
PORT OF HAY POINT

Maintenance Dredging 2019:

Independent Audit of Environmental Approvals

Final Audit Report



Prepared for: **North Queensland Bulk Ports Corporation. October 2019**



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ABBREVIATIONS

CSD	Cutter Suction Dredge
DES	Department of Environment and Science
DMPA	Dredge Material Placement Area
EA	Environmental Approval
EMP	Environmental Management Plan
ET	Environmental Thresholds Report
MDEMP	Maintenance Dredging Environmental Monitoring Plan
MEMP	Marine Environmental Monitoring Program
MPP	Marine Park Permit
NQBP	North Queensland Bulk Ports Corporation
SDP	Sea Dumping Permit
TSHD	Trailing Suction Hopper Dredge

EXECUTIVE SUMMARY

North Queensland Bulk Ports Corporation (NQBPC) undertook maintenance dredging at the Port of Hay Point near Mackay for the period 31st March 2019 to 2nd May 2019, resulting in the relocation of 353,740m³ of sediment from defined dredging areas to a nearby designated Dredge Material Placement Area (DMPA). This independent compliance audit seeks to determine the extent to which maintenance dredging operations adhered to approval conditions outlined in State and Commonwealth permits and approved Management Plans (EMPs).

Relevant permits include:

- Environmental Authority EPPR01742813
- Great Barrier Reef Marine Park Permit G19/40185.1
- Sea Dumping Permit 19/01
- Operational (Tidal) Works – Ref 1805-5537 SP

Conditions in the four approval permits refer to performance objectives (targets) and a variety of monitoring obligations. Details of the monitoring obligations are outlined in an approved Maintenance Dredging Environmental Management Plan (MDEMP) and a Marine Environmental Monitoring Program (MEMP) that incorporates an Environmental Thresholds Report (ET). Additional key Management Plans include the Port of Hay Point Long-term Maintenance Dredge Management Plan 2018 – 2043 (March 2018) and the TSHD Brisbane – Environmental Management Plan: Hay Point Maintenance Works (March 2019).

Several monitoring programs were implemented by NQBPC before, during and following the maintenance dredging program, including real-time water quality status and monitoring undertaken by Vision Environment and Port & Coastal Solutions. In summary, this monitoring demonstrated that:

- Water Quality Objectives (WQO) were exceeded on several occasions, but not to the point where a “cease dredge operations” response was triggered. Weather conditions appear to have had a greater impact on turbidity than the dredging operations.
- There was no apparent impact from maintenance dredge activities on coral health parameters, with changes between the Pre-Dredge and Post-Dredge surveys being attributable to seasonal variation or regional metocean influences.
- Analysis of bathymetric survey data confirmed that material removed from the approved dredge areas and placed in the approved DMPA was consistent with both the volume and depth requirements of the approval permits. The maximum apron dredge depth was exceeded at berth pockets, as permitted on drawing 41-14520-002, due to dredging of the berth batter slopes in the apron region. This was not regarded as a condition breach or non-compliance.

The performance of environmental monitoring undertaken before, during and following the Port of Hay Point Maintenance Dredging Program, including a final analysis and interpretation of turbidity data, and whether the environmental monitoring was implemented in accordance with the Management Plans, was undertaken by Port & Coastal Solutions, who found that:

“In general, the environmental monitoring undertaken as part of the Port of Hay Point 2019 maintenance dredging program has been implemented in the manner stated in the Management Plans.”

This Audit has considered a total of 217 permit conditions and EMP obligations. There is considerable overlap between the different permits and the EMP, hence 193 conditions have been assessed by the Auditor as applicable, with the remaining 24 deemed *Not Applicable* due to not being relevant at the time of audit or the Approval Condition not being triggered.

Overall, there were no *Minor, Major or Critical Non-Compliances* for any of the permit approval conditions or EMP obligations.

Across all permits and EMP obligations, all bar three of the approval conditions are *Fully Compliant*. Three conditions were found to be *Compliant but with Improvements Required*, all of which related to a similar waste management records/tracking issue.

The individual compliance results for each approval permit and EMP are:

Approval Permits and Environmental Management Plan	Fully Compliant	Compliant but improvements required	Minor Non-Compliance	Major Non-Compliance	Critical Non-Compliance	Undetermined
Environmental Authority EPPR01742813	98% (48/49)	2% (1/49)				
Great Barrier Reef Marine Park Permit G19/40185.1	96% (24/26)					4% (2/26)
Sea Dumping Permit 19/01	100% (26/26)					
Development Approval - Operational (Tidal) Works – Ref 1805-5537 SP	100% (30/30)					
TSHD Brisbane – Environmental Management Plan	96.7% (59/61)	3.3% (2/61)				

*Brackets indicate number of applicable permit / EMP conditions

A range of improvements to the conditions that regulate the Port of Hay Point 2019 Maintenance Dredging Program have been identified, either by the Auditor and/or through monitoring programs and reporting undertaken as part of the dredging operations. These improvements should be investigated and implemented if deemed appropriate by the regulatory agencies.

The Port of Hay Point 2019 Maintenance Dredging Program was undertaken consistent with the approvals and management plan requirements issued prior to the dredging program being undertaken by North Queensland Bulk Ports.

1 INTRODUCTION

North Queensland Bulk Ports Corporation undertook maintenance dredging at the Port of Hay Point, near Mackay in Queensland as part of a long-term maintenance dredging program for the port.

Maintenance dredging was undertaken using TSHD Brisbane for the period 31st March 2019 to 2nd May 2019, and involved the relocation of 353,740m³ of sediment from defined dredging areas to a nearby designated Dredge Material Placement Area (DMPA).

All maintenance dredging activities were undertaken in accordance with State and Commonwealth permits and approved Environmental Management Plans (EMPs). This independent compliance audit seeks to determine the extent to which these dredging activities adhered to the conditions outlined in the permits and approved EMP's.

Following completion of the maintenance dredging, associated 'bed-levelling' continued until the 10th May 2019, as part of the maintenance dredging program to ensure no high points remained on the dredged seabed.

An Interim Audit Report (Ethos NRM, 2019a) was previously completed, to comply with specific regulatory timeframes, for only one of the approval permits; the Department of Environment and Science's (DES) Environmental Authority EPPR01742813.

This audit report addresses all permits and approvals relevant to the Port of Hay Point Maintenance Dredging 2019 program, including that previously documented in the Interim Audit Report (Ethos NRM, 2019a).

1.1 Port of Hay Point Maintenance Dredging

Maintenance dredging at Hay Point is aimed at maintaining navigable shipping channels and berths at the Port of Hay Point. Maintenance dredging has been undertaken twice in the past decade, in 2008 and 2010. Considerable sediment has subsequently accumulated within the Port, particularly as a result of Tropical Cyclone Debbie in 2017.

State and Commonwealth approval has been granted for maintenance dredging at the Port of Hay Point, following environmental assessment and public consultation. Approval was subject to a variety of permits and conditions.

Approved Dredging Areas and the designated Dredge Material Placement Area (DMPA) is shown in **Figure 1**.

Dredging areas include the Departure Path, Berth Pockets and Apron Areas.

1.2 Approvals and Permits

Conditions that apply to the Port of Hay Point 2019 Maintenance Dredging Program are contained in the following State and Commonwealth approval permits:

- **Environmental Authority** for Environmentally Relevant Activity.
Permit EPPR01742813.
Issued by Department of Environment and Science, 25 June 2018,
under the *Environmental Protection Act 1994 (Qld)*
- **Great Barrier Reef Marine Park Permit**
Permit G19/40185.1
Issued by Great Barrier Reef Marine Park Authority, 23 January 2019

- **Sea Dumping Permit**

Permit 19/01.

Issued by Great Barrier Reef Marine Park Authority (Comm), 23 January 2019, under the Environment Protection (Sea Dumping) Act 1981

- **Development Approval – Operational (Tidal) Works**

Reference: 1805-5537 SPD.

Originally issued 27 February 2006 (Ref: IPDC000339006A12). Re-issued (as amended 1 February 2019) by Department of State Development, Manufacturing, Infrastructure and Planning (Qld).

1.3 Environmental Management Plans

Management plans relevant to the Port of Hay Point 2019 Maintenance Dredging Program are:

- Port of Hay Point Maintenance Dredging Environmental Management Plan (March 2019).
- TSHD Brisbane – Environmental Management Plan: Hay Point Maintenance Works (March 2019).
- Port of Hay Point Long-term Maintenance Dredge Management Plan 2018 – 2043 (March 2018).
- Marine Environmental Monitoring Program - Port of Hay Point (including an Environmental Thresholds Plan) March 2018.

These plans have been reviewed and approved by the relevant State and Commonwealth regulatory authority.

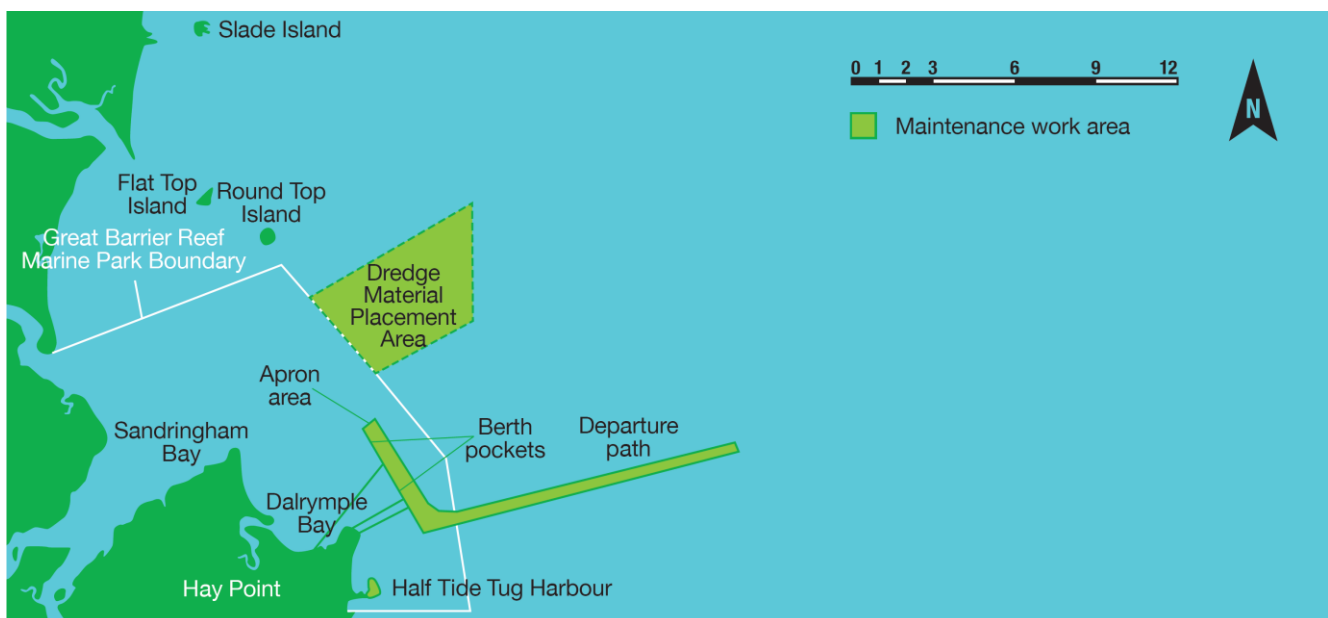


Figure 1: Dredging Areas and Dredge Material Placement Area at Port of Point Hay

(Note: Half Tide Tug Harbour was not included in the Port of Hay Point 2019 Maintenance Dredging Program)

2 INDEPENDENT AUDIT

2.1 Auditor's Statement

This Independent Audit has been completed in accordance with a Project/Audit Brief (NQBP, 2019), an agreed Audit Plan and is generally consistent with the requirements of AS/NZS ISO19011:2014.

The Auditor is suitably qualified, experienced and competent to undertake the audit, having previously undertaken similar environmental compliance audits for both private and public entities.

Ethos NRM has not previously completed work for North Queensland Bulk Ports and believes there are no conflict of interest issues.

2.2 Audit Scope and Audit Plan

An Audit Plan was developed in cooperation with North Queensland Bulk Ports to direct specific audit tasks and to ensure the audit objectives and methodology were clear. The audit methodology involved three broad audit tasks as listed below, which were summarised by North Queensland Bulk Ports in a 'Notifications and Obligations Schedule' that formed Appendix E in the Port of Hay Point Maintenance Dredging Environmental Management Plan.

Audit Tasks

1. Undertake a compliance audit of the 115 Compliance Criteria / Conditions emanating from the various approvals and management plans.
These have been collated into a '*Notifications and Obligations Schedule*' (Appendix E in the Port of Hay Point Maintenance Dredging Environmental Management Plan), which comprises
 - a. 36 pre-dredging compliance items,
 - b. 57 during dredging items, and
 - c. 22 post dredging compliance items.
2. Undertake a compliance audit of the TSHD Brisbane – Environmental Management Plan. Relevant auditable Compliance Criteria are described in:
 - a. Section 8.2 to 8.11 of the Plan
(which include detailed tables for Objective, Performance Criteria, Monitoring etc),
 - b. Sections 9 – Incident Reporting, and
 - c. Section 10 – Environmental Monitoring
3. Review and document results (including any necessary or recommended changes) from separate performance/monitoring reports (by other independent consultants: Port & Coastal Solutions and Vision Environment) of the:
 - a. Environmental Thresholds Report (ET)
 - b. Maintenance Dredging Environmental Management Plan (MDEMP)
 - c. Marine Environmental Monitoring Program (MEMP)

In undertaking the Audit, the Auditor considered ALL permit conditions and relevant sections of the TSHD Brisbane – Environmental Management Plan, thereby resulting in considerably more than the 115 Compliance Criteria / Conditions listed in the original Audit Brief and Scope. Many

of the additional conditions were found to be Not Applicable due to being an overarching statement of fact rather than a conditional requirement.

2.3 Audit Meetings, On-board Inspection and Reporting

An audit inception / commencement meeting was conducted on 1st May, 2019, after which an on-board inspection of TSHD Brisbane was undertaken on 2nd May when the vessel was alongside at Port of Mackay for bunkering and crew change. The on-board audit inspection was originally scheduled for 16th April, however was postponed due to unsafe weather and sea conditions for vessel transfer at sea.

The audit inception / commencement meeting allowed a draft Audit Plan to be discussed and finalised, clarification of the auditable criteria, and confirmation of the compliance rankings.

On-board inspection of TSHD Brisbane, whilst not undertaken during an active dredging operation, afforded the Auditor with first-hand on-board observational evidence, the opportunity to take photographic records of key compliance items, and discuss aspects of the dredging operation with the Master and crew members. A selection of photographs from the on-board inspection is provided at the rear of this report.

TSHD Brisbane crew and staff brought to the attention of the Auditor two operational matters relating to:

- An instance when dredge track plots extended beyond the designated dredging zone, and
- A power outage onboard the TSHD Brisbane while steaming.

North Queensland Bulk Ports also indicated that a separate Internal Audit had recently been completed and found four areas of Minor Non-Conformance relating to:

- Stowage of small grease drum
- On-board Availability of SDS's for all chemicals aboard TSHD Brisbane
- Crew familiarity with environmental approvals and management plans
- Potential operational improvement to fauna deflector chains on dredge head.

All issues were subsequently addressed and 'Closed Out' by NQBP and TSHD Brisbane during the maintenance dredging program.

No formal additional audit meetings were held following the audit inception / commencement meeting, the on-board inspection of TSHD Brisbane, and the exchange of Audit Evidence. Although a number of telephone and numerous e-mail exchanges subsequently occurred to ensure the Auditor had all the necessary information, discuss audit evidence and convey preliminary compliance rankings.

The Interim Audit Report of Environmental Authority EPPR01742813 Conditions was submitted to the Department of Environment and Science prior to 5th July, 2019, as required by the approved extended timeframe.

A draft of this Audit Report was issued to NQBP on 16th and 23rd October 2019, with the Final Audit Report issued on 28th October following receipt of comments from NQBP. The audit was closed-out during a subsequent telephone conversation.

2.4 Compliance Rankings

Compliance rankings for this Port of Hay Point 2019 Maintenance Dredging Program audit are consistent with those used for similar dredging compliance audits undertaken for Gippsland Ports and Port of Melbourne. **Table 1** lists the compliance rankings.

Table 1: Compliance Ranking Definitions

Compliance Grade	Description
Fully Compliant	There is sufficient evidence to confirm that actions have been undertaken, prepared and/or implemented in full compliance with the requirements of the auditable element.
Compliant but with Improvements Required	There is evidence to confirm that actions have been implemented to achieve compliance with the auditable element, but improvements are required to achieve Full Compliance.
Minor Non-Compliance	The evidence shows that actions are not in full compliance with the requirements of the auditable element but it is unlikely that this will cause the environment to be seriously affected.
Major Non-Compliance	The evidence shows that actions are not in full compliance with the requirements of the auditable element and this gives risk to a high potential that the environment will be seriously affected if the non-compliance is not rectified.
Critical Non-Compliance	The evidence shows that actions are not in full compliance with the requirements of the auditable element and this gives rise to a serious or imminent risk to the environment.
Undetermined	There is insufficient evidence (at the time of audit) to make a judgement on compliance.
Not Applicable	The auditable element falls outside the scope of the audit or is a 'statement' rather than a measurable / auditable action.

In addition to the compliance rankings listed above, the Auditor has also made Observations for an improvement relating to operational procedures, even where an action is Fully Compliant.

