than 10,000t but not more than 100,000t	100/SP312214

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.

Amanda Gray

Signature

18/7/2022

Date

Amanda Gray
Department of Environment and Science
Delegate of the administering authority
Environmental Protection Act 1994

Enquiries:
Coastal and Marine Assessment
Department of Environment and Science
GPO Box 2454
BRISBANE QLD 4001

Date Issued: 18/07/2022

Phone: 1300 130 372
Email: palm@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.

Obligations under the *Mining and Quarrying Safety and Health Act 1999*

If you are operating a quarry, other than a sand and gravel quarry where there is no crushing capability, you will be required to comply with the *Mining and Quarrying Safety and Health Act 1999*. For more information on your obligations under this legislation contact Mine Safety and Health at www.dnrm.qld.gov.au, or phone 13 QGOV (13 74 68) or your local Mines Inspectorate Office.

Development Approval

This permit is not a development approval under the *Planning Act 2016*. The conditions of this environmental authority are separate, and in addition to, any conditions that may be on the development approval. If a copy of this environmental authority is attached to a development approval, it is for information only, and may not be current. Please contact the Department of Environment and Science to ensure that you have the most current version of the environmental authority relating to this site.

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SECTION 1 – Port of Hay Point

Activities	Locations
ERA 16 - Extraction and Screening 1(d) - Dredging, in a year, the following quantity of material - more than 1,000,000t	126/SP123776 95/SP231132

Conditions of environmental authority

The environmentally relevant activitie(s) conducted at the location(s) as described above must be conducted in accordance with the following conditions of approval.

Agency interest: General											
Condition number	Condition										
G1	The administering authority must be advised in writing of the date of commencement of a dredge campaign at least ten days prior to that date.										
G2	Limit of Dredging Approved Dredging activities which constitute the environmentally relevant activity (ERA 16.1(d)) hereby approved, are limited to: a) The removal of maintenance dredge material dredged from the departure channel, apron area and berth pockets in the Port of Hay Point at locations shown in Port of Hay Point – Maintenance Dredging Areas prepared by North Queensland Bulk Ports Corporation dated 13/06/2022, reference number NQBP2022-01a, revision [not provided]. b) Placement of dredge spoil at Material Relocation area, defined by the following coordinates (GDA94): <table border="1" style="margin-left: 40px;"> <thead> <tr> <th>Longitude</th><th>Latitude</th></tr> </thead> <tbody> <tr> <td>149.3019269</td><td>-21.2198327</td></tr> <tr> <td>149.3348576</td><td>-21.20192259</td></tr> <tr> <td>149.3342955</td><td>-21.1655219</td></tr> <tr> <td>149.2806085</td><td>-21.19450986</td></tr> </tbody> </table>	Longitude	Latitude	149.3019269	-21.2198327	149.3348576	-21.20192259	149.3342955	-21.1655219	149.2806085	-21.19450986
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149.3342955	-21.1655219										
149.2806085	-21.19450986										
G3	Any dredging must be conducted using equipment that is in survey and registered and, in relation to environmental performance, is equal to or better than the following equipment: a) Trailing Suction Hopper Dredge that is equipped, as a minimum, with:										

	i. below keel discharge of tail waters via an anti-turbidity control valve; ii. on-board systems for determining solids to water ratio or density of dredged material; iii. electronic positioning and depth control system for defining the location and depth of dredging activities; and iv. dredge heads and depth control capable of, and where appropriate, fitted with fauna exclusion devices (e.g. turtle deflectors). b) Cutter Suction Dredge that is equipped, as a minimum, with: i. electronic positioning and depth control system for defining the location and depth of dredging activities; ii. continuous delivery connection (e.g. floating or submerged pipeline) to an approved placement site; iii. a system or process to ensure the delivery system integrity is maintained at all times; and iv. systems for determining solids to water ratio or density of dredged material during operations. c) Grab Dredge that is equipped, as a minimum, with: i. electronic positioning systems for defining the location and depth of dredging activities.
G4	External Audit An appropriately qualified Third Party Environmental Auditor must be engaged, nominated by the approval holder independent of contractual arrangements for the design and construction of the project, for each dredge campaign covered by this environmental authority.
G5	The Environmental Auditor must audit key stages of the works subject to this approval against the: a) Conditions of the Environmental Authority; b) Integrated Environmental Management System (IEMS) as required by condition G10; and c) General Environmental Duty (GED).
G6	At the completion of the project, the Environmental Auditor must finalise the audits and prepare a summary of the results in a form acceptable to the administering authority.
G7	A copy of each Audit Report must be provided to the administering authority within ten (10) business days of a written request being made or twenty-eight (28) business days of completion of a dredge campaign.

G8	The registered operator must ensure that a person or body possessing appropriate experience and qualifications determines the cross sections of the dredged area to confirm the works have been carried out in accordance with the plans referred to in conditions (G2) and report the results of the survey determinations to the administering authority within six (6) week of the completion of the project.
G9	Integrated Environmental Management System NOTE: For the purposes of this environmental authority, an approved Dredge management Plan, satisfies the requirements of an Integrated Environmental Management System, provided the following requirements are satisfied. From commencement of this environmental authority, an Integrated Environmental Management System (IEMS) must be implemented. The IEMS must identify all sources of environmental harm, including but not limited to the actual and potential release of all contaminants, the potential impact of these sources and what actions will be taken to prevent the likelihood of environmental harm being caused. The IEMS must also provide for the review and 'continual improvement' in the overall environmental performance of all ERAs that are carried out.
G10	The approved IEMS must provide for at least the following functions: a) Training of staff, contractors and visitors in the awareness of environmental issues related to carrying out the activities, which must include at least: i. The environmental policy, so that all persons that carry out the activities are aware of all relevant commitments to environmental management; ii. Any relevant normal objectives and targets, so that all staff are aware of the relevant performance objectives and can work towards these; iii. Control procedures to be implemented for routine operations for day to day activities to minimise likelihood of environmental harm, however occasioned or caused; iv. Contingency plans and emergency procedures to be implemented for non-routine situations to deal with foreseeable risks and hazards including corrective responses to prevent and mitigate environmental harm (including any necessary stabilisation and site rehabilitation); v. Organisational structure and responsibility to ensure that roles, responsibilities and authorities are appropriately defined to manage environmental issues effectively; vi. Effective communication to ensure two-way communication on environmental matters between operational staff and high management; and vii. Obligations in respect of monitoring, notification and record keeping under the DMP and relevant environmental authority.