3 AUDIT FINDINGS

3.1 Audit Findings Overview

Audit findings have been grouped in accordance with each of the four approval permits and the TSHD Brisbane Environmental Management Plan. Findings for each permit are discussed below, with details presented in **Appendix 1**.

A total of 217 approval conditions and EMP obligations have been audited. However, there is considerable overlap between the different permits and the EMP, with many of the conditions addressing a common issue, with similar performance criteria, but adopting slightly different wording to express each authority's requirement. This has created substantial repetition across the four permits and the EMP, and minor inconsistencies.

Consequently, there is similar repetition when presenting results of the audit assessment, whereby Full Compliance with a condition in one permit, correlates to Full Compliance with a similar condition in one or more of the other permits. Hence there are far fewer 'unique' auditable approval conditions than is suggested by the results presented below.

All currently available audit evidence was made readily accessible to the auditor for review. A relatively large number of *Undetermined* audit findings was presented in the Interim Audit Report, due to the 'outstanding evidence' not yet being available (due to studies not yet being complete), rather than the evidence not existing or not being presented to the Auditor. The outstanding evidence subsequently became available upon completion of the various monitoring reports, and are including in the results discussed below.

3.2 Audit Findings for Key Monitoring Reports

The four approval permits and the TSHD Brisbane EMP all refer to performance objectives (targets) and a variety of monitoring obligations that must be implemented to demonstrate compliance with these targets. All monitoring obligations are based on the following approved monitoring plans:

- Maintenance Dredging Environmental Management Plan (MDEMP)
- Marine Environmental Monitoring Program (MEMP) incorporating the Environmental Thresholds Report (ET).

In response, NQBP implemented a several monitoring programs, including real-time water quality status and monitoring undertaken by Vision Environment and Port & Coastal Solutions.

This audit report incorporates the findings and recommendations made by Vision Environment and Port & Coastal Solutions, as presented in the monitoring reports discussed below. These monitoring reports have been relied upon by the Auditor in addition to the Auditor's own assessment of all available information and on-board observations.

3.2.1 Hay Point Maintenance Dredge Water Quality Monitoring – Vision Environment, August 2019

Water quality monitoring was undertaken by Vision Environment during the Pre-Dredge, and Post-Dredge phases, utilising two trigger sites (Round Top Island and Victor Island) and two control sites (Slade Islet and Freshwater Point). Additional real time surface turbidity data was also utilised during dredge operations. Trigger values had previously been calculated based on long term ambient data sets.

Results for surface turbidity, benthic turbidity, pH, temperature, dissolved oxygen and nutrients indicate Water Quality Objectives (WQO) were exceeded on several occasions, but not to the point where a "cease dredge operations" response was triggered. Importantly,

Vision Environment also found that water quality was greatly influenced by prevailing weather conditions rather than solely by the dredging operations.

In summary, Vision Environment found that:

“Turbidity was highly responsive to increased wind speed”

“ ... it appears that climatic conditions had more of an impact on the measured [water quality] parameters, as opposed to dredge operations”

“Overall it appears that dredge operations had little impact on turbidity or the additional sampled parameters during the Dredge phase.”

Refer to the Hay Point Maintenance Dredge Water Quality Monitoring report by Vision Environment for a comprehensive discussion of water quality monitoring results.

3.2.2 Hay Point Maintenance Dredge: Coral Impact Monitoring Report - Vision Environment, August 2019

An assessment of the impact on Coral health from the Port of Hay Point Maintenance Dredging program was undertaken by Vision Environment in accordance with the Marine Environmental Monitoring Program (2019). Monitoring of four locations - Round Top Island and Victor Island (water quality monitoring trigger sites), and Slade Islet and Keswick Island (water quality monitoring control and support sites) took place prior to, and after, maintenance dredging activities.

Vision Environment found that:

“Hard and soft corals were recorded at all locations with coverage remaining similar during the Pre-Dredge and Post-Dredge surveys, indicating no apparent impact from dredging activities.”

“Few hard corals across the transects demonstrated stress, with less than 4% of corals overall showing pale bleaching and less than 1% of corals presenting white bleaching or disease. These levels did not change between the Pre-Dredge and Post-Dredge surveys.”

“Sediment was observed on corals at all locations However, the depth of the sediment on the coral increased between 0.5 to 0.9 mm across all locations from the Pre- to Post-Dredge surveys. As this occurred at all locations, it is unlikely that dredging activities were responsible.”

“Overall, no apparent impact from maintenance dredge activities was evident on the monitored coral parameters. Any significant changes between the Pre-Dredge and Post-Dredge surveys could be attributable to seasonal variation or regional metocean influences.”

Refer to the Hay Point Maintenance Dredge: Coral Impact Monitoring Report by Vision Environment for a comprehensive discussion of coral health impacts.

3.2.3 Port of Hay Point, 2019 Maintenance Dredging Performance of Environmental Monitoring – Port & Coastal Solutions, August 2019

Port & Coastal Solutions assessed the performance of environmental monitoring undertaken before, during and following the Port of Hay Point Maintenance Dredging Program, including a final analysis and interpretation of turbidity data, and whether the environmental monitoring was implemented in accordance with the Management Plans.

Port & Coastal Solutions found that:

“In general, the environmental monitoring undertaken as part of the Port of Hay Point 2019 maintenance dredging program has been implemented in the manner stated in the Management Plans.”

“The adaptive monitoring and resultant adaptive management measures adopted were in accordance with the Management Plans.”

During the maintenance dredging program the turbidity at Round Top Island exceeded the 90th percentile duration exceedance, with the site entering into management zone C, respond. The subsequent investigation was in accordance with the Management Plans and despite this concluding that the elevated turbidity was due to natural conditions, adaptive management measures were implemented to ensure a precautionary approach was adopted.”

Port & Coastal Solutions also undertook additional analysis of turbidity data, resulting in a range of recommendations to update requirements for the impact and adaptive monitoring obligations of future dredging programs, including updated surface turbidity intensity thresholds, and benthic turbidity intensity and duration thresholds.

Refer to the Port of Hay Point, 2019 Maintenance Dredging Performance of Environmental Monitoring report by Port & Coastal Solutions for a comprehensive discussion of water quality monitoring performance.

3.2.4 Bathymetric Survey Analysis (Port of Hay Point, 2019 Maintenance Dredging) – Port & Coastal Solutions, June 2019

Port & Coastal Solutions undertook detailed analysis of bathymetric surveys related to the Port of Hay Point Maintenance Dredging Program to calculate the in-situ volume changes between pre- and post-maintenance dredging surveys at both the Port of Hay Point and the dredge material placement area (DMPA). Port & Coastal Solutions also sought to confirm that maintenance dredging and subsequent ‘bed levelling’ works were completed in general accordance with the necessary approval conditions.

Port & Coastal Solutions found that:

“A review of the changes in the bathymetry over the 2019 Port of Hay Point maintenance dredging program was undertaken based on the approval requirements. It was found that the works undertaken as part of the 2019 maintenance dredging program have been in accordance with the necessary approval conditions.”

Analysis of the bathymetric survey concluded that:

- The total in-situ volume of material removed from the approved dredge areas was 335,230m³, as calculated by pre- and post-maintenance dredging bathymetric surveys, or 353,740m³ as calculated at the end of the maintenance dredging by MSQ. Both volumes being less than the maximum approved volume of 356,553m³.
- The in-situ volume of sediment removed from the departure path within the GBRMP was 7,551m³, being less than the annual total limit of 22,509m³ and less than the 12,000m³ maximum permitted in any one calendar year.

- The surveyed maximum pre-dredge depth in the apron and departure path was already at or deeper than the maximum permitted depth of 15.6 m below Lowest Astronomical Tide (LAT). Maintenance dredging did not change the average depth in the apron or departure path.
- Maintenance dredging in the apron regions adjacent to the berths resulted in an increase in the maximum depth, including directly adjacent to DBCT Berth 4 where maximum depth increased from 15.6 m below LAT to 19.1 m below LAT, due to dredging of the berth batter slopes in the apron region as permitted on drawing 41-14520-002 (Adaptive Strategies, 2019).
- The shallowest post-dredge survey point in the DMPA was 10.56 m below LAT, being deeper than the minimum permitted depth of 10 metres below LAT. Overall, placement of dredge sediment in the DMPA did not influence the shallowest depth in the DMPA, with the shallowest depth actually deepened by 0.02 m during maintenance dredging due to natural erosion (redistribution).
- Based on survey tolerances and placement of unconsolidated dredge material, there was a net calculated increase in the volume of sediment at the DMPA of 418,388m³.

Refer to the Bathymetric Survey Analysis report by Port & Coastal Solutions for a comprehensive discussion of Bathymetric changes resulting from the Port of Hay Point, 2019 Maintenance Dredging Program.

3.3 Audit Findings for Environmental Authority EPPR01742813

A detailed assessment of compliance against all conditions in Environmental Authority EPPR01742813 is documented in **Appendix 1: Detailed Audit Findings**. Findings in Appendix 1 are grouped under the same Condition headings and sub-headings as in Environmental Authority EPPR01742813:

- General Conditions
- Water Conditions
- Land Conditions
- Noise Conditions
- Waste Conditions
- Social Conditions

Audit findings for compliance against Environmental Authority EPPR01742813, based on these headings, are summarised in **Table 2** and below.

A total of 53 Approval Conditions have been assessed by the Auditor, of which 4 are deemed to be Not Applicable (due to not being relevant at the time of audit or the Approval Condition not being triggered).

Results for the **49 applicable Approval Conditions** are as follows:

Audit Findings - Environmental Authority EPPR01742813	
98% of Approval Conditions are Fully Compliant (48 out of 49)	
2% of Approval Conditions are Compliant but Improvements Required (1 out of 49)	
No Approval Conditions are a <i>Minor Non-Compliance</i>	
No Approval Conditions are a <i>Major Non-Compliance</i>	
No Approval Conditions are a <i>Critical Non-Compliance</i>	
No Approval Conditions are <i>Undetermined</i>	
An additional 4 Approval Conditions are considered Not Applicable.	

Table 2: Summary of Environmental Authority EPPR01742813 Compliance Findings

Auditable Conditions		Fully Compliant	Compliant but improvements required	Minor Non-Compliance	Major Non-Compliance	Critical Non-Compliance	Undetermined	Not Applicable
No.	General Conditions							
G1	Administrating Authority	1						
G2-G3	Limit of Dredging Approved	2						
G4-G8	External Audit	5						
G9-G13	Integrated Environmental Management System	5						
G14	Prevent and/or Minimise Likelihood of Environmental Harm	1						
G15	Maintenance of Measures, Plant and Equipment	1						
G16	Alterations	1						
G17	Display of Environmental Authority	1						
G18-G19	Records	1						1
G20	Cease Activities in Event of Material or Serious Environmental Harm Occurring	1						
G21	Notification	1						
G22	Information to Follow Notification							1
G23	Incident Recording	1						
G24-G25	Spill Kit(s)	2						

Continued

Table 2: continued

Auditable Conditions		Fully Compliant	Compliant but improvements required	Minor Non-Compliance	Major Non-Compliance	Critical Non-Compliance	Undetermined	Not Applicable
G26	Equipment Calibration	1						
G27	Trained/Experienced Operator(s)	1						
G28	Sample Analysis	1						
G29-G31	Monitoring	3						
Water Conditions								
W1-W11	Water Conditions	11						
W12	Reporting	1						
Land Conditions								
L1-L2	Preventing Contaminant Release to Land	2						
Noise Conditions								
N1-N3	Noise Conditions	1						2
Waste Conditions								
WA1-WA3	Waste Conditions	2	1					
WA4	Notification of Improper Disposal of Regulated Waste	1						
Social Conditions								
S1	Complaint Response	1						
# TOTALS		48	1	0	0	0	0	4
% TOTALS		90.6	1.9	0	0	0	0	7.5
% TOTALS excl Not Applicable		98.0	2.0	0	0	0	0	

3.4 Audit Findings for Great Barrier Reef Marine Park Permit G19/40185.1

A detailed assessment of compliance against all conditions in Great Barrier Reef Marine Park Permit G19/40185.1 is documented in **Appendix 1: Detailed Audit Findings**. Findings in Appendix 1 are grouped under the same Condition headings and sub-headings as in Great Barrier Reef Marine Park Permit G19/40185.1:

- Compliance with all Laws
- Deed Conditions
- Environmental Harm Conditions
- Maintenance Dredging Conditions
- Spoil Dumping Conditions
- Environmental Site Supervisor Conditions
- Mitigation Measures for Protection of Marine Species
- Environmental Monitoring and Management Plan Conditions

Audit findings for compliance against Great Barrier Reef Marine Park Permit G19/40185.1, based on these headings, are summarised in **Table 3** and below.

A total of 36 Approval Conditions have been assessed by the Auditor, of which 10 are deemed to be Not Applicable (due to not being relevant at the time of audit or the Approval Condition not being triggered).

Results for the **26 applicable Approval Conditions** are as follows:

Audit Findings - Great Barrier Reef Marine Park Permit G19/40185.1
<p>92.3 of Approval Conditions are <i>Fully Compliant</i> (24 out of 26)</p> <p>No Approval Conditions are <i>Compliant but Improvements Required</i></p> <p>No Approval Conditions are a <i>Minor Non-Compliance</i></p> <p>No Approval Conditions are a <i>Major Non-Compliance</i></p> <p>No Approval Conditions are a <i>Critical Non-Compliance</i></p> <p>7.7% of Approval Conditions are <i>Undetermined</i> (2 out of 26)</p> <p>An additional 10 Approval Conditions are considered Not Applicable.</p>

Table 3: Summary of Great Barrier Reef Marine Park Permit G19/40185.1 Compliance Findings

Auditable Conditions	Fully Compliant	Compliant but improvements required	Minor Non-Compliance	Major Non-Compliance	Critical Non-Compliance	Undetermined	Not Applicable
Compliance with all Laws							
MPP 1							1
MPP 2	1						
MPP 3	1						
Deed Conditions							
MPP 4	1						
MPP 5							1
MPP 6	1						
Environmental Harm Conditions							
MPP 7							1
MPP 8	1						
MPP 9	1						
Maintenance Dredging Conditions							
MPP 10	1						
MPP 11							1
Spoil Dumping Conditions							
MPP 12	1						
MPP 13							1
MPP 14	1						
MPP 15							1
MPP 16	1						
MPP 17	1						
MPP 18	1						
MPP 19	1						
MPP 20	1						
Environmental Site Supervisor Conditions							
MPP 21	1						
MPP 22							1
MPP 23							1
MPP 24							1
MPP 25							1

Continued

Table 3: continued

Auditable Conditions	Fully Compliant	Compliant but improvements required	Minor Non-Compliance	Major Non-Compliance	Critical Non-Compliance	Undetermined	Not Applicable
Mitigation Measures for Protection Of Marine Species							
MPP 26	1						
MPP 27	1						
Environmental Monitoring and Management Plan Conditions							
MPP 28	1						
MPP 29	1						
MPP 30	1						
MPP 31	1						
MPP 32	1						
MPP 33						1	
MPP 34						1	
MPP 35	1						
MPP 36	1						
# TOTALS	24	0	0	0	0	2	10
% TOTALS	66.7	0	0	0	0	5.6	27.8
% TOTALS excl Not Applicable	92.3	0	0	0	0	7.7	

3.5 Audit Findings for Sea Dumping Permit 19/01

A detailed assessment of compliance against all conditions in Sea Dumping Permit 19/01 is documented in **Appendix 1: Detailed Audit Findings**. Findings in Appendix 1 are grouped under the same Condition headings and sub-headings as in Sea Dumping Permit 19/01:

- Material to be Dumped
- Approved Dredge Spoil Disposal Area
- Environmental Monitoring and Management Plans for Dredging
- Access for Observers
- Mitigation Measures for Protection of Marine Species
- Environmental Risk and Incidents
- Monitoring and Reporting

Audit findings for compliance against Sea Dumping Permit 19/01, based on these headings, are summarised in **Table 4** and below.

A total of 30 Approval Conditions have been assessed by the Auditor, of which 3 are deemed to be Not Applicable (due to not being relevant at the time of audit or the Approval Condition not being triggered).