	b) Monitoring of the release of contaminants, methods, record keeping and notification of results; c) Conducting assessment of the environmental impact of any release of contaminants; d) Waste prevention, treatment and disposal; and e) A program for continuous improvement.
G11	The IEMS must not be implemented or amended in a way that contravenes or is inconsistent with any condition of this approval.
G12	The permit holder must provide any amendments to the IEMS to the administering authority at least 28 days prior to the implementation of the proposed amendments, except where amendments must be implemented to prevent environmental harm or to ensure compliance with this environmental authority.
G13	The IEMS must be reviewed every 5 years from commencement of the ERA and supplied to the administering authority for review.
G14	Prevent and/or Minimise Likelihood of Environmental Harm In carrying out an ERA to which this approval relates, all reasonable and practicable measures must be taken to prevent and/or to minimise the likelihood of environmental harm being caused. [Note: This environmental authority authorises the environmentally relevant activity. It does not authorise environmental harm unless a condition contained within this approval explicitly authorises that harm. Where there is no condition or the environmental approval is silent on a matter, the lack of a condition or silence shall not be construed as authorising harm.]
G15	Maintenance of Measures, Plant and Equipment The registered operator of an ERA to which this approval relates must: a) Install all measures, plant and equipment necessary to ensure compliance with the conditions of this approval; and b) Maintain such measures, plant and equipment in a proper and efficient condition; and operate such measures, plant and equipment in a proper and efficient manner.
G16	Alterations No change, replacement or operation of any plant or equipment is permitted if the change, replacement or operation of the plant or equipment increases, or is likely to substantially increase, the risk of environmental harm above that expressly provided for by this approval.
G17	Display of Environmental Authority A copy of this environmental authority must be kept in a location readily accessible to personnel carrying out the activity.

G18	Records Record, compile and keep all monitoring results required by this environmental authority and present this information to the administering authority upon request.
G19	All records required by the environmental authority must be kept for at least five (5) years, except where stated otherwise in a condition of this approval.
G20	Cease Activities in Event of Material or Serious Environmental Harm Occurring If the registered operator of an ERA to which this approval relates becomes aware of material environmental harm or serious environmental harm as a result of carrying out the environmentally relevant activity (ERA) then the said activities must cease immediately.
G21	Notification Telephone the administering authorities Pollution Hotline (1300 130 372) as soon as becoming aware of any release of contaminants not in accordance with the conditions of this environmental authority or any event where environmental harm has been caused or may be threatened.
G22	Information to Follow Notification Written advice detailing the following information must be provided to the administering authority within fourteen (14) days following any notification in accordance with condition (G21): a) The name of the registered operator, including the environmental authority number; b) The name and telephone number of a designated contact person; c) The location of the release / event; d) The time of the release / event; e) The time you became aware of the release / event; f) The suspected cause of the release / event; g) A description of the resulting effects of the release / event; h) The results of any sampling performed in relation to the release / event; i) Actions taken to mitigate any environmental harm and or environmental nuisance caused by the release / event; and j) Proposed actions to prevent a recurrence of the release / event.
G23	Incident Recording A record must be maintained of at least the following events: a) The time, date and duration of equipment malfunctions where the failure of the equipment resulted in the release of contaminants to the environment; and b) The time, date, description, volume and duration of any uncontrolled release of contaminants to the environment. c) The corrective actions implemented following an event (including photographic records).
G24	Spill Kit(s)

	Appropriate spill kit(s) and relevant operator instructions/emergency procedure guides for the management of wastes and chemicals associated with the ERA must be kept at the site.
G25	All relevant personnel operating under this approval must be trained in the use of the spill kit(s).
G26	Equipment Calibration All instruments, equipment and measuring devices used for measuring or monitoring in accordance with any condition of this environmental authority must be calibrated and appropriately operated and maintained.
G27	Trained/Experienced Operator(s) All persons engaged in the conduct of the activity, including but not limited to employees and contract staff, must be: a) Trained in the procedures and practices necessary to: i. Comply with the conditions of this environmental authority, and ii. Prevent environmental harm during normal operation and emergencies; or b) Under the close supervision of such a trained person.
G28	Sample Analysis All analyses and tests required to be conducted under this environmental authority must be carried out by a laboratory that has NATA certification for such analyses and tests, except as otherwise authorised by the administering authority.
G29	Monitoring All analyses and tests required to be conducted under this environmental authority must be carried out by a laboratory that has NATA certification for such analyses and tests, except as otherwise authorised by the administering authority.
G30	A monitoring report must be prepared every three (3) months and upon completion of dredging. This report shall include but not be limited to: a) A summary of the previous three (3) months monitoring results obtained under the monitoring programs required under this approval and, in graphical form showing relevant limits, a comparison of the previous three (3) months monitoring results to both this approval limits and to relevant prior results; and b) An evaluation and interpretation of the data from any monitoring programs; c) A summary of any record of quantities of release required to be kept under this approval; d) A summary of the record of equipment failures or events recorded for any site under this approval; e) Actions taken or proposed to minimise the environmental risk from any deficiency identified by the monitoring or recording programs.

G31	The monitoring report required by condition (G30) must be submitted to the administering authority upon request or at the completion of each dredge campaign.
Agency interest: Air	
Condition number	Condition – Dust Nuisance - Nil
Agency interest: Water	
Condition number	Condition
W1	Coral and water quality monitoring must be carried out in accordance with the <i>Port of Hay Point Dredging – Coral and Water Quality Monitoring Plan (dated 27 August 2007)</i> .
W2	The following performance indicators are to be employed, as defined in the <i>Port of Hay Point Dredging – Coral and Water Quality Monitoring Plan (dated 27 August 2007)</i> : a) Total Suspended Solids (TSS) does not exceed 100mg/L calculated on a six hour rolling mean at any of the water logger locations; b) Coral mortality does not exceed 5% as Round Top Island and 5% at Victor Island in any one dredge campaign.
W3	Dredging activities shall not cause the dredge plume from the dredge head and the deposition site to elevate turbidity in the vicinity of reef communities located at Round Top Island or Victor Islet which is outside the turbidity value identified in (W2).
W4	If the nominated turbidity trigger value identified in (W2) is exceeded, measures must be implemented to reduce the impact of the sediment plume of coral communities in accordance with correction action specified in the <i>Port of Hay Point Dredging – Coral and Water Quality Monitoring Plan (dated 27 August 2007)</i> .
W5	If the nominated turbidity value identified in (W2) is exceeded, the administering authority must be advised, within 24 hours of the event, of the corrective action that has been or will be implemented.
W6	The level of dredge spoil within the spoil ground must not exceed a maximum height of 10 metres below Lowest Astronomical Tide.
W7	Where trailer suction dredging is carried out, an effective turtle deflector device must be fitted to the dredge head. Evidence that this device has been installed and used on the dredge for the entire period of the dredging activity must be provided to the administering authority .
W8	Operating procedures that minimise the risk of turtle capture by the dredge head, and the risk from all activities of injury to marine species of conservation significance, must be developed prior to the commencement of dredging activities.

W9	Mobile dredging operations and spoil disposal activities must cease, or relocated to another site, if dugongs, turtles, or cetaceans, are either likely to be struck or captured, or are observed within 150 metres of the activities being undertaken.
W10	Stationary dredging operations and spoil disposal activities must cease, or relocate to another site, if dugongs, turtles, or cetaceans, are either likely to be struck or captured, or are observed within 75 metres of the activities being undertaken.
W11	The administering authority is to be immediately notified of any turtle captures by the dredge, or of injury to any marine species of conservation significance.
W12	Reporting A monitoring report must be prepared and submitted to the administering authority within 3 months of the completion of each dredge campaign. This report shall include, but not be limited to: a) Results of the monitoring required by this environmental authority and the WQMP; b) A daily summary of dredge movements and disposal activity (map based); c) An evaluation or explanation of the data from these monitoring programs; d) Details of any turtle captures by the dredge and the species involved; e) Details of any complaints received including investigation undertaken, conclusions formed and action taken; f) A summary of significant equipment failures or events that have potential environmental management consequences; g) An outline of corrective actions that will or have been taken to minimise or reduce environmental harm; and h) The quantity (volume in cubic metres) and location of dredging material removed and disposed of.
Agency interest: Land	
Condition number	Condition
L1	Preventing Contaminant Release to Land Contaminants must not be released to land, except where otherwise stated in a condition of this approval.
L2	All chemicals and fuels must be contained within and on-site containment system and controlled in a manner that prevents environmental harm. (Note: All flammable and combustible liquids including petroleum products/fuels must be stored in accordance with AS 1940 – <i>Storage and Handling of Flammable and Combustible Liquids</i>. Storage for flammable and combustible liquids must be constructed and maintained with AS 1940.)

Agency interest: Noise	
Condition number	Condition
N1	Noise from the dredging activities must not cause environmental nuisance at a nuisance sensitive place.
N2	When requested by the administering authority , noise monitoring must be undertaken to investigate any complaint of noise nuisance, and the results notified within 14 days to the administering authority. Monitoring must include: a) LA 10, adj, 10 mins b) LA 1, adj, 10 mins c) The level and frequency of occurrence of impulsive or tonal noise; d) Atmospheric conditions including wind speed and direction; e) Effects due to extraneous factors such as traffic noise; and f) Location, date and time of recording.
N3	The method of measurement and reporting of noise levels must comply with the latest edition of the administering authorities Noise Measurement Manual.
Agency interest: Waste	
Condition number	Condition
WA1	Waste Management Waste generated in the carrying out of the activities must be stored, handled and transferred in a proper and efficient manner.
WA2	All regulated waste removed from the site must be removed by a person who holds a current approval to transport such waste under the provision of the <i>Environmental Protection Act 1994</i> .
WA3	Where regulated waste is removed from the site (other than by a release as permitted under another condition of this environmental authority), the registered operator must monitor and keep records of the following: a) The date, quantity and type of waste removed; b) The name of the waste transporter and/or disposal operator that removed the waste; and c) The intended treatment/disposal/destination of the waste. Note: Records of documents maintained in compliance with a waste tracking system established under the <i>Environmental Protection Act 1994</i> or any other law for regulated waste will be deemed to satisfy this condition.
WA4	Notification of Improper Disposal of Regulated Waste

	If a person removes regulated waste associated with activities at the site and disposes of such waste in a manner which is not authorised or is improper or unlawful, the registered operator must notify the administering authority of all relevant facts, matters and circumstances known concerning the disposal as soon as practicable.
Agency interest: Social	
Condition number	Condition
S1	Complaint Response The registered operator of an ERA to which this approval relates must record the following details for all complaints received and provide this information to the administering authority on request: a) Time, date, name and contact details of the complainant; b) For the complaint; c) Any investigation undertaken; d) Conclusions formed; and e) Any actions taken.

Definitions

Key terms and/or phrases used in this document are defined in this section and **bolded** throughout this document. Applicants should note that 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.

Administering authority means the Department of Environment and Science or its successor or predecessors.

Commercial place 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.

Dwelling means any of the following structures or vehicles that is principally used as a residence- a house, unit, motel, nursing home or other building or part of a building; a caravan, mobile home or other vehicle or structure on land; a water craft in a marina.