Results for the **27 applicable Approval Conditions** are as follows:

Audit Findings - Sea Dumping Permit 19/01
<p>100% of Approval Conditions are <i>Fully Compliant</i> (27 out of 27)</p> <p>No Approval Conditions are <i>Compliant but Improvements Required</i></p> <p>No Approval Conditions are a <i>Minor Non-Compliance</i></p> <p>No Approval Conditions are a <i>Major Non-Compliance</i></p> <p>No Approval Conditions are a <i>Critical Non-Compliance</i></p> <p>No Approval Conditions are <i>Undetermined</i></p> <p>An additional 3 Approval Conditions are considered Not Applicable.</p>

Table 4: Summary of Sea Dumping Permit 19/01 Compliance Findings

Auditable Conditions	Fully Compliant	Compliant but improvements required	Minor Non-Compliance	Major Non-Compliance	Critical Non-Compliance	Undetermined	Not Applicable
SDP 1							1
Material to be Dumped							
SDP 2	1						
SDP 3							1
SDP 4	1						
SDP 5							1
SDP 6	1						
Approved Dredge Spoil Disposal Area							
SDP 7	1						
SDP 8	1						
SDP 9	1						
Environmental Monitoring and Management Plans for Dredging							
SDP 10	1						
SDP 11	1						
SDP 12	1						
SDP 13	1						
SDP 14	1						
Access for Observers							
SDP 15	1						
Mitigation Measures for Protection of Marine Species							
SDP 16	1						
SDP 17	1						
Environmental Risk and Incidents							
SDP 18	1						
SDP 19	1						
Monitoring and Reporting							
SDP 20	1						
SDP 21	1						
SDP 22	1						
SDP 23	1						
SDP 24	1						
SDP 25	1						

Continued

Table 4: continued

Auditable Conditions	Fully Compliant	Compliant but improvements required	Minor Non-Compliance	Major Non-Compliance	Critical Non-Compliance	Undetermined	Not Applicable
SDP 26	1						
SDP 27	1						
SDP 28	1						
SDP 29	1						
SDP 30	1						
# TOTALS	27	0	0	0	0	0	3
% TOTALS	90	0	0	0	0	0	10
% TOTALS excl Not Applicable	100.00	0	0	0	0	0	

3.6 Audit Findings for Development Approval - Operational (Tidal) Works – Ref 1805-5537 SP

A detailed assessment of compliance against all conditions in Development Approval - Operational (Tidal) Works – Ref 1805-5537 SP is documented in **Appendix 1: Detailed Audit Findings**. Findings in Appendix 1 are grouped under the same Condition headings and sub-headings as in Development Approval - Operational (Tidal) Works – Ref 1805-5537 SP:

- Coordinator General Conditions
- IPDC00339006A12 Conditions General
- Long-term Maintenance Dredging Management Plan
- Construction and Maintenance of the Departure Path and Apron
- Dredge Spoil Disposal
- Water Quality Management
- Reporting
- Hydrographic Survey Requirements

Audit findings for compliance against Sea Dumping Permit 19/01, based on these headings, are summarised in **Table 5** and below.

A total of 36 Approval Conditions have been assessed by the Auditor, of which 6 are deemed to be Not Applicable (due to not being relevant at the time of audit or the Approval Condition not being triggered).

Results for the **30 applicable Approval Conditions** are as follows:

Audit Findings - Development Approval - Operational (Tidal) Works – Ref 1805-5537 SP
<p>100% of Approval Conditions are <i>Fully Compliant</i> (30 out of 30)</p> <p>No Approval Conditions are <i>Compliant but Improvements Required</i></p> <p>No Approval Conditions are a <i>Minor Non-Compliance</i></p> <p>No Approval Conditions are a <i>Major Non-Compliance</i></p> <p>No Approval Conditions are a <i>Critical Non-Compliance</i></p> <p>No Approval Conditions are <i>Undetermined</i></p> <p>An additional 6 Approval Conditions are considered Not Applicable.</p>

**Table 5: Summary of Development Approval - Operational (Tidal) Works –
Ref 1805-5537 SP Compliance Findings**

Auditable Conditions	Fully Compliant	Compliant but improvements required	Minor Non-Compliance	Major Non-Compliance	Critical Non-Compliance	Undetermined	Not Applicable
Coordinator General Conditions							
AM 2							1
AM 3	1						
AM 4	1						
AM 5	1						
IPDC00339006A12 Conditions General							
G 1	1						
A 1	1						
A 2							1
Long-term Maintenance Dredging Management Plan							
A 3	1						
A 4	1						
A 5	1						
A 6	1						
A 7							1
Construction and Maintenance of the Departure Path and Apron							
A 8	1						
A 9	1						
A 10							1
A 11	1						
A 12	1						
A 13	1						
Dredge Spoil Disposal							
A 14	1						
A 15	1						
A 16							1
A 17	1						
A 18	1						
A 19	1						
A 20	1						

Continued

Table 5: continued

Auditable Conditions	Fully Compliant	Compliant but improvements required	Minor Non-Compliance	Major Non-Compliance	Critical Non-Compliance	Undetermined	Not Applicable
Water Quality Management							
A 21	1						
A 22	1						
A 23	1						
A 24	1						
A 25							1
A 26	1						
Reporting							
A 27a	1						
A 27	1						
A 28							
Hydrographic Survey Requirements							
A 29	1						
A 30	1						
# TOTALS	30	0	0	0	0	0	6
% TOTALS	83.3	0	0	0	0	0	16.7
% TOTALS excl Not Applicable	100.00	0	0	0	0	0	

3.7 Audit Findings for: TSHD Brisbane – Environmental Management Plan

A detailed assessment of compliance against all conditions in TSHD Brisbane – Environmental Management Plan: Hay Point Maintenance Works is documented in **Appendix 1: Detailed Audit Findings**. Findings in Appendix 1 are grouped under the same Condition headings and sub-headings as in TSHD Brisbane – Environmental Management Plan: Hay Point Maintenance Works:

- 8.3.1 Waste Management - General and Recycling Wastes
- 8.3.2 Waste Management – Sewage Treatment
- 8.3.3 Waste Management – Hazardous Waste
- 8.4 Emissions Management
- 8.5 Turbidity Management
- 8.6 Protected Marine Fauna
- 8.7 Cultural Heritage
- 8.8 Ballast Water Management
- 8.9 Vessel Washdown
- 8.10 Hopper Washing
- 8.11 Bunkering of Fuel
- 9.0 Incident Reporting
- 10.0 Environmental Monitoring

Audit findings for compliance against Sea Dumping Permit 19/01, based on these headings, are summarised in **Table 6** and below.

A total of 62 Approval Conditions have been assessed by the Auditor, of which 1 is deemed to be Not Applicable (due to not being relevant at the time of audit or the Approval Condition not being triggered).

Results for the **61 applicable Approval Conditions** are as follows:

Audit Findings - TSHD Brisbane – Environmental Management Plan
96.7% of Approval Conditions are <i>Fully Compliant</i> (59 out of 61)
3.3% of Approval Conditions are <i>Compliant but Improvements Required</i> (2 out of 61)
No Approval Conditions are a <i>Minor Non-Compliance</i>
No Approval Conditions are a <i>Major Non-Compliance</i>
No Approval Conditions are a <i>Critical Non-Compliance</i>
No Approval Conditions are <i>Undetermined</i>
An additional 1 Approval Conditions are considered Not Applicable.

Table 6: Summary of TSHD Brisbane – Environmental Management Plan Compliance Findings

Auditable Conditions	Fully Compliant	Compliant but improvements required	Minor Non-Compliance	Major Non-Compliance	Critical Non-Compliance	Undetermined	Not Applicable
8.3.1 Waste Management - General and Recycling Wastes							
EMP 1	1						
EMP 2	1						
EMP 3	1						
EMP 4	1						
EMP 5	1						
EMP 6	1						
EMP 7	1						
EMP 8	1						
EMP 9	1						
EMP 10	1						
EMP 11	1						
8.3.2 Waste Management – Sewage Treatment							
EMP 12	1						
EMP 13	1						
EMP 14	1						
EMP 15	1						
EMP 16	1						
EMP 17	1						
8.3.3 Waste Management – Hazardous Waste							
EMP 18	1						
EMP 19	1						
EMP 20	1						
EMP 21		1					
EMP 22	1						
EMP 23		1					
8.4 Emissions Management							
EMP 24	1						
EMP 25							1
EMP 26	1						
EMP 27	1						
EMP 28	1						

Continued

Table 6: continued

Auditable Conditions	Fully Compliant	Compliant but improvements required	Minor Non-Compliance	Major Non-Compliance	Critical Non-Compliance	Undetermined	Not Applicable
EMP 29	1						
EMP 30	1						
EMP 31	1						
EMP 32	1						
EMP 33	1						
8.5 Turbidity Management							
EMP 34	1						
EMP 35	1						
EMP 36	1						
EMP 37	1						
8.6 Protected Marine Fauna							
EMP 38	1						
EMP 39	1						
EMP 40	1						
EMP 41	1						
EMP 42	1						
EMP 43	1						
EMP 44	1						
EMP 45	1						
EMP 46	1						
8.7 Cultural Heritage							
EMP 47	1						
EMP 48	1						
EMP 49	1						
8.8 Ballast Water Management							
EMP 50	1						
EMP 51	1						
EMP 52	1						
8.9 Vessel Washdown							
EMP 53							

Continued

Table 6: continued

Auditable Conditions	Fully Compliant	Compliant but improvements required	Minor Non-Compliance	Major Non-Compliance	Critical Non-Compliance	Undetermined	Not Applicable
8.10 Hopper Washing							
EMP 54	1						
EMP 55	1						
EMP 56	1						
EMP 57	1						
EMP 58	1						
8.11 Bunkering of Fuel							
EMP 59	1						
EMP 60	1						
9.0 Incident Reporting							
EMP 61	1						
10.0 Environmental Monitoring							
EMP 62	1						
# TOTALS	59	2	0	0	0	0	1
% TOTALS	95.2	3.2	0	0	0	0	1.6
% TOTALS excl Not Applicable	96.7	3.3	0	0	0	0	

3.8 Positive Outcomes

This audit of the Port of Hay Point 2019 Maintenance Dredging Program has determined that all bar one of the currently assessable Approval Conditions are *Fully Compliant*. One condition was found to be *Compliant but with Improvements Required*.

There were no *Minor, Major or Critical Non-Compliances*.

Undetermined audit findings in the Interim Audit Report (Ethos NRM, 2019a) have been resolved by evidence subsequently becoming available upon completion of monitoring work and associated reporting.

Not Applicable audit findings are due to the approval condition not being relevant at the time of audit, or the condition not being triggered, or that the condition is an overarching statement of fact rather than a conditional requirement.

Other positive aspects noted by the Auditor for the Port of Hay Point 2019 Maintenance Dredging Program include:

- No environmental incidents occurred
- No 'over-dredging' occurred, and all dumping was within the designated Dredge Material Placement Area
- All dredge material and spoil material volumes were compliant
- Turbidity management was recognised by crew as an important risk
- Monitoring program was well designed and implemented to demonstrate regulatory compliance
- Monitoring results well analysed and able demonstrate compliance with regulatory approval conditions
- Crew training well recorded and emergency drills well implemented.
- All operational aspects of dredging program were executed in accordance with well-developed operational procedures
- All equipment was well maintained and clean, with manuals and maintenance logs on hand
- No complaints were received during dredging operations
- Strong compliance culture and desire for continuous improvement
- Preparedness to self-report and openly declare potential non-compliances
- All Internal Audit items fully closed out.
- All audit evidence was well recorded and made readily available to the Auditor
- NQBP staff and TSHD Brisbane crew were highly professional, with a strong appreciation of the need to comply with requirements in the various Environmental Approvals and EMPs
- Well planned and executed compliance framework to address multiple complex approval permits

The Auditor considers that the individual Approval Conditions listed in Environmental Authority EPPR01742813 address the intent of General Environmental Duty, *Environmental Protection Act 1994* (Sect. 437-439) and that the Port of Hay Point 2019 Maintenance Dredging Program was undertaken with the objective of "preventing environmental harm".

3.9 Items of Interest

TSHD Brisbane crew and staff brought to the attention of the Auditor two operational matters relating to:

- An instance when dredge track plots extended beyond the designated dredging zone, and
- A power outage on the TSHD Brisbane while steaming.

The Captain and Dredge Operations Manager described an instance when the GPS location track plot extended outside the permitted dredge area. This occurred due to the dredge vessel moving across the dredge batter slope while raising the dredge drag arm/head, but without the dredge pumps operating. The Auditor verified this instance on-board by inspecting the vessel navigation track plots and by reviewing the Incident Report, and concludes this event did not result in suction / dredging occurring outside the approved Maintenance Dredging Areas. Corrective action was subsequently implemented by increasing the internal buffer within the approved Maintenance Dredging Areas.

A total power outage briefly occurred on TSHD Brisbane while steaming within the apron area after returning from the DMPA. The incident had the potential to have serious ramifications for other nearby vessels and the surrounding environment. Standard operating procedures for such a situation were successfully implemented and no other vessels or the surrounding environment were impacted. An incident report was prepared, relevant authorities were advised and corrective actions were implemented.

In both instances, the Auditor concludes that each incident did not breach any of the Approval Conditions and was not notifiable under the requirements of Condition G20, G21 or MPP8 and MPP9 as there was no “material environmental harm or serious environmental harm”, or “release of contaminants to the environment”.

North Queensland Bulk Ports also indicated that a separate Internal Audit had recently been completed and found four areas of Non-Conformance relating to:

- Stowage of small grease drum
- On-board availability of SDS's for all chemicals aboard TSHD Brisbane
- Crew familiarity with environmental approvals and management plans
- Potential operational improvement to fauna deflector chains on dredge head.

All issues were subsequently addressed and ‘Closed Out’ by NQBP and TSHD Brisbane staff prior to the External Audit being undertaken.

Water quality monitoring by Vision Environment identified Water Quality Objectives (WQO) were exceeded on several occasions, but not to the point where a “cease dredge operations” response was triggered, and hence did not constitute a *non-compliance*. Monitoring demonstrated that water quality was greatly influenced by prevailing weather conditions rather than solely by the dredging operations.

Maintenance dredging directly adjacent to DBCT Berth 4 resulted in a maximum depth of 19.1 m below LAT, deeper than the maximum permitted depth of 15.6 m below LAT. Dredging of the berth batter slopes in the apron region to this depth was however permitted based on drawing 41-14520-002 (Adaptive Strategies, 2019). Hence the increased depth did not constitute a *non-compliance*.

3.10 Non-compliances

No *Minor, Major or Critical Non-Compliances* were identified during the Port of Hay Point 2019 Maintenance Dredging Program.

Three conditions were found to be *Compliant but with Improvements Required*. These all related to similar waste management requirements described in Condition WA3, EMP 21 and EMP 23. The waste removal contractor Toxfree (part of Cleanaway Group), is licenced for Regulated Waste and disposed of all waste in accordance with state-specific regulatory requirements, however no evidence exists to indicate Toxfree maintained records regarding the “*intended treatment/disposal/destination of the waste*” collected from TSHD Brisbane (EA Condition WA3). There were also no hazardous waste ‘*tracking records*’ available, as required by TSHD Brisbane EMP Condition EMP21, nor any hazardous waste disposal records as required by TSHD Brisbane EMP Condition EMP23 and “section A20 of the TSHD Brisbane Operational and Administration Procedures Manual”.

The Auditor believes all hazardous waste was disposed of in accordance with state-specific regulatory requirements, and hence the conditions are *Compliant*, however TSHD Brisbane staff should obtain the necessary information from Toxfree regarding how and where the collected waste is treated and disposed of, including tracking records, and ensure the procedures are consistent with the Operational and Administration Procedures Manual.

3.11 Observations

As part of assessing the dredge track plots for Condition G2, the Auditor observed that there is an opportunity to investigate the potential of using different coloured plot lines to distinguish between the dredge pumps being ‘Off’ or on when the dredge head / arm is ‘Down’. This would allow for better demarcation of when dredging is occurring rather than relying solely on the ‘dredge arm’ status.

3.12 Potential Regulatory Improvements

A range of improvements to the conditions that regulate the Port of Hay Point 2019 Maintenance Dredging Program have been identified, either by the Auditor and/or through the monitoring programs and reporting undertaken as part of the dredging operations:

- Investigate the potential to reduce overlap, prevent repetition and avoid minor inconsistencies in the approval conditions by combining all the different approval permits into a single ‘authorisation’ that is based on the requirements of each regulatory agency. This should include nominating one of the agencies as the ‘Controlling Authority’ for all approvals and compliance reporting, thereby creating a ‘single point of contact’.
- Adjust notification and reporting timeframes to remove inconsistencies and the need to report/action the same ‘item’ to different agencies on different dates.
- Clarify the apron dredge design drawings that permit dredging to depths deeper than the that stated in the approval condition(s).
- Clarify the minimum permitted shallowness in the Dredge Material Placement Area (spoil dump zone) if the existing pre-spoil placement depth is already shallower than the that stated in the approval condition(s).
- Update, prior to next dredging program, all water quality monitoring parameters, targets and thresholds in the MEMP to take account of additional monitoring results / information, and long term data sets.

- Investigate reducing overlap between different Environmental Management Plans by combining them into a single (or fewer) EMP, written specifically to address future maintenance dredging at Port of Hay Point

4 CONCLUSION

This Independent Audit of the Approval Conditions for the Port of Hay Point 2019 Maintenance Dredging Program assessed a total of 217 Approval Conditions and EMP obligations.

There is considerable overlap between the different permits and the EMP, with many of the conditions addressing a common issue but expressed slightly differently by each authority in their permit. Hence there are far fewer 'unique' auditable approval conditions than is suggested by the total number of permit conditions.

Of the 217 Approval Conditions and EMP obligations, 193 have been assessed by the Auditor as applicable, with the remaining 24 deemed *Not Applicable* due to not being relevant at the time of audit or the Approval Condition not being triggered.

Overall, there were no *Minor, Major or Critical Non-Compliances* for any of the permits or EMP obligations.

Across all permits and EMP obligations, all bar three of the approval conditions are *Fully Compliant*. Three conditions were found to be *Compliant but with Improvements Required*, all of which related to a similar waste management records/tracking issue.

The individual compliance results for each approval permit and EMP are:

Approval Permits and Environmental Management Plan	Fully Compliant	Compliant but improvements required	Minor Non-Compliance	Major Non-Compliance	Critical Non-Compliance	Undetermined
Environmental Authority EPPR01742813	98% (48/49)	2% (1/49)				
Great Barrier Reef Marine Park Permit G19/40185.1	96% (24/26)					4% (2/26)
Sea Dumping Permit 19/01	100% (26/26)					
Development Approval - Operational (Tidal) Works – Ref 1805-5537 SP	100% (30/30)					
TSHD Brisbane – Environmental Management Plan	96.7% (59/61)	3.3% (2/61)				

*Brackets indicate number of applicable permit / EMP conditions

The Auditor found that there were no environmental incidents during dredging operations, no 'over-dredging', and all dumping was within the designated Dredge Material Placement Areas.