General environmental duty means general environmental duty as defined in section 319 of the *Environmental Protection Act 1994*.

Intrusive noise means noise that, because of its frequency, duration, level, tonal characteristics impulsiveness or vibration;

- Is clearly audible to, or can be felt by, an individual; and
- Annoys the individual.

Note: In determining whether a noise annoys an individual and is unreasonably intrusive, regard must be given to Australian Standard 1055.2 – 1997 *Acoustics – Description and Measurement of Environmental Noise Part 2 – Application to Specific Situations*.

Land means any land, whether above or below the ordinary high-water mark at spring tides (i.e. includes **tidal land**).

Material environmental harm means material environmental harm as defined in section 16 of the *Environmental Protection Act 1994*.

mg/L means milligrams per litre.

NATA means National Association of Testing Authorities.

Noise affected premises means a “noise sensitive place” or a “commercial place”.

Noxious means harmful or injurious to health or physical wellbeing.

Nuisance sensitive place means –

- A dwelling, residential allotment, mobile home or caravan park, residential marina or other residential premises; or
- A motel, hotel or hostel; or
- A kindergarten, school, university or other educational institution; or
- A medical centre or hospital; or
- A protection area under the *Nature Conservation Act 1992*, the *Marine Parks Act 2004* or a World Heritage Area; or
- A public thoroughfare, park or gardens; or
- 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.

Protected area means –

- A protection area under the *Nature Conservation Act 1992*, or
- A marine park under the *Marine Parks Act 2004* or
- a World Heritage Area.

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

Regulated waste is defined in Schedule 9 of the Environmental Protection Regulation 2019

Serious environmental harm as defined in section 17 of the *Environmental Protection Act 1994*.

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 SECTION 1

SECTION 2 – Half Tide Tug Harbour

Activities	Locations
ERA 16 - Extraction and Screening 1(b) - Dredging, in a year, the following quantity of material - more than 10,000t but not more than 100,000t	143/SP121683 100/SP312214

Conditions of environmental authority

The environmentally relevant activitie(s) conducted at the location(s) as described above must be conducted in accordance with the following conditions of approval.

Agency interest: General	
Condition number	Condition
G1	The quantity of material removed under this environmental authority must not exceed 100,000 tonnes per year.
G2	The activity under this environmental authority must be conducted within the bounds and specifications of the following approved plan in attachment two (2): a) Half Tide Tug Harbour – Maintenance Dredging Areas prepared by North Queensland Bulk Ports Corporation , dated 02/12/2021 , reference number NQBP2021-002A , revision [not provided] .
G3	Dredged material is authorised for placement at the Dredge Material Placement Area (DMPA) within the bounds of the following approved plan in attachment three (3): a) Half Tide Tug Harbour (HTTH) - Maintenance Dredging Area and Dredge Material Placement Area (DMPA) prepared by North Queensland Bulk Ports Corporation dated 04/08/2021 , reference number NQBP2021-042 , revision [not provided] .
G4	Dredged material must not be placed at sea except at a designated place authorised under an authority, licence or other permit issued by the Commonwealth or Queensland governments.
G5	All reasonable and practicable measures must be taken to prevent or minimise environmental harm caused by the activities .
G6	Any breach of a condition of this environmental authority must be reported to the administering authority as soon as practicable within 24 hours of becoming aware of the breach. Records must be kept including full details of the breach and any subsequent actions taken.
G7	Other than as permitted by this environmental authority, the release of a contaminant into the environment must not occur.
G8	Environmental monitoring results must be kept until surrender of this environmental authority. All other information and records that are required by the conditions of this environmental authority must be kept for a minimum of five (5) years. All information and records required by the conditions of this environmental authority must be provided to the administering authority , or nominated delegate upon request, within the required timeframe and in the specified format.
G9	An appropriately qualified person(s) must monitor, record and interpret all parameters that are required to be monitored by this environmental authority and in the manner specified by this environmental authority.

G10	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. The only exception to this condition is for <i>in situ</i> monitoring of water quality parameters.
G11	When required by the administering authority , monitoring must be undertaken in the manner prescribed by the administering authority , to investigate a complaint of environmental nuisance arising from the activity . The monitoring results must be provided within 10 business days to the administering authority upon its request.
G12	At least five (5) business days prior to commencing a dredge operation, written notification must be provided to the administering authority of the following: 1. Commencement date of the dredge operation. 2. Expected end date of the dredge operation.
G13	The characterisation of sediments and suitability for disposal to waters of dredged material must be submitted to the administering authority in accordance with methodology provided in the latest edition of the: • <i>National Assessment Guidelines for Dredging</i>; and • <i>Queensland Acid Sulfate Soil Technical Manual</i> ...and any other relevant guideline specified by the administering authority , at 20 business days prior to the commencement of the dredging activity . Note: It is the responsibility of the operator to determine whether previous characterisation of sediments are suitable for assessing risks to environmental values associated with the dredging campaign to which this environmental authority relates.
G14	Chemicals and fuels in containers of greater than 15 litres must be stored within a secondary containment system.
G15	Any containment area specified in condition G14 must be certified by appropriately qualified person(s) and maintained to that condition.
G16	Prior to the commencement of the dredging activity , a Dredge Management Plan* (DMP) for the activity must be developed and implemented, and the DMP must contain the following: 1. Clearly stated aims and objectives. 2. Description of dredging operation including: a. type of equipment to be used in dredging ; b. volume of dredged material to be removed, and duration and timing of the dredging campaign; c. methods to be utilised for transporting dredged material ; and d. dredged material disposal methods. 3. Maps or plans showing: a. legend, north arrow and scale; b. boundaries of dredging operation; c. estimated or modelled zone of influence of sediment plumes; d. location of designated disposal sites; e. location of sensitive receptors ; and f. all monitoring locations. 4. A detailed description of sediment plume-associated monitoring program including:

	a. sampling regime and methods; and b. monitoring sites. 5. A detailed description of the assessment methodology to provide data in relation to trigger values that will define alert levels. 6. Clearly set out data handling and evaluation procedures that demonstrate how exceedance of alert levels will be determined. 7. Management actions to be initiated if alert levels are exceeded. *Note: The Dredge Management Plan is subject to review and amendment as required by changing regulation, monitoring results, or Technical Advisory Group recommendations.
G17	The Dredge Management Plan must not be implemented or amended in a way that contravenes or is inconsistent with any condition of this authority.
G18	The Dredge Management Plan (DMP) must be provided to the administering authority at either of the addresses below: PALM@DES.qld.gov.au; or Department of Environment and Science Permit and Licence Management Implementation and Support Unit GPO Box 2454 Brisbane Qld 4001
G19	The Dredge Management Plan must be submitted to the administering authority at least 20 business days prior to the commencement of dredging and amended in accordance with any comments made by the administering authority .
G20	If the Dredge Management Plan is amended, it must be provided to the administering authority at least 20 business days prior to commencing activities under the amended Dredge Management Plan .
G21	Any comments made by the administering authority on the amended Dredge Management Plan provided in accordance with condition G20 must be addressed to the satisfaction of the administering authority prior to implementing the amended Dredge Management Plan .
G22	Condition G20 and G21 applies each time the Dredge Management Plan is amended.
G23	The dredging activity must be undertaken in accordance with the Dredge Management Plan required in condition G16.
G24	Reporting A monitoring report must be prepared and submitted to the administering authority within three (3) months of the completion of each dredge campaign. This report shall include, but not be limited to: a) Results of the monitoring required by this environmental authority and the WQMP; b) A daily summary of dredge movements and disposal activity (map based); c) An evaluation or explanation of the data from these monitoring programs; d) Details of any turtle captures by the dredge and the species involved; e) Details of any complaints received including investigation undertaken, conclusions formed and action taken; f) A summary of significant equipment failures or events that have potential environmental management consequences;

	g) An outline of corrective actions that will or have been taken to minimise or reduce environmental harm; and h) The quantity (volume in tonnes) and location of dredging material removed and disposed of.
Agency interest: Air	
Condition number	Condition
A1	Odours or airborne contaminants must not cause environmental nuisance to any sensitive place or commercial place .
Agency interest: Land	
Condition number	Condition
L1	Contaminants must not be released to land.
L2	Treatment and management of acid sulfate soils must comply with the guidance provided in the current edition of the Queensland Acid Sulfate Soil Technical Manual.
Agency interest: Acoustic	
Condition number	Condition
N1	Noise generated by the activity must not cause environmental nuisance to any sensitive place or commercial place .
Agency interest: Waste	
Condition number	Condition
W1	All waste generated in carrying out the activity must be reused, recycled or removed to a facility that can lawfully accept the waste.
Agency interest: Water	
Condition number	Condition
WT1	The only contaminants to be released to surface waters are dredged material to waters described in condition G3.
WT2	The release to waters must not: 1) have any properties at a concentration that is capable of causing environmental harm. 2) produce any slick or other visible evidence of oil or grease, nor contain visible floating oil, grease, scum, litter or other visually objectionable matter.
WT3	Where the zone of influence of a sediment plume generated by the activity encroaches upon a sensitive receptor, slightly disturbed or high ecological value waters, sediment plume-associated monitoring¹ (SPAM) is to be undertaken as follows: a) continuous visual monitoring²; and

	b) spot-checking (weekly and event-based concern site monitoring with control site-based checking) ¹The default sediment plume-associated monitoring program may be amended at the discretion of the administering authority to a more-intensive or less-intensive monitoring approach depending on the amount and quality of supporting information available at the time the dredging application is made, the management intent of waters under the Environmental Protection (Water and Wetland Biodiversity) Policy 2019, and the level of perceived risk and protection status of each potentially-affected environmental value. ²The continuous visual monitoring methodology includes a subjective monitoring component, but must also be supplemented with daily, non-subjective (i.e. objective, empirical) data collection that must occur at the most appropriate times to report the full extent of the sediment plumes being generated (e.g. mid-ebb and flood tides whilst actively dredging) as detailed in the Dredge Management Plan.
WT4	Monitoring of contaminant releases to waters must be undertaken in accordance with condition WT3 and records of the results must be kept.
WT5	The level of dredge spoil within the spoil ground must not exceed a maximum height of 10 metres below Lowest Astronomical Tide.
WT6	The following performance indicators are to be employed, as defined in the <i>Port of Hay Point Dredging – Coral and Water Quality Monitoring Plan (dated 27 August 2007)</i>: a) Total Suspended Solids (TSS) does not exceed 100mg/L calculated on a six-hour rolling mean at any of the water logger locations; b) Coral mortality does not exceed 5% at Round Top Island and 5% at Victor Island in any one dredge campaign.
WT7	If the nominated turbidity trigger value identified in (WT6) is exceeded, measures must be implemented to reduce the impact of the sediment plume on coral communities in accordance with correction action specified in the <i>Port of Hay Point Dredging – Coral and Water Quality Monitoring Plan (dated 27 August 2007)</i> .
WT8	If the nominated turbidity value identified in (WT6) is exceeded, the administering authority must be advised, within 24 hours of the event, of the corrective action that has been or will be implemented.
WT9	Mobile dredging operations and spoil disposal activities must cease, or be relocated to another site, if dugongs, turtles, or cetaceans, are either likely to be struck or captured, or are observed within 300 metres of the activity/ies being undertaken.
WT10	Stationary dredging operations and spoil disposal activity/ies must cease, or relocate to another site, if dugongs, turtles, or cetaceans, are either likely to be struck or captured, or are observed within 75 metres of the activity/ies being undertaken.
WT11	The administering authority is to be immediately notified of any turtle captures by the dredge, or of injury to any marine species of conservation significance.
WT12	A sediment-plume associated monitoring program must be developed and implemented, including: a. sampling regime and methods for monitoring dredging within 300 metres of Half Tide Tug Harbour; b. monitoring sites, including depth in seawater column; c. thresholds for monitoring sites and time period of threshold; and d. management actions.