NQBP staff and TSHD Brisbane crew were highly professional, with a strong appreciation of the need to comply with requirements in the various Environmental Approvals and EMPs. There was a strong compliance culture and desire for continuous improvement, including a preparedness to self-report and openly declare potential non-compliances.

NQBP staff developed and executed a well-planned compliance framework to address multiple complex approval permits. The monitoring program was well designed and implemented to demonstrate regulatory compliance. Monitoring results were well analysed and able demonstrate compliance with regulatory approval conditions.

All audit evidence was well recorded and made readily available to the Auditor for review.

The Auditor considers that the Port of Hay Point 2019 Maintenance Dredging Program was undertaken with the objective of “preventing environmental harm”, as required by Sect. 437-439, General Environmental Duty of the *Environmental Protection Act 1994*.

A range of improvements to the conditions that regulate the Port of Hay Point 2019 Maintenance Dredging Program have been identified, either by the Auditor and/or through the monitoring programs and reporting undertaken as part of the dredging operations. These improvements should be investigated and implemented if deemed appropriate by the regulatory agencies.

The Port of Hay Point 2019 Maintenance Dredging Program was undertaken consistent with the approvals and management plan requirements issued prior to the dredging program being undertaken by North Queensland Bulk Ports.



ERIC SJERP
Principal Consultant

28th October, 2019

Date

5 REFERENCES

- Ethos NRMa, 2019a. Port of Hay Point, Maintenance Dredging 2019: Independent Audit of Environmental Approvals. Interim Audit Report of Environmental Authority EPPR01742813 Conditions. July 2019
- Ethos NRMa, 2019b. Port of Hay Point 2019 Maintenance Dredging Program - Audit Plan
- North Queensland Bulk Ports, 2019. Port of Hay Point 2019 Maintenance Dredging Program - Audit Brief
- North Queensland Bulk Ports, 2019. Port of Hay Point Maintenance Dredging Environmental Management Plan (March 2019).
- North Queensland Bulk Ports, 2019. Port of Hay Point Long-term Maintenance Dredge Management Plan 2018 – 2043 (March 2018).
- North Queensland Bulk Ports, 2019. Marine Environmental Monitoring Program - Port of Hay Point (including an Environmental Thresholds Plan) March 2018.
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- Port of Brisbane Limited, 2019. TSHD Brisbane – Environmental Management Plan: Hay Point Maintenance Works (March 2019).
- Standards Australia. AS/NZS ISO19011:2014. Guidelines for Auditing Management Systems.

Regulatory Approvals

- Department of Environment and Science, 2018. Environmental Authority for Environmentally Relevant Activity - Permit EPPR01742813.
- Great Barrier Reef Marine Park Authority, 2019. Great Barrier Reef Marine Park Permit G19/40185.1
- Great Barrier Reef Marine Park Authority, 2019. Sea Dumping Permit 19/01.
- Department of State Development, Manufacturing, Infrastructure and Planning (Qld), 2019. Development Approval – Operational (Tidal) Works.
Reference: 1805-5537 SPD. Originally issued 27 February 2006 as
Ref: IPDC000339006A12.

6 APPENDIX 1: Detailed Audit Findings

6.1 Appendix 1.1 Audit Findings for Environmental Authority EPPR01742813

Environmental Authority EPPR01742813 Conditions					
Dredge Phase	Condition Number	Approval Condition	Available Evidence	Audit Findings and Comments	Compliance
GENERAL CONDITIONS					
Administrating Authority					
Pre-	EA - 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.	<ul style="list-style-type: none"> NQBP and DES emails Electronic copies provided to Auditor by NQBP. 	The Auditor concludes the available evidence adequately demonstrates Full Compliance with the Approval Condition.	Fully Compliant
Limit of Dredging Approved					
During	EA - G2	<p>Dredging activities which constitute the environmentally relevant activity (ERA 16.1 (d)) hereby approved, are limited to:</p> <p>a) The removal of maintenance dredge material dredged from the departure channel, apron area and berth pockets in the Port of Hay Point, and Half Tide Tug Harbour at locations shown in Drawing NQBP2013-018b Port of Hay Point - Maintenance Dredging Areas, attached herein as Attachment 1.</p> <p>b) Placement of dredge spoil at Material Relocation area, defined by the following coordinates (GDA94):</p> <p>Longitude Latitude 149.3019269 -21.21998327</p>	<ul style="list-style-type: none"> TSHD Brisbane GPS track plots TSHD Brisbane Daily Logs Electronic copies provided to Auditor by NQBP. Verbal advice from TSHD Brisbane Captain and Dredge Operations Manager Verbal advice from NQBP Auditor's on-board observations and photographs Incident Report 	<p>Track Plots and Daily Logs indicate dredge operated within approved Maintenance Dredging Areas and approved Dredge Material Placement Area (DMPA), except one instance as below.</p> <p>Captain and Dredge Operations Manager described an instance when track plot extended outside permitted dredge area due to dredge vessel moving up the dredge batter slope with the dredge arm/head down but without the dredge pumps operating.</p> <p>The Auditor verified this instance on-board by inspecting the vessel navigation track plots, and reviewing the Incident Report, and</p>	Fully Compliant

Environmental Authority EPPR01742813 Conditions					
Dredge Phase	Condition Number	Approval Condition	Available Evidence	Audit Findings and Comments	Compliance
		149.3348576 -21.20192259 149.3342955 -21.1655219 149.2806085 -21.19450986	Ref.A1375058	<p>concludes this event did not result in suction / dredging occurring outside the approved Maintenance Dredging Areas.</p> <p>Corrective action taken: Increased internal operational dredge buffer to avoid dredge arm contacting the seafloor outside approved Maintenance Dredging Areas.</p> <p>Half Tide Tug Harbour was not dredged.</p> <p>The Auditor concludes the available evidence adequately demonstrates Full Compliance with the Approval Condition.</p> <p>Observation: Investigate potential to distinguish different coloured plot lines between dredge pumps being off and on when dredge head / arm is down.</p>	
During	EA - G3	<p>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:</p> <p>(a) Trailing Suction Hopper Dredge that is equipped, as a minimum, with:</p> <p>(i) below keel discharge of tail waters via an anti-turbidity control valve;</p> <p>(ii) on-board systems for determining solids to water ratio or density of dredged material;</p> <p>(iii) electronic positioning and depth contrail system for defining the location and depth of dredging activities; and</p> <p>(iv) dredge heads and depth control capable of, and where appropriate, fitted with fauna</p>	<ul style="list-style-type: none"> Auditor's on-board observations and photographs 	<p>TSHD Brisbane is a Trailing Suction Hopper Dredge, not a Cutter Suction.</p> <p>Below keel discharge valves observed.</p> <p>Anti-turbidity control valves observed and operational procedure noted.</p> <p>On-board GPS positioning and depth instrumentation observed.</p> <p>Fauna exclusion chains and hydro jets observed on dredge head. Single chain missing and was listed on maintenance schedule for repair.</p> <p>The Auditor concludes the available evidence adequately demonstrates Full Compliance</p>	Fully Compliant

Environmental Authority EPPR01742813 Conditions					
Dredge Phase	Condition Number	Approval Condition	Available Evidence	Audit Findings and Comments	Compliance
		<p>exclusion devices (e.g. turtle deflectors).</p> <p>(b) Cutter Suction Dredge that is equipped, as a minimum, with:</p> <p>(i) electronic positioning and depth control system for defining the location and depth of dredging activities;</p> <p>(ii) continuous delivery connection (e.g. floating or submerged pipeline) to an approved placement site;</p> <p>(iii) a system or process to ensure the delivery system integrity is maintained at all times; and</p> <p>(iv) systems for determining solids to water ratio or density of dredged material during operations.</p> <p>(c) Grab Dredge that is equipped, as a minimum, with:</p> <p>i) electronic positioning systems for defining the location and depth of dredging activities.</p>		with the Approval Condition.	
External Audit					
During	EA - G4	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.	<ul style="list-style-type: none"> NQBP and Ethos NRM contract for engagement of Independent Auditor 	The Auditor concludes the available evidence adequately demonstrates Full Compliance with the Approval Condition.	Fully Compliant
During	EA - G5	The Environmental Auditor must audit key stages of the works subject to this approval against the: <p>(a) Conditions of this Environmental Authority;</p> <p>(b) Integrated Environmental Management System</p>	<ul style="list-style-type: none"> NQBP and Ethos NRM contract for engagement of Independent Auditor Port of Hay Maintenance 	Integrated Environmental Management System (IEMS) comprises of a series of documents approved by DES: Port of Hay Maintenance Dredging EMP, TSHD Brisbane -	Fully Compliant

Environmental Authority EPPR01742813 Conditions					
Dredge Phase	Condition Number	Approval Condition	Available Evidence	Audit Findings and Comments	Compliance
		(IEMS) as required by condition G10; and (c) General Environmental Duty (GED).	Dredging-EMP <ul style="list-style-type: none"> • TSHD Brisbane - Hay Point Maintenance Dredging EMP • Ethos NRM Interim Audit Report and this subsequent Final Audit Report • DES email 11-7-19 confirming acceptance of Interim Audit Report 	Hay Point Maintenance Dredging EMP, and Marine Environment Monitoring Program. The Auditor has reviewed the requirements of General Environmental Duty (GED) and believes the various Approval Conditions (including those in the Environmental Authority), together with the relevant approved EMPs, collectively address the intended environmental safeguards of the GED. Contract for Independent Audit by Ethos NRM and Audit Plan stipulate audit requirements. DES confirmed acceptance of Interim Audit Report. The Auditor concludes the available evidence adequately demonstrates Full Compliance with the Approval Condition.	
NA	EA - 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.	<ul style="list-style-type: none"> • Ethos NRM Interim Audit Report and this subsequent Final Audit Report • Interim Audit Report issued by NQBP to DES via email 5-7-19 • DES email 11-7-19 confirming acceptance of Interim Audit Report 	Interim Audit Report was issued by NQBP and accepted by DES. Final Audit Report will be issued by NQBP upon completion. The Auditor concludes the available evidence adequately demonstrates Full Compliance with the Approval Condition.	Fully Compliant
Post-	EA - 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-	<ul style="list-style-type: none"> • Ethos NRM Interim Audit Report and this subsequent 	Audit Reports issued by NQBP upon completion in accordance with approved	Fully Compliant

Environmental Authority EPPR01742813 Conditions					
Dredge Phase	Condition Number	Approval Condition	Available Evidence	Audit Findings and Comments	Compliance
		eight (28) business days of completion of a dredge campaign.	Final Audit Report <ul style="list-style-type: none"> DES email 17-6-19 re approved extension of submission timeframes DES email 11/7/19 confirming acceptance of Interim Audit Report 	timeframes Compliance was be confirmed by DES. The Auditor concludes the available evidence adequately demonstrates Full Compliance with the Approval Condition.	
Post-	EA - 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 condition (G2) and report the results of the survey determinations to the administering authority within six (6) weeks of the completion of the project.	<ul style="list-style-type: none"> Hydrological survey plans Bathymetric survey analysis and report NQBP and DES emails 28/6/2019 re. issuing report 	Hydrological survey plans and Bathymetric analysis of Dredged Areas and Dredge Material Placement Area confirm compliance with maximum depth criteria. The Auditor concludes the available evidence adequately demonstrates Full Compliance with the Approval Condition.	Fully Compliant
Integrated Environmental Management System					
During	EA - G9	NOTE: For the purposes of this environmental authority, an approved Dredge Management Plan, satisfies the requirements of an Integrated Environmental Management System, provide 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	<ul style="list-style-type: none"> Port of Hay Point Maintenance Dredging EMP TSHD Brisbane - Hay Point Maintenance Dredging EMP Marine Environment Monitoring-Program NQBP and DES emails approving IEMS 	Integrated Environmental Management System (IEMS) comprises of a series of documents approved by DES: Port of Hay Maintenance Dredging EMP, TSHD Brisbane - Hay Point Maintenance Dredging EMP, and Marine Environment Monitoring Program. The Auditor concludes the available evidence adequately demonstrates Full Compliance with the Approval Condition.	Fully Compliant

Environmental Authority EPPR01742813 Conditions

Dredge Phase	Condition Number	Approval Condition	Available Evidence	Audit Findings and Comments	Compliance
		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.			
Pre-	EA - G10	<p>The approved IEMS must provide for at least the following functions:</p> <p>(a) Training of staff, contractors and visitors in the awareness of environmental issues related to carrying out the activities, which must include at least:</p> <p>(i) The environmental policy, so that all persons that carry out the activities are aware of all relevant commitments to environmental management;</p> <p>(ii) Any relevant environmental objectives and targets, so that all staff are aware of the relevant performance objectives and can work towards these;</p> <p>(iii) Control procedures to be implemented for routine operations for day to day activities to minimise likelihood of environmental harm, however occasioned or caused;</p> <p>(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);</p> <p>(v) Organisational structure and responsibility to ensure that roles, responsibilities and authorities are appropriately defined to manage environmental issues effectively;</p>	<ul style="list-style-type: none"> Port of Hay Maintenance Dredging EMP TSHD Brisbane - Hay Point Maintenance Dredging EMP Marine Environment Monitoring-Program NQBP and DES emails approving IEMS Water Quality Monitoring report Coral Impact Monitoring Report Bathymetric survey analysis and report Performance of Environmental Monitoring Report NQBP emails submitting monitoring reports 	<p>Integrated Environmental Management System (IEMS) comprises of a series of documents approved by DES: Port of Hay Maintenance Dredging EMP, TSHD Brisbane - Hay Point Maintenance Dredging EMP, and Marine Environment Monitoring Program.</p> <p>IEMS address all DES requirements.</p> <p>Water Quality, Coral Health, Bathymetric and Performance reports submitted to regulatory authorities.</p> <p>The Auditor concludes the available evidence adequately demonstrates Full Compliance with the Approval Condition.</p>	Fully Compliant

Environmental Authority EPPR01742813 Conditions					
Dredge Phase	Condition Number	Approval Condition	Available Evidence	Audit Findings and Comments	Compliance
		(vi) Effective communication to ensure two-way communication on environmental matters between operational staff and higher 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.			
NA	EA - G11	The IEMS must not be implemented or amended in a way that contravenes or is inconsistent with any condition of this approval.	<ul style="list-style-type: none"> Port of Hay Maintenance Dredging EMP TSHD Brisbane - Hay Point Maintenance Dredging EMP Marine Environment Monitoring Program NQBP and DES emails approving IEMS Auditor's on-board observations and photographs 	Dredging works have been undertaken in accordance with approval conditions and related environmental management plans that together form the approved IEMS. Water Quality, Coral Health, Bathymetric and performance reports submitted to regulatory authorities. The Auditor concludes the available evidence adequately demonstrates Full Compliance with the Approval Condition.	Fully Compliant
Pre-	EA - 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.	<ul style="list-style-type: none"> Auditor's observations and discussions with NQBP. 	No amendments have been made to the IEMS. The Auditor concludes the available evidence adequately demonstrates Full Compliance with the Approval Condition.	Fully Compliant

Environmental Authority EPPR01742813 Conditions

Dredge Phase	Condition Number	Approval Condition	Available Evidence	Audit Findings and Comments	Compliance
Pre-	EA - G13	The IEMS must be reviewed every 5 years from commencement of the ERA and supplied to the administering authority for review.	<ul style="list-style-type: none"> Port of Hay Maintenance Dredging EMP TSHD Brisbane - Hay Point Maintenance Dredging EMP Marine Environment Monitoring Program NQBP and DES emails approving IEMS 	All documents comprising IEMS were reviewed and updated prior to approval by DES for Port of Hay Point 2019 Maintenance Dredging Program	Fully Compliant

Prevent and/or Minimise Likelihood of Environmental Harm

NA	EA - G14	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.]	<ul style="list-style-type: none"> Auditor's observations and assessment Discussions with NQBP staff Discussions with TSHD Brisbane crew 	<p>Auditor believes NQBP staff and TSHD Brisbane crew have undertaken the Port of Hay Point 2019 Maintenance Dredging Program in a highly professional manner, acutely aware of the relevant environmental approvals and associated operational conditions imposed on the dredging works.</p> <p>All works were undertaken within a culture of compliance and avoiding environmental harm.</p> <p>The Auditor concludes the available evidence adequately demonstrates Full Compliance with the Approval Condition.</p>	Fully Compliant
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Maintenance of Measures, Plant and Equipment

Environmental Authority EPPR01742813 Conditions					
Dredge Phase	Condition Number	Approval Condition	Available Evidence	Audit Findings and Comments	Compliance
NA	EA - G15	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	<ul style="list-style-type: none"> Auditor's on-board observations and photographs On-board equipment and operational protocols On-board equipment maintenance records Turbidity Density Meter Maintenance Report TSHD Brisbane Daily Logs NQBP Internal Audit Marine Environment Monitoring Program 	<p>TSHD Brisbane is a modern dredge vessel equipped with all the necessary equipment, telemetrics, monitoring and recording equipment to enable dredging operations to be undertaken in accordance with environmental approvals.</p> <p>Protocols for use and maintenance of all equipment are highly developed.</p> <p>All monitoring programs successfully implemented.</p> <p>The Auditor concludes the available evidence adequately demonstrates Full Compliance with the Approval Condition.</p>	Fully Compliant
Alterations					
NA	EA - G16	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.	<ul style="list-style-type: none"> Discussions with NQBP staff Discussions with TSHD Brisbane crew Auditor's on-board observations and photographs 	<p>No alteration to equipment occurred.</p> <p>The Auditor concludes the available evidence adequately demonstrates Full Compliance with the Approval Condition.</p>	Fully Compliant
Display of Environmental Authority					
During	EA - G17	A copy of this environmental authority must be kept in a location readily accessible to personnel carrying out the activity.	<ul style="list-style-type: none"> Discussions with TSHD Brisbane crew Auditor's on-board observations and photographs 	<p>Auditor observed electronic copy of Environmental Authority EPPR01742813 on the bridge of TSHD Brisbane.</p> <p>The Auditor concludes the available evidence adequately demonstrates Full Compliance</p>	Fully Compliant