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 successor or predecessors.

Alert level represent tiers in a hierarchy of increasing environmental risk and are defined by **trigger values**. Three alert levels (low, moderate, and high) are typically used in a management action framework to indicate adverse conditions and guide management responses that aim to prevent and minimise environmental harm.

Appropriately qualified person(s) means a person or persons who has professional qualifications, training, skills or experience relevant to the EA requirement and can give authoritative assessment, advice and analysis in relation to the EA requirements using the relevant protocols, standards, methods or literature.

Approved plan means a plan authorised under this environmental authority and as per attachments one (1), two (2) and three (3):

- 1) **Port of Hay Point – Maintenance Dredging Areas** prepared by **North Queensland Bulk Ports Corporation** dated **13/06/2022**, reference number **NQBP2022-01a**, revision **[not provided]**.
- 2) **Half Tide Tug Harbour – Maintenance Dredging Areas** prepared by **North Queensland Bulk Ports Corporation**, dated **02/12/2021**, reference number **NQBP2021-002A**, revision **[not provided]**.
- 3) **Half Tide Tug Harbour (HTTH) - Maintenance Dredging Area and Dredge Material Placement Area (DMPA)** prepared by **North Queensland Bulk Ports Corporation** dated **04/08/2021**, reference number **NQBP2021-042**, revision **[not provided]**.

Commercial place 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.

Continuous visual monitoring means visual appraisal of the sediment plume extent and intensity as performed by the dredge crew throughout the day on an *ad hoc* basis (i.e. whenever it is safe and non-disruptive to do so). The continuous visual monitoring requirement is intended to facilitate an early response feature in the **dredge management plan**, so that the dredge operator remains cognisant of the extent and intensity of the sediment plume being generated and reacts according to the **dredge management plan** accordingly. This requirement must be supplemented with empirical data (e.g. photography, when water quality instruments are not in use) taken at key indicative points in the tidal cycle (where applicable) to demonstrate the extent and intensity of the sediment plume.

Control site refers to a monitoring site located beyond the anticipated **zone of influence** of sediment plumes and has **site pairing** with one or more **test sites** or **sentinel sites**. In monitoring programs, **control sites** serve the same role as do **reference sites** but only for a defined subset of parameters.

Dredge management plan (DMP) is an environmental management plan for the dredging **activity**. It defines and describes the:

- scope, timing and duration of the **dredging** operation
- **sediment plume-associated monitoring programs**
- assessment of data, **trigger values** and **alert levels**, and
- management actions that may be required in response to adverse monitoring results.

Dredge Material Placement Area (DMPA) means the area approved for sea disposal as per **approved plan** in attachment three (3) - **Half Tide Tug Harbour (HTTH) - Maintenance Dredging Area and Dredge Material Placement Area (DMPA)** prepared by **North Queensland Bulk Ports Corporation** dated **04/08/2021**, reference number **NQBP2021-042**, revision **[not provided]**.

Dredged material means mud, sand, coral, shingle, gravel, clay, earth and other material removed by dredging. Dredged material includes dredge spoil and extracted quarry material.

Dredging means the mechanical removal of material from below naturally occurring surface waters. It excludes minor adjustments to the bed surface to level troughs and peaks and where bed material is only redistributed locally (bed levelling).

Environmental value –

- a quality or physical characteristic of the environment that is conducive to ecological health or public amenity or safety; or
- another quality of the environment identified and declared to be an environmental value under an environmental protection policy or regulation.

Event-based actions refers to management responses (e.g. an increased level of monitoring) initiated in following 'an event', with the event being defined in the **dredge management plan** (e.g. 'an event' can occur when monitoring results indicate an exceedance of an adopted **trigger value**, or a non-compliance with the environmental authority condition).

High Ecological Value (HEV) is the 'management intent' for the 'ecosystem condition' as defined in Schedule 1 of the Environmental Protection Policy (Water and Wetland) 2019 for scheduled waters, or the Australian and New Zealand Guidelines for Fresh and Marine Water Quality 2000 (ANZECC & ARMCANZ 2000) for non-scheduled waters. HEV ecosystems are intact and typically exhibit relatively insignificant levels of anthropogenic impacts.

Holder as defined in Schedule 4 Dictionary of the *Environmental Protection Act 1994*.

Land means any land, whether above or below the ordinary high-water mark at spring tides (i.e. includes **tidal land**).

Measures has the broadest interpretation and includes:

- Procedural measures such as standard operating procedures for **dredging** operations, environmental risk assessment, management actions, departmental direction and competency expectations under relevant guidelines
- Physical measures such as plant, equipment, physical objects (such as bunding, containment systems etc.), ecosystem monitoring and bathymetric surveys.

NATA means National Association of Testing Authorities.

Nominated delegate means another government agency that provides services to the **administering authority**.

Release of a contaminant into the environment means to:

- deposit, discharge, emit or disturb the contaminant
- cause or allow the contaminant to be deposited, discharged, emitted or disturbed
- fail to prevent the contaminant from being deposited, discharged emitted or disturbed
- allow the contaminant to escape
- fail to prevent the contaminant from escaping.

Sediment plume-associated monitoring (SPAM) means environmental monitoring associated with risk management of **sediment plume-associated impacts**.

Sediment plume-associated impacts are impacts associated with sediment plumes including turbidity and suspended solids concentrations, light attenuation or sedimentation rates elevated above either **control site** or **reference site** readings or baseline conditions for an equivalent time of year. Where **dredge material** possesses acid sulfate soil-related properties, sediment plume-associated impacts may also include pH, dissolved oxygen and metal and metalloid-related toxicity impacts.