Environmental Authority EPPR01742813 Conditions					
Dredge Phase	Condition Number	Approval Condition	Available Evidence	Audit Findings and Comments	Compliance
				with the Approval Condition.	
Records					
NA	EA - G18	Record, compile and keep all monitoring results required by this environmental authority and present this information to the administering authority upon request.	<ul style="list-style-type: none"> Auditor's on-board observations and photographs TSHD Brisbane GPS track plots TSHD Brisbane Daily Logs TSHD Brisbane crew training logs NQBP Internal Audit TSHD Brisbane Turbidity Density Meter Maintenance Report TSHD Brisbane Waste management receipts TSHD Brisbane emergency drill logs On-line Water quality dashboard Water Quality Monitoring report Coral Impact Monitoring Report Bathymetric survey analysis and report Performance of 	<p>Extensive monitoring was collected and recorded before, during and after during dredging operations.</p> <p>Water Quality, Coral Health, Bathymetric and Performance reports submitted to regulatory authorities.</p> <p>The Auditor concludes the available evidence adequately demonstrates Full Compliance with the Approval Condition.</p>	Fully Compliant

Environmental Authority EPPR01742813 Conditions					
Dredge Phase	Condition Number	Approval Condition	Available Evidence	Audit Findings and Comments	Compliance
			Environmental Monitoring Report • NQBP emails submitting monitoring reports		
NA	EA - 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.		Not Applicable at time of audit.	Not Applicable
Cease Activities in Event of Material or Serious Environmental Harm Occurring					
During	EA - G20	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.	<ul style="list-style-type: none"> • TSHD Brisbane Daily Logs • Discussions with NQBP staff • Discussions with TSHD Brisbane crew • Auditor's on-board observations and photographs • Operational Incident Reports 	<p>No Incident causing 'Environmental Harm' was declared to the Auditor.</p> <p>No evidence observed by Auditor on TSHD Brisbane Daily Logs to suggest an 'Environmental Harm' incident occurred.</p> <p>The Auditor concludes the available evidence adequately demonstrates Full Compliance with the Approval Condition.</p>	Fully Compliant
Notification					
During	EA - G21	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.	<ul style="list-style-type: none"> • TSHD Brisbane Daily Logs • Discussions with NQBP staff • Discussions with TSHD Brisbane crew • Auditor's on-board observations and photographs 	<p>No Incident requiring notification due to release of contaminants was declared to the Auditor.</p> <p>No evidence observed by Auditor on TSHD Brisbane Daily Logs to suggest a notifiable incident due to release of contaminants had occurred.</p>	Fully Compliant

Environmental Authority EPPR01742813 Conditions					
Dredge Phase	Condition Number	Approval Condition	Available Evidence	Audit Findings and Comments	Compliance
			<ul style="list-style-type: none"> Operational Incident Reports 	The Auditor concludes the available evidence adequately demonstrates Full Compliance with the Approval Condition.	
Information to Follow Notification					
During	EA - G22	<p>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):</p> <p>(a) the name of the registered operator, including the environmental authority number;</p> <p>(b) the name and telephone number of a designated contact person;</p> <p>(c) the location of the release I event;</p> <p>(d) the time of the release I event;</p> <p>(e) the time you became aware of the release I event;</p> <p>(f) the suspected cause of the release I event;</p> <p>(g) a description of the resulting effects of the release I event;</p> <p>(h) the results of any sampling performed in relation to the release I event;</p> <p>(i) actions taken to mitigate any environmental harm and or environmental nuisance caused by the release I event; and</p> <p>j) proposed actions to prevent a recurrence of the release I event.</p>	<ul style="list-style-type: none"> TSHD Brisbane Daily Logs Discussions with NQBP staff Discussions with TSHD Brisbane crew 	There were no Notifiable Incidents required under Condition G21.	Not Applicable
Incident Recording					

Environmental Authority EPPR01742813 Conditions

Dredge Phase	Condition Number	Approval Condition	Available Evidence	Audit Findings and Comments	Compliance
NA	EA - G23	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).	<ul style="list-style-type: none"> • TSHD Brisbane Daily Logs • Discussions with NQBP staff • Discussions with TSHD Brisbane crew • Operational Incident Reports 	<p>There were no Notifiable Incidents required under Condition G21.</p> <p>Note: The Auditor was advised by NQBP staff and TSHD Brisbane crew of two operational incidents that did NOT cause “material environmental harm or serious environmental harm”, or “release of contaminants to the environment”, and for which compliant Incident Reports were issued to the relevant authorities.</p> <p>The Auditor concludes the available evidence adequately demonstrates Full Compliance with the Approval Condition.</p>	Fully Compliant

Spill Kit(s)

During	EA - G24	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.	<ul style="list-style-type: none"> • Auditor's on-board observations and photographs • NQBP Internal Audit 	<p>Spill kits and the relevant instructions/emergency procedures were observed by the Auditor and noted in the Internal Audit.</p> <p>The Auditor concludes the available evidence adequately demonstrates Full Compliance with the Approval Condition.</p>	Fully Compliant
During	EA - G25	All relevant personnel operating under this approval must be trained in the use of the spill kit(s).	<ul style="list-style-type: none"> • TSHD Brisbane crew training logs • TSHD Brisbane emergency training records • TSHD Brisbane crew EMP signoff 	<p>Auditor observed TSHD Brisbane crew EMP signoff, SOPEP records, and Emergency Drill Records.</p> <p>The Auditor concludes the available evidence adequately demonstrates Full Compliance with the Approval Condition.</p>	Fully Compliant

Equipment Calibration					
During	EA - G26	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.	<ul style="list-style-type: none"> • Turbidity Density Meter Maintenance Record • General equipment maintenance on-board records • On-line Water quality dashboard • Water Quality Monitoring report • Coral Impact Monitoring Report • Bathymetric survey analysis and report 	<p>Turbidity Density Meter has been checked and calibrated several times between 2017 and 2019.</p> <p>Monitoring reports provide details of equipment used.</p> <p>The Auditor concludes the available evidence adequately demonstrates Full Compliance with the Approval Condition.</p>	Fully Compliant
Trained/Experienced Operator(s)					
During	EA - G27	<p>All persons engaged in the conduct of the activity, including but not limited to employees and contract staff, must be:</p> <p>(a) trained in the procedures and practices necessary to:</p> <p>(i) comply with the conditions of this environmental authority, and</p> <p>(ii) prevent environmental harm during normal operation and emergencies; or</p> <p>(b) under the close supervision of such a trained person.</p>	<ul style="list-style-type: none"> • TSHD Brisbane crew training logs • TSHD Brisbane emergency training records • TSHD Brisbane crew EMP signoff • Monitoring reports 	<p>All crew appropriately trained.</p> <p>Authors of monitoring reports suitably qualified.</p> <p>The Auditor concludes the available evidence adequately demonstrates Full Compliance with the Approval Condition.</p>	Fully Compliant
Sample Analysis					
NA	EA - G28	All analyses and tests required to be conducted under this environmental authority must be carried	<ul style="list-style-type: none"> • Monitoring analysis and test results from numerous 	Water Quality, Turbidity and Coral Monitoring used NATA accredited Symbio and ALS	Fully Compliant

Environmental Authority EPPR01742813 Conditions					
Dredge Phase	Condition Number	Approval Condition	Available Evidence	Audit Findings and Comments	Compliance
		out by a laboratory that has NATA certification for such analyses and tests, except as otherwise authorised by the administering authority.	<ul style="list-style-type: none"> reports Water Quality Monitoring report Coral Impact Monitoring Report Bathymetric survey analysis and report Performance of Environmental Monitoring Report 	<p>laboratories.</p> <p>The Auditor concludes the available evidence adequately demonstrates Full Compliance with the Approval Condition.</p>	
Monitoring					
Pre-	EA - G29	An experienced and suitably qualified person(s) must conduct any monitoring required by this approval.	<ul style="list-style-type: none"> NQBP engaged Vision Environment to undertake and report on Water Quality and Coral Health monitoring, and Port & Coastal Solutions to undertake Bathymetric survey analysis and performance reporting 	<p>The Auditor believes Vision Environment and Port & Coastal Solutions are appropriately qualified and suitably experienced.</p> <p>The Auditor concludes the available evidence adequately demonstrates Full Compliance with the Approval Condition.</p>	Fully Compliant
Post-	EA - 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	<ul style="list-style-type: none"> Monitoring analysis and test results from numerous reports Water Quality Monitoring report Coral Impact Monitoring Report 	<p>Review of monitoring reports and performance reports indicates all requires were adhered to. Refer to Audit report text for details.</p> <p>The Auditor concludes the available evidence adequately demonstrates Full Compliance with the Approval Condition.</p>	Fully Compliant

Environmental Authority EPPR01742813 Conditions					
Dredge Phase	Condition Number	Approval Condition	Available Evidence	Audit Findings and Comments	Compliance
		<p>monitoring results to both this approvals limits and to relevant prior results; and</p> <p>(b) an evaluation and interpretation of the data from any monitoring programs;</p> <p>(c) a summary of any record of quantities of releases required to be kept under this approval;</p> <p>(d) a summary of the record of equipment failures or events recorded for any site under this approval;</p> <p>(e) actions taken or proposed to minimise the environmental risk from any deficiency identified by the monitoring or recording programs.</p>	<ul style="list-style-type: none"> Bathymetric survey analysis and report Performance of Environmental Monitoring Report 		
Post-	EA - 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.	<ul style="list-style-type: none"> NQBP emails submitting monitoring reports to Regulatory Authorities on 8-8-19 and 30-8-19 	The Auditor concludes the available evidence adequately demonstrates Full Compliance with the Approval Condition.	Fully Compliant
WATER CONDITIONS					
During	EA - W1	Coral and water quality monitoring must be carried out in accordance with the Port of Hay Point Dredging - Coral and Water Quality Monitoring Plan (dated 27 August 2007).	<ul style="list-style-type: none"> Marine Environmental Monitoring Program NQBP and DES emails approving Marine Environmental Monitoring Program Real-time Monitoring Dashboard Water Quality Monitoring Report Coral Impact Monitoring Report 	<p>Marine Environmental Monitoring Program 2018 supersedes the Coral and Water Quality Monitoring Plan, 2017</p> <p>The new MEMP 2018 requires:</p> <ul style="list-style-type: none"> - WQ for 28-days post dredging - post-coral surveys 28-days post-dredging <p>MEMP WQ Monitoring results presented in Vision Environment reports:</p> <ul style="list-style-type: none"> - Water Quality Monitoring Report - Coral Impact Monitoring Report 	Fully Compliant

Environmental Authority EPPR01742813 Conditions					
Dredge Phase	Condition Number	Approval Condition	Available Evidence	Audit Findings and Comments	Compliance
			<ul style="list-style-type: none"> Performance of Environmental Monitoring Report 	The Auditor concludes the available evidence adequately demonstrates Full Compliance with the Approval Condition.	
During	EA - W2	<p>The following performance indicators are to be employed, as defined in the Port of Hay Point Dredging - Coral and Water Quality Monitoring Plan (dated 27 August 2007):</p> <p>(a) Total Suspended Solids (TSS) does not exceed 100mg/L calculated on a six hour rolling mean at any of the water logger locations;</p> <p>(b) Coral mortality does not exceed 5% at Round Top Island and 5% at Victor Island in any one dredge campaign.</p>	<ul style="list-style-type: none"> Marine Environmental Monitoring Program results NQBP and DES emails approving Marine Environmental Monitoring Program Real-time Monitoring Dashboard Preliminary Total Suspended Solids 100mg/L graphs Sediment Plume Validation - Technical Note Water Quality Monitoring Report Coral Impact Monitoring Report 	<p>Marine Environmental Monitoring Program 2018 supersedes the Coral and Water Quality Monitoring Plan, 2007</p> <p>Preliminary results indicated no exceedances over Preliminary Total Suspended Solids 100mg/L threshold</p> <p>MEMP WQ Monitoring results presented in Vision Environment reports:</p> <ul style="list-style-type: none"> - Water Quality Monitoring Report - Coral Impact Monitoring Report <p>Reports conclude that “dredging activities had little impact turbidity and other sampled parameters during dredge operations” and “no apparent impact on coral health”.</p> <p>Refer to Audit report text for details.</p> <p>The Auditor concludes the available evidence adequately demonstrates Full Compliance with the Approval Condition.</p>	Fully Compliant
NA	EA - 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 trigger value identified in (W2).	<ul style="list-style-type: none"> Water Quality Monitoring Report Sediment Plume Validation - Technical Note 	<p>Monitoring reports confirm compliance with Condition W2: Total Suspended Solids 100mg/L turbidity threshold requirements.</p> <p>The Auditor concludes the available evidence adequately demonstrates Full Compliance with the Approval Condition.</p>	Fully Compliant

Environmental Authority EPPR01742813 Conditions					
Dredge Phase	Condition Number	Approval Condition	Available Evidence	Audit Findings and Comments	Compliance
During	EA - 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 Port of Hay Point Dredging - Coral and Water Quality Monitoring Plan (dated 27 August 2007).	<ul style="list-style-type: none"> Marine Environmental Monitoring Program Water Quality Monitoring report Coral Impact Monitoring Report Performance of Environmental Monitoring Report 	<p>Monitoring reports and Performance report confirm compliance with Marine Environmental Monitoring Program and with requirements of Condition W2.</p> <p>The Auditor concludes the available evidence adequately demonstrates Full Compliance with the Approval Condition.</p>	Fully Compliant
During	EA - 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 .	<ul style="list-style-type: none"> Sediment Plume Validation - Technical Note Water Quality Monitoring report 	<p>Sediment Plume Validation and Water Quality Monitoring reports confirm compliance with turbidity requirements of Condition W2. No exceedance occurred, hence no notification required.</p> <p>The Auditor concludes the available evidence adequately demonstrates Full Compliance with the Approval Condition.</p>	Fully Compliant
During	EA - W6	The level of dredge spoil within the spoil ground must not exceed a maximum height of 10 metres below Lowest Astronomical Tide.	<ul style="list-style-type: none"> Hay Point Dredge Material Placement Area : Post-Dredge Hydrographic Survey, 7 May, 2019 Bathymetric survey analysis and report Performance of Environmental Monitoring Report 	<p>Post-Dredge hydrographic survey and analysis indicates dredge spoil did not exceed a maximum height of 10 metres below Lowest Astronomical Tide.</p> <p>The Auditor concludes the available evidence adequately demonstrates Full Compliance with the Approval Condition.</p>	Fully Compliant
During	EA - 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	<ul style="list-style-type: none"> Auditor's on-board observations and photographs 	<p>Auditor observed turtle / fauna deflectors and aqua jets on dredge head.</p> <p>The Auditor concludes the available evidence</p>	Fully Compliant

Environmental Authority EPPR01742813 Conditions					
Dredge Phase	Condition Number	Approval Condition	Available Evidence	Audit Findings and Comments	Compliance
		period of the dredging activity must be provided to the administering authority.		adequately demonstrates Full Compliance with the Approval Condition.	
Pre-	EA - 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.	<ul style="list-style-type: none"> • TSHD Brisbane EMP • Auditor's on-board observations and photographs 	<p>TSHD Brisbane EMP includes Section 8.6 'Protected Marine Fauna' and Appendix C 'Marine Fauna Incident Response Procedure'.</p> <p>Auditor observed turtle / fauna deflectors and aqua jets on dredge head.</p> <p>The Auditor concludes the available evidence adequately demonstrates Full Compliance with the Approval Condition.</p>	Fully Compliant
During	EA - W9	Mobile 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 150 metres of the activities being undertaken.	<ul style="list-style-type: none"> • TSHD Brisbane Daily Logs • Auditor's on-board observations and photographs • Observation log on bridge 	<p>No recorded sightings of dugongs, turtles, or cetaceans.</p> <p>Auditor observed binoculars on bridge.</p> <p>Auditor observed observation log on bridge.</p> <p>The Auditor concludes the available evidence adequately demonstrates Full Compliance with the Approval Condition.</p>	Fully Compliant
NA	EA - 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.	<ul style="list-style-type: none"> • TSHD Brisbane Daily Logs • Auditor's on-board observations and photographs • Observation log on bridge 	<p>No recorded sightings of dugongs, turtles, or cetaceans.</p> <p>Auditor observed binoculars on bridge.</p> <p>Auditor observed observation log on bridge.</p> <p>The Auditor concludes the available evidence adequately demonstrates Full Compliance with the Approval Condition.</p>	Fully Compliant
During	EA - 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	<ul style="list-style-type: none"> • TSHD Brisbane Daily Logs • Auditor's on-board 	<p>No recorded sightings of dugongs, turtles, or cetaceans.</p>	Fully Compliant

Environmental Authority EPPR01742813 Conditions					
Dredge Phase	Condition Number	Approval Condition	Available Evidence	Audit Findings and Comments	Compliance
		significance.	observations and photographs <ul style="list-style-type: none"> Observation log on bridge 	No notification required. The Auditor concludes the available evidence adequately demonstrates Full Compliance with the Approval Condition.	
Reporting					
Post-	EA - W12	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: <ul style="list-style-type: none"> (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 investigations 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 	<ul style="list-style-type: none"> Ethos NRM Interim Audit Report and this subsequent Final Audit Report Water Quality Monitoring report Coral Impact Monitoring Report Bathymetric survey analysis and report Performance of Environmental Monitoring Report NQBP emails submitting monitoring reports to Regulatory Authorities 	Interim Audit Report submitted within approved extension of submission timeframes. All monitoring reports submitted upon becoming available. This Final Audit Report. The Auditor concludes the available evidence adequately demonstrates Full Compliance with the Approval Condition.	Fully Compliant

Environmental Authority EPPR01742813 Conditions					
Dredge Phase	Condition Number	Approval Condition	Available Evidence	Audit Findings and Comments	Compliance
		disposed of.			
LAND CONDITIONS					
Preventing Contaminant Release to Land					
NA	EA - L1	Contaminants must not be released to land, except where otherwise stated in a condition of this approval.	<ul style="list-style-type: none"> TSHD Brisbane Daily Logs 	<p>All dredged material was placed within the designated Dredge Material Placement Area (DMPA). No spoil was disposed to land.</p> <p>The Auditor concludes the available evidence adequately demonstrates Full Compliance with the Approval Condition.</p>	Fully Compliant
During	EA - L2	<p>All chemicals and fuels must be contained within an on-site containment system and controlled in a manner that prevents environmental harm.</p> <p>(Note: All flammable and combustible liquids including petroleum products/fuels must be stored in accordance with AS 1940 - Storage and Handling of Flammable and Combustible Liquids. Storage for flammable and combustible liquids must be constructed and maintained in accordance with AS 1940.)</p>	<ul style="list-style-type: none"> Auditor's on-board observations and photographs NQBP Internal Audit 	<p>Auditor observed chemicals and oils stored correctly on-board, including appropriate bunding.</p> <p>NQBP Internal Audit undertook detailed chemicals management and storage assessment and found no non-compliances.</p> <p>The Auditor concludes the available evidence adequately demonstrates Full Compliance with the Approval Condition.</p>	Fully Compliant
NOISE CONDITIONS					
NA	EA - N1	Noise from the dredging activities must not cause environmental nuisance at a nuisance sensitive place.	<ul style="list-style-type: none"> Discussions with NQBP staff Discussions with TSHD Brisbane crew 	<p>Dredging occurred within an operating port with multiple berths capable of accommodating vessels 2-3 times larger than the Brisbane TSHD.</p> <p>Dredging by TSHD Brisbane would have created less noise than 'normal background'</p>	Fully Compliant

Environmental Authority EPPR01742813 Conditions					
Dredge Phase	Condition Number	Approval Condition	Available Evidence	Audit Findings and Comments	Compliance
				operating noise. The Auditor concludes the available evidence adequately demonstrates Full Compliance with the Approval Condition.	
NA	EA - 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.	<ul style="list-style-type: none"> Discussions with NQBP staff 	No request to undertake Noise monitoring.	Not Applicable
NA	EA - N3	The method of measurement and reporting of noise levels must comply with the latest edition of the administering authorities Noise Measurement Manual.	<ul style="list-style-type: none"> Discussions with NQBP staff 	No request to undertake Noise monitoring.	Not Applicable
WASTE CONDITIONS					
During*	EA - WA1	Waste generated in the carrying out of the activities must be stored, handled and transferred in a proper and efficient manner.	<ul style="list-style-type: none"> TSHD Brisbane waste receipts Auditor's on-board observations and photographs 	Auditor observed on-board waste segregation practices and separate bins. TSHD Brisbane waste receipts confirm segregated waste was collected by ToxFree.	Fully Compliant

Environmental Authority EPPR01742813 Conditions					
Dredge Phase	Condition Number	Approval Condition	Available Evidence	Audit Findings and Comments	Compliance
				The Auditor concludes the available evidence adequately demonstrates Full Compliance with the Approval Condition.	
During	EA - 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 provisions of the Environmental Protection Act 1994.	<ul style="list-style-type: none"> TSHD Brisbane waste receipts ToxFree Waste online literature 	<p>TSHD Brisbane waste receipts confirm segregated waste was collected by ToxFree.</p> <p>Toxfree (part of Cleanaway Group) is licenced for Regulated Waste.</p> <p>The Auditor concludes the available evidence adequately demonstrates Full Compliance with the Approval Condition.</p>	Fully Compliant
During*	EA - WA3	<p>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:</p> <p>(a) the date, quantity and type of waste removed;</p> <p>(b) the name of the waste transporter and/or disposal operator that removed the waste; and</p> <p>(c) the intended treatment/disposal/destination of the waste.</p> <p>Note: Records of documents maintained in compliance with a waste tracking system established under the Environmental Protection Act 1994 or any other law for regulated waste will be deemed to satisfy this condition.</p>	<ul style="list-style-type: none"> ToxFree Waste online literature 	<p>Toxfree (part of Cleanaway Group) is licenced for Regulated Waste. Waste is disposed of in accordance with state-specific regulatory requirements, however no evidence exists to indicate Toxfree maintained records regarding " c) intended treatment/disposal/destination of the waste" collected from TSHD Brisbane.</p> <p>Auditor concludes the available evidence adequately demonstrates Compliance with the Approval Condition but that improvements are required.</p> <p>Improvement:</p> <p>There is an opportunity for improvement by TSHD Brisbane crew obtaining the necessary information form Toxfree regarding how and where the collected waste is treated and disposed of.</p>	Compliant but Improvements Required

Environmental Authority EPPR01742813 Conditions					
Dredge Phase	Condition Number	Approval Condition	Available Evidence	Audit Findings and Comments	Compliance
Notification of Improper Disposal of Regulated Waste					
During*	EA - WA4	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.	<ul style="list-style-type: none"> • TSHD Brisbane waste receipts • Discussions with NQBP staff • Discussions with TSHD Brisbane crew • Auditor's on-board observations and photographs 	<p>Auditor is of the opinion that all regulated waste was removed by Toxfree, who are licenced for Regulated Waste.</p> <p>The Auditor concludes the available evidence adequately demonstrates Full Compliance with the Approval Condition.</p>	Fully Compliant
SOCIAL CONDITIONS					
Complaint Response					
During	EA - S1	<p>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:</p> <p>(a) Time, date, name and contact details of the complainant;</p>	<ul style="list-style-type: none"> • Discussions with staff • Hay Point Maintenance Dredging Stakeholder Engagement and Communication Plan • Evaluation of Stakeholder Engagement and 	<p>NQBP staff advised Auditor that no complaints were received during dredging works.</p> <p>Review of a comprehensive Stakeholder Engagement and Communication Plan describes how public comments, petitions and objections during the approval phase of Port of Hay Point 2019 Maintenance Dredging</p>	Fully Compliant

Environmental Authority EPPR01742813 Conditions					
Dredge Phase	Condition Number	Approval Condition	Available Evidence	Audit Findings and Comments	Compliance
		(b) for the complaint; (c) any investigations undertaken; (d) conclusions formed; and (e) any actions taken.	Communication Plan <ul style="list-style-type: none"> NQBP email to DES 5/7/19 submitting copy of Stakeholder Engagement and Communication Plan (as recommended in Interim Audit Report) 	Program were addressed. Auditor understands no complaints were received specifically regarding the dredging operations in the context of this Approval Condition. Stakeholder Engagement and Communication Plan submitted to DES. The Auditor concludes the available evidence adequately demonstrates Full Compliance with the Approval Condition.	

6.2 Appendix 1.2. Audit Findings for Great Barrier Reef Marine Park Permit G19/40185.1

Great Barrier Reef Marine Park Permit G19/40185.1 Conditions					
Dredge Phase	Condition Number	Approval Condition	Available Evidence	Audit Findings and Comments	Compliance
COMPLIANCE WITH ALL LAWS					
NA	MPP 1	All works conducted under this permission must be undertaken in accordance with the provisions of the laws in force from time to time in the State of Queensland and the Commonwealth of Australia.		Not Applicable. Condition is an overarching statement and Auditor is unable to determine compliance with provisions of all possible State and Commonwealth "laws in force from time to time".	Not Applicable
During	MPP 2	The Permit Holder must ensure that when operations are conducted in the Marine Park under this permit, this permit or a copy, and any relevant documents including any approved Management Plans are held at the site or sites of operation.	<ul style="list-style-type: none"> Discussions with TSHD Brisbane crew Auditor's on-board observations and photographs 	<p>Auditor observed electronic copy of GBRMPP G19/40185.1 on the bridge of TSHD Brisbane.</p> <p>The Auditor concludes the available evidence adequately demonstrates Full Compliance with the Approval Condition.</p>	Fully Compliant
Pre-	MPP 3	The Permit Holder must inform its officers, employees, contractors, agents and/or nominees in the program of relevant restrictions applying under any zoning plans, plans of management, Marine Park regulations and this permit.	<ul style="list-style-type: none"> NQBP Steering Committee and Communication Working Group meetings Pre-start meetings TSHD Brisbane crew training logs TSHD Brisbane crew EMP signoff 	<p>NQBP informed applicable persons of relevant obligations and operational restrictions.</p> <p>The Auditor concludes the available evidence adequately demonstrates Full Compliance with the Approval Condition.</p>	Fully Compliant
DEED CONDITIONS					

Great Barrier Reef Marine Park Permit G19/40185.1 Conditions

Dredge Phase	Condition Number	Approval Condition	Available Evidence	Audit Findings and Comments	Compliance
Pre-	MPP 4	Within 30 business days of the date of commencement of this permit or prior to commencement of works under this permit, whichever is sooner, the Permit Holder must execute, seal and deliver a Deed to the Managing Agency in the form annexed to this permit, identified with the permit number, and marked 'Deed of Agreement'.	<ul style="list-style-type: none"> NQBP email and Registered Mail 	<p>NQBP emailed and express posted by Registered Mail the Deed to GBRMPA for arrival on 6/3/2019</p> <p>The Auditor concludes the available evidence adequately demonstrates Full Compliance with the Approval Condition.</p>	Fully Compliant
	MPP 5	The Permit Holder must observe and perform its obligations under and pursuant to the Deed. Any breach of the Deed shall be a breach of this condition.		<p>Not Applicable.</p> <p>Condition is an overarching statement.</p>	Not Applicable
Pre-	MPP 6	The Permit Holder must provide to the Managing Agency copies of certificates of currency or the insurance policy documents required under the Deed of Agreement within 20 business days of being called upon to do so.	<ul style="list-style-type: none"> NQBP email 22/03/2019 	<p>NQBP emailed Insurance CoCs to GBRMPA on 22/03/2019</p> <p>The Auditor concludes the available evidence adequately demonstrates Full Compliance with the Approval Condition.</p>	Fully Compliant

ENVIRONMENTAL HARM CONDITIONS

	MPP 7	The Permit Holder must take all reasonable steps to ensure that activities carried out under this permit do not cause harm to the environment.		<p>Not Applicable.</p> <p>Condition is an overarching statement.</p>	Not Applicable
During	MPP 8	<p>The Permit Holder must notify the Managing Agency, within 24 hours after becoming aware, of all incidents. The notification must include:</p> <p>(i) details of the incident including date, time, location, cause and nature of the incident;</p> <p>(ii) the name and contact details of the person(s) witnessing, reporting and/or responsible for the</p>	<ul style="list-style-type: none"> TSHD Brisbane Daily Logs Discussions with NQBP staff Discussions with TSHD Brisbane crew Operational Incident Reports 	<p>No 'Environmental Harm' incidents occurred, as defined in Condition MPP 8.</p> <p>NQBP staff and TSHD Brisbane crew advised the Auditor of two operational incidents that did NOT cause 'Environmental Harm' and for which compliant Incident Reports were issued to the relevant regulatory authorities.</p>	Fully Compliant

Great Barrier Reef Marine Park Permit G19/40185.1 Conditions

Dredge Phase	Condition Number	Approval Condition	Available Evidence	Audit Findings and Comments	Compliance
		incident; (iii) the type, estimated volume and concentration of any pollutants involved; (iv) the type and number of any pests transported; (v) the type and estimated scale of any physical damage caused to the environment; and (vi) measures taken or proposed to be taken to mitigate the impact or risk and the success of those measures in addressing the incident or risk.		The Auditor concludes the available evidence adequately demonstrates Full Compliance with the Approval Condition.	
During	MPP 9	The Permit Holder must then provide written details of the notification as specified in condition 8 to the Managing Agency within three (3) days of the time the Permit Holder became aware of the incident. This written notification must include details specified in condition 8 as well as the following: (i) measures taken or proposed to prevent or mitigate against the recurrence of such an incident; and (ii) any other relevant matters.	<ul style="list-style-type: none"> • TSHD Brisbane Daily Logs • Discussions with NQBP staff • Discussions with TSHD Brisbane crew • Operational Incident Reports 	<p>No 'Environmental Harm' incidents occurred, as defined in Condition MPP 8.</p> <p>Incident Reports submitted for two operational incidents that did NOT cause 'Environmental Harm'.</p> <p>The Auditor concludes the available evidence adequately demonstrates Full Compliance with the Approval Condition.</p>	Fully Compliant

MAINTENANCE DREDGING CONDITIONS

During	MPP 10	This permit allows for maintenance dredging of up to a maximum of 22,509 cubic metres in total from within the Approved Dredge Area, with no more than 12,000 cubic metres dredged in any one calendar year.	<ul style="list-style-type: none"> • Discussions with NQBP staff • Bathymetric survey analysis and report 	Bathymetric survey analysis and report confirm the in-situ volume of sediment removed from the departure path within the GBRMP was 7,551m ³ , being less than the annual total limit of 22,509m ³ and less than the 12,000m ³ maximum permitted in any one calendar year	Fully Compliant
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Great Barrier Reef Marine Park Permit G19/40185.1 Conditions

Dredge Phase	Condition Number	Approval Condition	Available Evidence	Audit Findings and Comments	Compliance
				The Auditor concludes the available evidence adequately demonstrates Full Compliance with the Approval Condition.	
During	MPP 11	This permit allows for contingency maintenance dredging of up to a maximum of 11,000 cubic metres in total from within the Approved Dredge Area.	<ul style="list-style-type: none"> Discussions with NQBP staff Bathymetric survey analysis and report 	Contingency maintenance dredging volume of up maximum 11,000 cubic metres was not utilised. Not Applicable	Not Applicable

SPOIL DUMPING CONDITIONS

During	MPP 12	Subject to condition s 14 and 15, this permit allows for the dumping of up to a maximum of 756,553 cubic metres in total of maintenance dredging spoil material to the Approved Dredge Spoil Disposal Area.	<ul style="list-style-type: none"> Bathymetric survey analysis and report 	353,740m ³ of dredged spoil material, as calculated by MSQ at end of maintenance dredging program, was placed at Approved Dredge Material Placement Area, being less than the maximum permitted volume of 756,553m ³ . The Auditor concludes the available evidence adequately demonstrates Full Compliance with the Approval Condition.	Fully Compliant
During	MPP 13	Subject to prior written approval from the Managing Agency, this permit allows for the dumping of up to a maximum of 200,000 cubic metres in total of contingency maintenance dredging spoil material to the Approved Dredge Spoil Disposal Area.	<ul style="list-style-type: none"> Discussions with NQBP staff Bathymetric survey analysis and report 	Contingency maintenance dredging spoil material of up maximum 200,000 cubic metres was not utilised. Not Applicable	Not Applicable
During	MPP 14	This permit allows for the dumping of up to a maximum of 356,553 cubic metres of maintenance dredge spoil material to the Approved Dredge Spoil Disposal Area within 18 months of the commencement date of the first dredge campaign authorised under this permit.	<ul style="list-style-type: none"> Discussions with NQBP staff Bathymetric survey analysis and report 	Bathymetric survey analysis and report confirm the total in-situ volume of material removed from the approved dredge areas was 335,230m ³ , as calculated by pre- and post-maintenance dredging bathymetric surveys, or 353,740m ³ as calculated at the end of the	Fully Compliant

Great Barrier Reef Marine Park Permit G19/40185.1 Conditions					
Dredge Phase	Condition Number	Approval Condition	Available Evidence	Audit Findings and Comments	Compliance
				<p>maintenance dredging by MSQ. Both volumes being less than the maximum approved volume of 356,553m³.</p> <p>The Auditor concludes the available evidence adequately demonstrates Full Compliance with the Approval Condition.</p>	
During	MPP 15	Except in accordance with condition 14, the Permit Holder must not dispose of more than 200,000 cubic metres in total of maintenance dredge spoil material to the Approved Dredge Spoil Disposal Area in any one calendar year.	<ul style="list-style-type: none"> Discussions with NQBP staff 	<p>Condition applies to future years' spoil disposal.</p> <p>Not Applicable</p>	Not Applicable
During	MPP 16	The Permit Holder must not carry out any of the works permitted herein for seven (7) days before and after all predicted mass coral spawning events for the region. The relevant dates for each campaign must be approved in writing by the Managing Agency prior to works commencing.	<ul style="list-style-type: none"> GBRMPA email 28/02/2019 	<p>NQBP received email from GBRMPA on 28/02/2019 stating:</p> <p>"I confirm maintenance dredging commencing 31 March 2019 for a period of approximately 40 days does not interfere with mass coral spawning events and is approved under condition 16"</p> <p>The Auditor concludes the available evidence adequately demonstrates Full Compliance with the Approval Condition.</p>	Fully Compliant
Pre-	MPP 17	The Permit Holder must not carry out any works within the Marine Park unless the Managing Agency has advised the Permit Holder in writing that the relevant components of the Sampling and Analysis Plan and Sampling and Analysis Plan Report have been approved and the sediments are demonstrated to be suitable for unconfined ocean disposal in accordance with the National Assessment Guidelines for Dredging, unless	<ul style="list-style-type: none"> GBRMPA letter 06/02/2019 	<p>NQBP received letter from GBRMPA on 06/02/2019 confirming that material was suitable for sea-disposal at DMPA</p> <p>The Auditor concludes the available evidence adequately demonstrates Full Compliance with the Approval Condition.</p>	Fully Compliant