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

1. a dwelling, residential allotment, mobile home or caravan park, residential marina or other residential premises; or
2. a motel, hotel or hostel; or
3. a kindergarten, school, university or other educational institution; or
4. a medical centre or hospital; or
5. a protected area under the *Nature Conservation Act 1992*, the *Marine Parks Act 2004* or a World Heritage Area; or
6. a public park or garden; or
7. for noise, a place defined as a sensitive receptor for the purposes of the Environmental Protection (Noise) Policy 2019.

Sensitive receptor includes biological sensitive receptors together with other **environmental values** sensitive to the effects of dredge-generated **sediment plume-associated impacts**.

Slightly disturbed is the 'management intent' for the 'ecosystem condition' as defined in Schedule 1 of the Environmental Protection (Water and Wetland Biodiversity) Policy 2019. Slightly disturbed ecosystems should generally be regarded as **high ecological value** ecosystems in all respects except for some relatively minor disturbances (usually water-quality related e.g. nutrient concentrations exceeding the water quality objective).

Spot-checking refers to a non-continuous monitoring approach performed at a fixed distance and direction from a mobile impact source (in the context of this guidance, dredging vessels) or at other key points of interest. Spot-checking may be routine or **event-based**, and may also include monitoring at fixed monitoring sites, such as **reference sites** or **control sites** and **test sites** or **sentinel sites**, although the same sites need not necessarily be monitored on every sampling event.

Technical Advisory Group means an assembly of **appropriately qualified persons** representing experts in various scientific fields, formed to be capable of assessing **sediment plume-associated monitoring** data and presenting advice relevant to conducting the **dredging** campaign and protecting **sensitive receptors** as directed under this authority and the **dredge management plan**.

Tidal land means land that is submerged at any time by tidal water.

Trigger values are physicochemical, parameter-specific measurement values used to indicate a condition where an environmental value or sensitive receptor may be at low, moderate or high risk, or some other risk-related indicator.

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.

WQMP means *Port of Hay Point Dredging – Coral and Water Quality Monitoring Plan (dated 27 August 2007)*.

Zone of Influence of a sediment plume is, in its broadest application, defined by the **dredge footprint** and the area beyond the **dredge footprint** where at least some level of **sediment plume-associated impacts** are

expected to occur. The overall *zone of influence* may be broken down into more risk-relevant sub-categories, such as the *Zone of Unavoidable Loss* (the **dredge footprint** and immediately adjacent areas), the *Zone of Moderate Impact*, or the *Zone of Marginal Impact*, with each zone being defined according to its purpose or role in environmental management.

Attachments

- **Attachment 1**

Port of Hay Point – Maintenance Dredging Areas prepared by **North Queensland Bulk Ports Corporation** dated **13/06/2022**, reference number **NQBP2022-01a**, revision **[not provided]**.

- **Attachment 2**

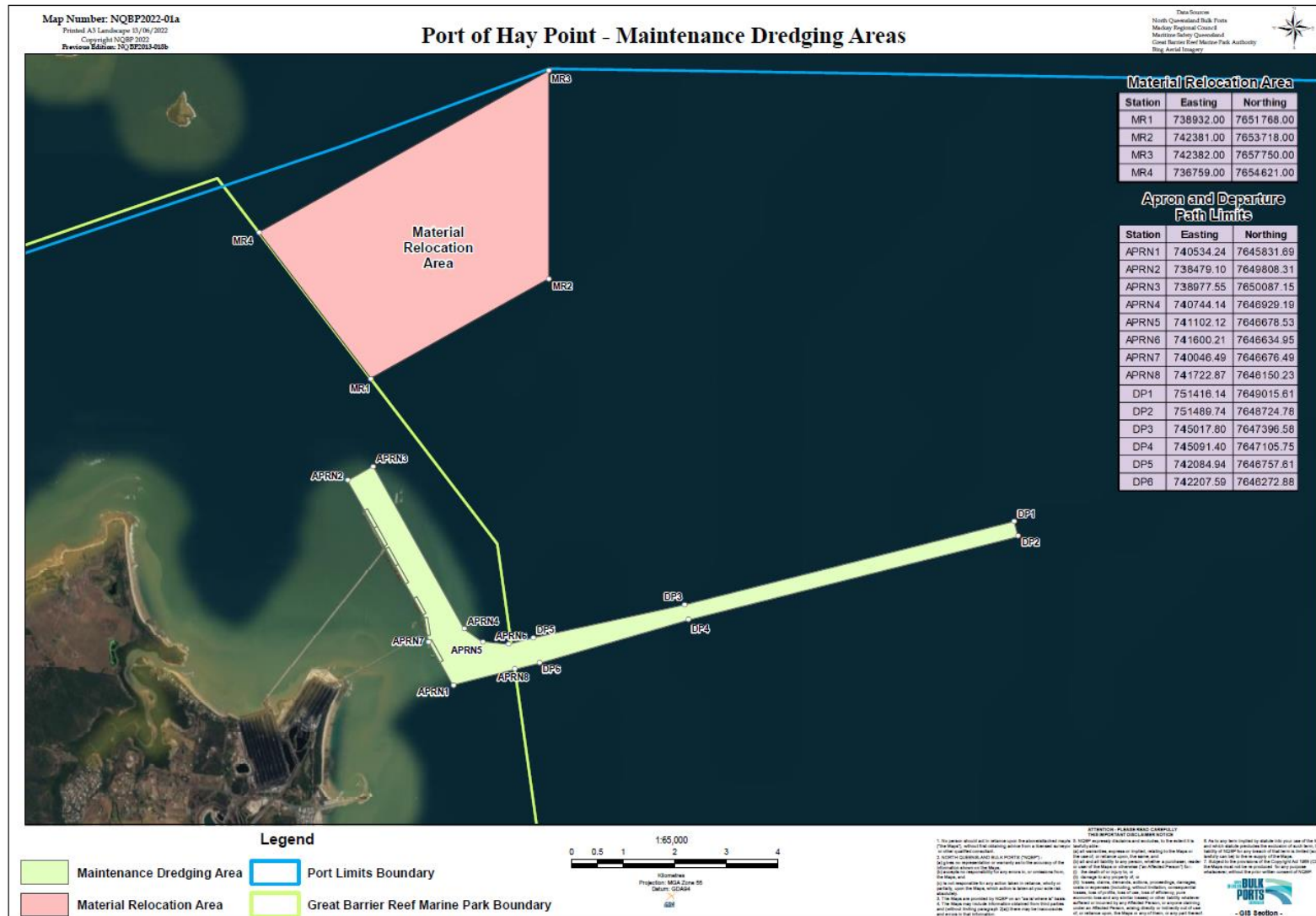
Half Tide Tug Harbour – Maintenance Dredging Areas prepared by **North Queensland Bulk Ports Corporation**, dated **02/12/2021**, reference number **NQBP2021-002A**, revision **[not provided]**.