Great Barrier Reef Marine Park Permit G19/40185.1 Conditions

Dredge Phase	Condition Number	Approval Condition	Available Evidence	Audit Findings and Comments	Compliance
		otherwise advised in writing by the Managing Agency.			
Pre-	MPP 18	The Permit Holder must not carry out any of the works permitted herein unless the Permit Holder has provided a bathymetric survey to the Managing Agency, conducted immediately prior to the commencement of works, of the Approved Dredge Area and the Approved Dredge Spoil Disposal Area to the Managing Agency.	<ul style="list-style-type: none"> NQBP email 27/03/2019 	<p>NQBP provided bathymetric surveys completed by MSQ to GBRMPA / DES via email on 27/03/2019</p> <p>The Auditor concludes the available evidence adequately demonstrates Full Compliance with the Approval Condition.</p>	Fully Compliant
Post-	MPP 19	A bathymetric survey of the Approved Dredge Area and the Approved Dredge Spoil Disposal Area must be undertaken by the Permit Holder within one (1) month of the completion of each dredge campaign authorised under this permit.	<ul style="list-style-type: none"> Hydrological survey plans Bathymetric survey analysis and report NQBL and DES emails 28/5/2019 and 28/6/2019 re. issuing report 	<p>Hydrological survey plans and bathymetric analysis of Approved Dredge Area and the Approved Dredge Spoil Disposal Areas completed and submitted to regulatory authorities.</p> <p>The Auditor concludes the available evidence adequately demonstrates Full Compliance with the Approval Condition.</p>	Fully Compliant
Post-	MPP 20	The Permit Holder must provide to the Managing Agency in-situ calculations in cubic metres of spoil material dredged from the Approved Dredge Area and disposed at the Approved Dredge Spoil Disposal Area within two (2) months of the completion of each post-dredge campaign bathymetric survey authorised under this permit. The volume calculations must be based on bathymetric surveys undertaken prior to work commencing and following the completion of each dredge campaign.	<ul style="list-style-type: none"> Hydrological survey plans Bathymetric survey analysis and report NQBL and DES emails 28/5/2019 and 28/6/2019 re. issuing report 	<p>Hydrological survey plans and bathymetric analysis of Approved Dredge Area and the Approved Dredge Spoil Disposal Areas completed and submitted to regulatory authorities.</p> <p>Volume calculations demonstrate compliance with maximum permissible amounts.</p> <p>The Auditor concludes the available evidence adequately demonstrates Full Compliance with the Approval Condition.</p>	Fully Compliant

ENVIRONMENTAL SITE SUPERVISOR CONDITIONS

Great Barrier Reef Marine Park Permit G19/40185.1 Conditions					
Dredge Phase	Condition Number	Approval Condition	Available Evidence	Audit Findings and Comments	Compliance
During	MPP 21	Where the Permit Holder is advised by the Managing Agency that environmental site supervision of works is required, the Permit Holder must: (i) provide the 24-hour contact details of an on-site liaison officer whom the Environmental Site Supervisor can contact; and (ii) provide the Environmental Site Supervisor with access to the works as and when they require; and (iii) Only conduct works in the presence of the Environmental Site Supervisor, unless otherwise advised by the Managing Agency.	<ul style="list-style-type: none"> NQBP emails and correspondence with GBRMPA 	<p>Two GBRMPA personnel, in the role of an 'Environmental Site Supervisor', undertook site visit onboard THSD Brisbane on 1-2 April.</p> <p>All notifications and on-board requirements were adhered to.</p> <p>The Auditor concludes the available evidence adequately demonstrates Full Compliance with the Approval Condition.</p>	Fully Compliant
During	MPP 22	The Environmental Site Supervisor is authorised to stop, suspend or modify works, which in their opinion have caused or are likely to cause harm.	<ul style="list-style-type: none"> NQBP emails and correspondence with GBRMPA 	<p>Two GBRMPA personnel, in the role of an 'Environmental Site Supervisor', undertook site visit onboard THSD Brisbane on 1-2 April and were subsequently updated via weekly email as member of Management Reference Group (MRG).</p> <p>There was no request 'stop, suspend or modify works'. Hence Condition is Not Applicable.</p> <p>Managing Agency did not request that an Environmental Site Supervisor was required.</p>	Not Applicable
During	MPP 23	Where the Environmental Site Supervisor has directed the Permit Holder to cease works, the Permit Holder must not recommence works unless authorised by the Environmental Site Supervisor.		Two GBRMPA personnel, in the role of an 'Environmental Site Supervisor', undertook site visit onboard THSD Brisbane on 1-2 April and were subsequently updated via weekly email as member of Management Reference Group (MRG).	Not Applicable

Great Barrier Reef Marine Park Permit G19/40185.1 Conditions

Dredge Phase	Condition Number	Approval Condition	Available Evidence	Audit Findings and Comments	Compliance
				There was no request 'cease works'. Hence Condition is Not Applicable .	
During	MPP 24	Where the Environmental Site Supervisor directs the Permit Holder to cease or modify works, the conduct of the Permit Holder when complying with the direction must be in accordance with: (i) Any further directions given by the Environmental Site Supervisor; or (ii) an approved Management Plan.		Two GBRMPA personnel, in the role of an 'Environmental Site Supervisor', undertook site visit onboard THSD Brisbane on 1-2 April and were subsequently updated via weekly email as member of Management Reference Group (MRG). There was no request 'cease or modify works'. Hence Condition is Not Applicable .	Not Applicable
During	MPP 25	The Permit Holder must ensure that its officers, employees, contractors, agents and/or nominees comply with any direction given by the Environmental Site Supervisor for the purpose of ensuring compliance with this permit, and any direction considered necessary by the Environmental Site Supervisor for the conservation, protection and preservation of the Marine Park and property in the Marine Park.		Two GBRMPA personnel, in the role of an 'Environmental Site Supervisor', undertook site visit onboard THSD Brisbane on 1-2 April and were subsequently updated via weekly email as member of Management Reference Group (MRG). There was no request 'direction given by the Environmental Site Supervisor'. Hence Condition is Not Applicable .	Not Applicable

MITIGATION MEASURES FOR PROTECTION OF MARINE SPECIES

During	MPP 26	Before commencing each dredging or dumping run, the Permit Holder must check, using binoculars from the dredge vessel, for Marine Mammals and/or turtles within the Monitoring Zone.	<ul style="list-style-type: none"> Auditor's on-board observations and photographs Observation log on bridge 	<p>Auditor observed binoculars on bridge.</p> <p>Auditor observed observation log on bridge.</p> <p>The Auditor concludes the available evidence adequately demonstrates Full Compliance with the Approval Condition.</p>	Fully Compliant
During	MPP 27	If any Marine Mammals and/or turtles are sighted in the Monitoring Zone pursuant to Condition 27,	<ul style="list-style-type: none"> TSHD Brisbane Daily Logs Auditor's on-board 	No recorded sightings of dugongs, turtles, or	Fully Compliant

Great Barrier Reef Marine Park Permit G19/40185.1 Conditions

Dredge Phase	Condition Number	Approval Condition	Available Evidence	Audit Findings and Comments	Compliance
		works must not commence in the Monitoring Zone until 20 minutes after the last Marine Mammal and/or turtle is observed to leave the Monitoring Zone or the vessel is to move to another area of the Approved Dredge Area or Approved Dredge Spoil Disposal Area to maintain a minimum distance of 300 metres between the vessel and any of the Marine Mammals and/or turtles identified in condition 27	observations and photographs <ul style="list-style-type: none"> Observation log on bridge 	cetaceans. Auditor observed binoculars on bridge. Auditor observed observation log on bridge. The Auditor concludes the available evidence adequately demonstrates Full Compliance with the Approval Condition.	

ENVIRONMENTAL MONITORING AND MANAGEMENT PLAN CONDITIONS

Pre-	MPP 28	The Permit Holder must implement the following Management Plans (Plans) in the manner stated in the Plan: (i) a Long Term Monitoring and Management Plan that addresses the management of dredging at the Port of Hay Point over a 25 year period; (ii) Environmental Thresholds Report; (iii) Maintenance Dredging Environmental Management Plan; and (iv) Marine Environmental Monitoring Plan.	<ul style="list-style-type: none"> Port of Hay Point Long-term Maintenance Dredge Management Plan 2018 – 2043 Port of Hay Maintenance Dredging EMP TSHD Brisbane - Hay Point Maintenance Dredging EMP Marine Environment Monitoring Program Monitoring reports 	Long-term Maintenance Dredge Management Plan and associated EMPs and Monitoring Program were implemented as documented by Monitoring reports and this Audit Report. The Auditor concludes the available evidence adequately demonstrates Full Compliance with the Approval Condition.	Fully Compliant
	MPP 29	If Managing Agency believes that it is necessary or desirable for the better protection of the environment to do so, the Managing Agency may request the Permit Holder to make specified revisions to any of the Plans as specified in Condition 28 and submit the revised Plan for the Managing Agency's approval. If the Managing Agency approves a revised Plan pursuant to this	<ul style="list-style-type: none"> Port of Hay Point Long-term Maintenance Dredge Management Plan 2018 – 2043 Port of Hay Maintenance Dredging EMP TSHD Brisbane - Hay Point 	Plans updated by NQBP and approved by Regulatory Authorities, including GBRMPA, prior to dredging operations commencing. The Auditor concludes the available evidence adequately demonstrates Full Compliance with the Approval Condition.	Fully Compliant

Great Barrier Reef Marine Park Permit G19/40185.1 Conditions					
Dredge Phase	Condition Number	Approval Condition	Available Evidence	Audit Findings and Comments	Compliance
		condition, the Permit Holder must implement that Plan in place of the original Plan specified at Condition 28.	Maintenance Dredging EMP <ul style="list-style-type: none"> Marine Environment Monitoring Program NQBP correspondence with Regulatory Authorities 		
Pre-	MPP 30	The Permit Holder must review and update the Plans required under conditions 28(ii-iv) prior to each dredge campaign. Any modifications to the Plans must be approved in writing by the Managing Agency prior to implementation.	<ul style="list-style-type: none"> Port of Hay Point Long-term Maintenance Dredge Management Plan 2018 – 2043 Port of Hay Maintenance Dredging EMP TSHD Brisbane - Hay Point Maintenance Dredging EMP Marine Environment Monitoring Program NQBP correspondence with Regulatory Authorities 	Plans updated by NQBP and approved by Regulatory Authorities, including GBRMPA, prior to dredging operations commencing. The Auditor concludes the available evidence adequately demonstrates Full Compliance with the Approval Condition.	Fully Compliant
Pre-	MPP 31	The Permit Holder must, within 30 days of receiving approval of each Plan from the Managing Agency, make available on the Permit Holder's website, the approved Plans.	<ul style="list-style-type: none"> Port of Hay Point Long-term Maintenance Dredge Management Plan 2018 – 2043 Port of Hay Maintenance Dredging EMP TSHD Brisbane - Hay Point Maintenance Dredging EMP Marine Environment Monitoring Program NQBP website 	NQBP placed all plans on website upon approval. Auditor confirmed all plans available at https://nqbp.com.au/our-ports/hay-point/proposed-maintenance-dredging/reports-and-research The Auditor concludes the available evidence adequately demonstrates Full Compliance with the Approval Condition.	Fully Compliant

Great Barrier Reef Marine Park Permit G19/40185.1 Conditions

Dredge Phase	Condition Number	Approval Condition	Available Evidence	Audit Findings and Comments	Compliance
Post-	MPP 32	The Permit Holder must, prior to 31 January each year, provide to the Managing Agency an annual report on the results of all field work, monitoring results and management requirements that form part of the approved Plans, as specified at condition 28.	<ul style="list-style-type: none"> Ethos NRM Interim Audit Report and this subsequent Final Audit Report Water Quality Monitoring report Coral Impact Monitoring Report Bathymetric survey analysis and report Performance of Environmental Monitoring Report NQBP emails submitting monitoring reports to Regulatory Authorities 	<p>Monitoring reports and this Final Audit Report fulfil condition requirements.</p> <p>All monitoring reports have been issued by NQBP to Regulatory Authorities.</p> <p>This Audit Report will be provided by NQBP to Regulatory Authorities upon completions.</p> <p>The Auditor concludes the available evidence adequately demonstrates Full Compliance with the Approval Condition.</p>	Fully Compliant
Post-	MPP 33	The Permit Holder must, prior to 1 March each year make available on the Permit Holder's website all monitoring reports in accordance with the approved Marine Environmental Monitoring Plan specified in Condition 28(iv).		Reporting date not yet triggered; hence condition is Undetermined .	Undetermined
Post-	MPP 34	<p>Within six (6) months of completion of each dredge campaign permitted herein, the Permit Holder must publish a report on their website addressing compliance with the requirements of the Environmental Thresholds Report, Maintenance Dredging Environmental Management Plan and the Marine Environmental Monitoring Plan, as verified by an independent audit. That audit report must include but not be limited to the following:</p> <p>(i) deviations from the Environmental Thresholds</p>	<ul style="list-style-type: none"> Ethos NRM Interim Audit Report and this subsequent Final Audit Report Water Quality Monitoring report Coral Impact Monitoring Report Bathymetric survey analysis and report 	<p>Ethos NRM Interim Audit Report and this subsequent Final Audit Report.</p> <p>All reports have been prepared and submitted to Regulatory Authorities.</p> <p>NQBP is required to place report(s) on web site no later than 2nd November, 2019. Action date not yet triggered; hence condition is Undetermined.</p>	Undetermined

Great Barrier Reef Marine Park Permit G19/40185.1 Conditions					
Dredge Phase	Condition Number	Approval Condition	Available Evidence	Audit Findings and Comments	Compliance
		Report; and (ii) identification of any changes that would be required to the Maintenance Dredging Environmental Management Plan, the Marine Environmental Monitoring Plan or the Environmental Thresholds Report before the next dredge campaign.	<ul style="list-style-type: none"> Performance of Environmental Monitoring Report NQBP website https://nqbp.com.au/ 		
Post-	MPP 35	The Managing Agency must approve the auditor in writing prior to commencement of each independent audit referred to in condition 34.	<ul style="list-style-type: none"> GBRMPA email 22/3/2019 	<p>GBRMPA approved appointment of Ethos NRM Pty Ltd.</p> <p>The Auditor concludes the available evidence adequately demonstrates Full Compliance with the Approval Condition.</p>	Fully Compliant
Pre-	MPP 36	The Permit Holder must ensure that all notifications, plans and reports that require approval under this permit are submitted to the Managing Agency no less than 40 business days before the relevant works are proposed to commence.	<ul style="list-style-type: none"> GBRMPA emails 19/02/2019 and 28/02/2019 	<p>TSHD Brisbane commenced works on 31st March 2019.</p> <p>GBRMPA emails on 19/02/2019 and 28/02/2019, acknowledged that "that all endeavors have been made to supply the required pre-works notifications as soon as practicable after the permit was granted, being 19 February 2019".</p> <p>The Auditor concludes the available evidence adequately demonstrates Full Compliance with the Approval Condition.</p>	Fully Compliant

6.3 Appendix 1.3. Audit Findings for Sea Dumping Permit 19/01

Sea Dumping Permit 19/01 Conditions					
Dredge Phase	Condition Number	Approval Condition	Available Evidence	Audit Findings and Comments	Compliance
NA	SDP 1	Except so far as the contrary intention appears, terms used in these conditions to this permit have the same meaning as such terms in the Act		Not Applicable. Condition is an overarching statement.	Not Applicable
MATERIAL TO BE DUMPED					
During	SDP 2	North Queensland Bulk Ports Corporation Limited must ensure only up to 756,553 cubic metres in total of seabed material, derived from maintenance dredging of the Port of Hay Point is dumped at the Approved Dredge Spoil Disposal Area, specified at Condition 7.	<ul style="list-style-type: none"> Bathymetric survey analysis and report 	<p>MSQ calculated 353,740m³ of dredged seabed material was placed at the approved Dredge Material Placement Area (DMPA).</p> <p>Once placed at the DMPA, unconsolidated dredge material increased the volume of DMPA by a calculated 418,388m³.</p> <p>The Auditor concludes the available evidence adequately demonstrates Full Compliance with the Approval Condition.</p>	Fully Compliant
During	SDP 3	North Queensland Bulk Ports Corporation Limited must ensure only up to 200,000 cubic metres in total of seabed material, derived from contingency maintenance dredging of the Port of Hay Point is dumped at the Approved Dredge Spoil Disposal Area, specified at Condition 7.	<ul style="list-style-type: none"> Discussions with NQBP staff Bathymetric survey analysis and report 	<p>Contingency maintenance dredging spoil material of up maximum 200,000 cubic metres was not utilised.</p> <p>Not Applicable</p>	Not Applicable
During	SDP 4	North Queensland Bulk Ports Corporation Limited must not dispose of more than 356,553 cubic metres of maintenance dredge material, derived from maintenance dredging at Port of Hay Point, to the Approved Dredge Spoil Disposal Area, specified at Condition 7, within 18 months of the	<ul style="list-style-type: none"> Discussions with NQBP staff Bathymetric survey analysis and report 	Bathymetric survey analysis and report confirm the total in-situ volume of material removed from the approved dredge areas was 335,230m ³ , as calculated by pre- and post-maintenance dredging bathymetric surveys, or 353,740m ³ as calculated at the	Fully Compliant