- **Attachment 3**

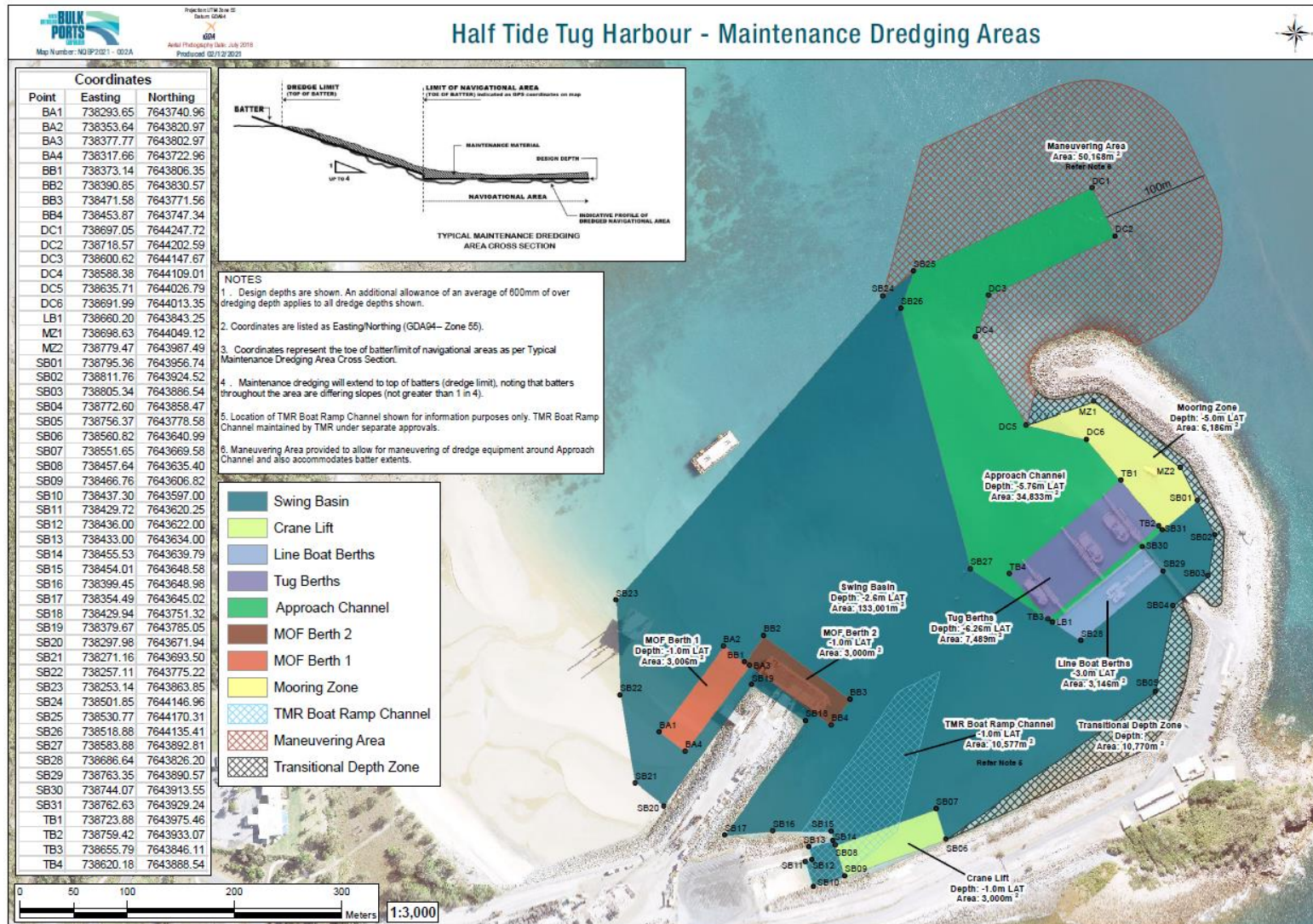
Half Tide Tug Harbour (HTTH) - Maintenance Dredging Area and Dredge Material Placement Area (DMPA) prepared by **North Queensland Bulk Ports Corporation** dated **04/08/2021**, reference number **NQBP2021-042**, revision **[not provided]**.

END OF PERMIT

Attachment 1 - Port of Hay Point – Maintenance Dredging Areas prepared by **North Queensland Bulk Ports Corporation** dated **13/06/2022**, reference number **NQBP2022-01a**, revision **[not provided]**.



Attachment 2 - Half Tide Tug Harbour – Maintenance Dredging Areas prepared by North Queensland Bulk Ports Corporation, dated 02/12/2021, reference number NQBP2021-002A, revision [not provided].



Attachment 3 - Half Tide Tug Harbour (HTTH) - Maintenance Dredging Area and Dredge Material Placement Area (DMPA) prepared by North Queensland Bulk Ports Corporation dated 04/08/2021, reference number NQBP2021-042, revision [not provided].