Sea Dumping Permit 19/01 Conditions					
Dredge Phase	Condition Number	Approval Condition	Available Evidence	Audit Findings and Comments	Compliance
		commencement of the first dredge campaign authorised under this permit.		end of the maintenance dredging by MSQ. Both volumes being less than the maximum approved volume of 356,553m³. The Auditor concludes the available evidence adequately demonstrates Full Compliance with the Approval Condition.	
During	SDP 5	Except in accordance with Condition 4, North Queensland Bulk Ports Corporation Limited must not dispose of more than 200,000 cubic metres of maintenance dredge spoil material to the Approved Dredge Spoil Disposal Area, specified at Condition 7 in any one calendar year.	<ul style="list-style-type: none">Discussions with NQBP staff	Condition applies to future years' spoil disposal. Not Applicable	Not Applicable
Pre-	SDP 6	North Queensland Bulk Ports Corporation Limited will only undertake dumping activities of sediments after the Managing Agency has advised the Permittee in writing that the relevant components of the Sampling and Analysis Plan and Sampling and Analysis Plan Report have been approved and the sediments are demonstrated to be suitable for unconfined ocean disposal in accordance with the National Assessment Guidelines for Dredging.	<ul style="list-style-type: none">GBRMPA letter 06/2/2019	NQBP received letter from GBRMPA on 06/2/2019 confirming that material was suitable for sea-disposal at DMPA The Auditor concludes the available evidence adequately demonstrates Full Compliance with the Approval Condition.	Fully Compliant
APPROVED DREDGE SPOIL DISPOSAL AREA					
During	SDP 7	North Queensland Bulk Ports Corporation Limited must only dispose maintenance dredge material within the area bound by the following coordinates (GDA94 datum): <div><div>SITE ID</div><div>Latitude</div><div>Longitude</div><div>MR1</div><div>-21.21982</div><div>149.30192</div></div>	<ul style="list-style-type: none">TSHD Brisbane GPS track plotsTSHD Brisbane Daily LogsElectronic copies provided to Auditor by NQBP.	Track Plots and Daily Logs indicate dredge operated within approved Dredge Material Placement Area (DMPA). The Auditor concludes the available evidence adequately demonstrates Full Compliance with the Approval Condition.	Fully Compliant

Sea Dumping Permit 19/01 Conditions					
Dredge Phase	Condition Number	Approval Condition	Available Evidence	Audit Findings and Comments	Compliance
		MR2 -21.20192 149.33486 MR3 -21.16552 149.3343 MR4 -21.19451 149.28061	<ul style="list-style-type: none"> Verbal advice from NQBP Auditor's on-board observations and photographs 		
During	SDP 8	North Queensland Bulk Ports Corporation Limited must ensure that dredged material is disposed so that the material is distributed generally in an even manner over the Approved Dredge Spoil Disposal Area specified in Condition 7.	<ul style="list-style-type: none"> Hydrological survey plans Bathymetric survey analysis and report 	<p>Hydrological survey plans and Bathymetric analysis of Dredge Material Placement Area confirm disposed material was evenly placed in compliance with depth criteria.</p> <p>The Auditor concludes the available evidence adequately demonstrates Full Compliance with the Approval Condition.</p>	Fully Compliant
During	SDP 9	North Queensland Bulk Ports Corporation Limited must establish by GPS that, prior to dumping, the vessel is within the Approved Dredge Spoil Disposal Area specified in Condition 7.	<ul style="list-style-type: none"> TSHD Brisbane GPS navigation system TSHD Brisbane GPS track plots TSHD Brisbane Daily Logs Auditor's on-board observations and photographs 	<p>GPS navigation system, track plots and Daily Logs used to confirm position within approved Dredge Material Placement Area (DMPA),</p> <p>The Auditor concludes the available evidence adequately demonstrates Full Compliance with the Approval Condition.</p>	Fully Compliant
ENVIRONMENTAL MONITORING AND MANAGEMENT PLANS FOR DREDGING					
Pre-	SDP 10	<p>North Queensland Bulk Ports Corporation Limited must implement the following Management Plans (Plans) in the manner stated in the Plan:</p> <p>a. A Long Term Monitoring and Management Plan that addresses the management of dredging at the Port of Hay Point over a 25 year period;</p> <p>b. Environmental Thresholds Report;</p>	<ul style="list-style-type: none"> Port of Hay Point Long-term Maintenance Dredge Management Plan 2018 – 2043 Port of Hay Maintenance Dredging EMP TSHD Brisbane - Hay Point 	<p>Long-term Maintenance Dredge Management Plan and associated EMPs and Monitoring Program were implemented as documented by Monitoring reports and this Audit Report.</p> <p>The Auditor concludes the available evidence adequately demonstrates Full Compliance with the Approval Condition.</p>	Fully Compliant

Sea Dumping Permit 19/01 Conditions					
Dredge Phase	Condition Number	Approval Condition	Available Evidence	Audit Findings and Comments	Compliance
		c. Maintenance Dredging Environmental Management Plan; and d. Marine Environmental Monitoring Plan.	Maintenance Dredging EMP • Marine Environment Monitoring Program • Monitoring reports		
Pre-	SDP 11	North Queensland Bulk Ports Corporation Limited must review and update the Plans required under conditions 10(b-d) prior to each dredge campaign. Any modifications to the Plans must be approved in writing by the Managing Agency prior to implementation.	<ul style="list-style-type: none"> Port of Hay Point Long-term Maintenance Dredge Management Plan 2018 – 2043 Port of Hay Maintenance Dredging EMP TSHD Brisbane - Hay Point Maintenance Dredging EMP Marine Environment Monitoring Program NQBP correspondence with Regulatory Authorities 	Plans updated by NQBP and approved by Regulatory Authorities The Auditor concludes the available evidence adequately demonstrates Full Compliance with the Approval Condition.	Fully Compliant
Pre-	SDP 12	The approved Plans must be made available for the term of this permit (electronically) on North Queensland Bulk Ports Corporation Limited website within 30 days of being approved by the Managing Agency.	<ul style="list-style-type: none"> Port of Hay Point Long-term Maintenance Dredge Management Plan 2018 – 2043 Port of Hay Maintenance Dredging EMP TSHD Brisbane - Hay Point Maintenance Dredging EMP Marine Environment 	NQBP placed all plans on website upon approval. Auditor confirmed all plans available at https://nqbp.com.au/our-ports/hay-point/proposed-maintenance-dredging/reports-and-research The Auditor concludes the available evidence adequately demonstrates Full Compliance with the Approval Condition.	Fully Compliant

Sea Dumping Permit 19/01 Conditions					
Dredge Phase	Condition Number	Approval Condition	Available Evidence	Audit Findings and Comments	Compliance
			<ul style="list-style-type: none"> Monitoring Program NQBP website 		
	SDP 13	If the Minister believes that it is necessary or desirable for the better protection of the environment to do so, the Minister may request North Queensland Bulk Ports Corporation Limited to make specified revisions to any of the Plans as specified in Condition 10 and submit the revised Plan for the Minister's approval. If the Minister approves a revised Plan pursuant to this condition, North Queensland Bulk Ports Corporation Limited must implement that Plan in place of the original Plan specified at Condition 10.	<ul style="list-style-type: none"> Port of Hay Point Long-term Maintenance Dredge Management Plan 2018 – 2043 Port of Hay Maintenance Dredging EMP TSHD Brisbane - Hay Point Maintenance Dredging EMP Marine Environment Monitoring Program NQBP correspondence with Regulatory Authorities 	<p>Plans updated by NQBP and approved by Regulatory Authorities.</p> <p>The Auditor concludes the available evidence adequately demonstrates Full Compliance with the Approval Condition.</p>	Fully Compliant
	SDP 14	North Queensland Bulk Ports Corporation Limited must ensure that all dumping activities are undertaken in accordance with this permit and the Plans as approved by the Managing Agency from time to time.	<ul style="list-style-type: none"> Port of Hay Point Long-term Maintenance Dredge Management Plan 2018 – 2043 Port of Hay Maintenance Dredging EMP TSHD Brisbane - Hay Point Maintenance Dredging EMP Marine Environment Monitoring Program Bathymetric survey analysis and report 	<p>Bathymetric survey analysis and report, and Environmental Monitoring Performance Report confirm compliance in accordance with SDP 19/01</p> <p>The Auditor concludes the available evidence adequately demonstrates Full Compliance with the Approval Condition.</p>	Fully Compliant

Sea Dumping Permit 19/01 Conditions					
Dredge Phase	Condition Number	Approval Condition	Available Evidence	Audit Findings and Comments	Compliance
			<ul style="list-style-type: none"> Performance of Environmental Monitoring Report 		
ACCESS FOR OBSERVERS					
	SDP 15	At least two nominees of the Managing Agency are to be afforded access to witness, inspect, examine or audit any part of the operations, including any dumping or monitoring activity, the vessel or any other equipment, or any documented records, and are to be provided with any necessary assistance in carrying out their duties.	<ul style="list-style-type: none"> NQBP emails and correspondence 	<p>Two GBRMPA personnel undertook site visit onboard THSD Brisbane on 1-2 April.</p> <p>The Auditor concludes the available evidence adequately demonstrates Full Compliance with the Approval Condition.</p>	Fully Compliant
MITIGATION MEASURES FOR PROTECTION OF MARINE SPECIES					
During	SDP 16	Before beginning dredging and dumping activities, North Queensland Bulk Ports Corporation Limited must check, using binoculars from the vessel, for marine mammals and/or turtles within the monitoring zone.	<ul style="list-style-type: none"> Auditor's on-board observations and photographs TSHD Brisbane Daily Logs Observation log on bridge 	<p>Auditor observed binoculars on bridge.</p> <p>Auditor observed observation log on bridge.</p> <p>No recorded sightings of marine mammals and/or turtles.</p> <p>The Auditor concludes the available evidence adequately demonstrates Full Compliance with the Approval Condition.</p>	Fully Compliant
During	SDP 17	If any marine mammals and/or turtles are sighted in the monitoring zone pursuant to Condition 16, dumping activities must not commence in the monitoring zone until 20 minutes after the last marine mammal and/or turtle is observed to leave the monitoring zone or the vessel is to move to	<ul style="list-style-type: none"> TSHD Brisbane Daily Logs Observation log on bridge Auditor's on-board observations and photographs 	<p>No recorded sightings of marine mammals and/or turtles during dumping activities.</p> <p>Dumping activities were not required to cease.</p> <p>The Auditor concludes the available evidence</p>	Fully Compliant

Sea Dumping Permit 19/01 Conditions					
Dredge Phase	Condition Number	Approval Condition	Available Evidence	Audit Findings and Comments	Compliance
		another area of the Approved Dredge Spoil Disposal Area to maintain a minimum distance of 300 metres between the vessel and any for marine mammals and/or turtles identified in Condition 16.		adequately demonstrates Full Compliance with the Approval Condition.	
ENVIRONMENTAL RISK AND INCIDENTS					
During	SDP 18	If, at any time during the course of the dumping activities, an environmental incident occurs or environmental risk is identified, all measures must be taken immediately by North Queensland Bulk Ports Corporation Limited to mitigate the environmental risk or the environmental impact. The environmental risk or environmental impact is to be reported as soon as practicable and followed by a written report within three days, to the Managing Agency, with details of the environmental incident or environmental risk, the measures taken, the success of those measures in addressing the environmental incident or environmental risk and any additional measures proposed to be taken.	<ul style="list-style-type: none"> • TSHD Brisbane Daily Logs • Discussions with NQBP staff • Discussions with TSHD Brisbane crew • Auditor's on-board observations and photographs • Operational Incident Reports 	<p>No Incident ('environmental incident or environmental risk') was declared to the Auditor.</p> <p>No evidence observed by Auditor on TSHD Brisbane Daily Logs to suggest an 'environmental incident or environmental risk' occurred.</p> <p>The Auditor concludes the available evidence adequately demonstrates Full Compliance with the Approval Condition.</p>	Fully Compliant
	SDP 19	North Queensland Bulk Ports Corporation Limited must ensure that all persons engaged in the dumping activities under this permit, including the owner(s) and/or person(s) in charge of the vessel, comply with this permit and the requirements of the Act.	<ul style="list-style-type: none"> • TSHD Brisbane crew training logs • TSHD Brisbane emergency training records • TSHD Brisbane crew EMP signoff 	<p>All crew and staff appropriately trained.</p> <p>The Auditor concludes the available evidence adequately demonstrates Full Compliance with the Approval Condition.</p>	Fully Compliant

Sea Dumping Permit 19/01 Conditions					
Dredge Phase	Condition Number	Approval Condition	Available Evidence	Audit Findings and Comments	Compliance
MONITORING AND REPORTING					
During	SDP 20	<p>North Queensland Bulk Ports Corporation Limited must keep records comprising either weekly plotting sheets or a certified extract of the ship's log which detail:</p> <p>a. the times and dates of when each dumping run is commenced and finished;</p> <p>b. the position (as determined by GPS) of the vessel at the beginning and end of each dumping run, with the inclusion of the path of each dumping run; and</p> <p>c. the volume of dredge material (in-situ cubic metres) dumped and quantity in dry tonnes for the specified operational period and a comparison of these quantities with the total amount permitted under the permit on a daily basis.</p> <p>These records are to be retained by North Queensland Bulk Ports Corporation Limited for verification and audit purposes.</p>	<ul style="list-style-type: none"> TSHD Brisbane GPS track plots TSHD Brisbane Daily Logs Hydrological survey plans Bathymetric survey analysis and report Performance of Environmental Monitoring Report 	<p>Track Plots and Daily Logs record position and dredge / spoil volumes.</p> <p>Track Plots and Daily Logs indicate dredge operated within approved Maintenance Dredging Areas and approved Dredge Material Placement Area (DMPA), except one instance as described in Condition EA-G2.</p> <p>Monitoring reports and Performance report indicate compliance with location and volume parameters.</p> <p>The Auditor concludes the available evidence adequately demonstrates Full Compliance with the Approval Condition.</p>	Fully Compliant
Pre-	SDP 21	Prior to the commencement of each dredge campaign and dumping activities under this permit, North Queensland Bulk Ports Corporation Limited must provide a bathymetric survey of the spoil ground, conducted immediately prior to the commencement of works, to the Managing Agency.	<ul style="list-style-type: none"> NQBP email 27/03/2019 	<p>NQBP provided bathymetric surveys completed by Marine Safety Queensland to GBRMPA via email on 27/03/2019</p> <p>The Auditor concludes the available evidence adequately demonstrates Full Compliance with the Approval Condition.</p>	Fully Compliant
Post-	SDP 22	A bathymetric survey of the Approved Dredge Spoil Disposal Area defined in Condition 7 must	<ul style="list-style-type: none"> Hydrological survey plans Bathymetric survey analysis 	Hydrological survey plans and bathymetric analysis of Approved Dredge Area and the	Fully Compliant

Sea Dumping Permit 19/01 Conditions					
Dredge Phase	Condition Number	Approval Condition	Available Evidence	Audit Findings and Comments	Compliance
		be undertaken by North Queensland Bulk Ports Corporation Limited within one (1) month of the completion of each dredge campaign dumping activities authorised under this permit.	and report <ul style="list-style-type: none"> NQBP correspondence 28/5/2019 	Approved Dredge Spoil Disposal Areas completed and submitted to regulatory authorities. The Auditor concludes the available evidence adequately demonstrates Full Compliance with the Approval Condition.	
Post-	SDP 23	Within two (2) months of a bathymetric survey being undertaken as specified in Condition 22, North Queensland Bulk Ports Corporation Limited must provide a digital copy of each of the bathymetric surveys to the Australian Hydrographic Office, Locked Bag 8801, Wollongong, NSW 2500.	<ul style="list-style-type: none"> Hydrological survey plans Bathymetric survey analysis and report NQBP letter to AHO 5/6/19 NQBP upload to AHO 	Hydrological survey plans and bathymetric analysis uploaded electronically to AHO on 5 June, 2019 The Auditor concludes the available evidence adequately demonstrates Full Compliance with the Approval Condition.	Fully Compliant
Post-	SDP 24	North Queensland Bulk Ports Corporation Limited must provide a report on the bathymetry to the Managing Agency within two (2) months of the bathymetric survey being undertaken. The report must include a chart showing the change in sea floor bathymetry as a result of dumping and include written commentary on the volumes of dumped material in cubic metres that appear to have been retained within the Approved Dredge Spoil Disposal Area.	<ul style="list-style-type: none"> Hydrological survey plans Bathymetric survey analysis and report NQBP and DES emails 28/5/2019 and 28/6/2019 re. issuing report 	Hydrological survey plans and bathymetric analysis of Approved Dredge Area and the Approved Dredge Spoil Disposal Areas completed and submitted to regulatory authorities. Volume calculations demonstrate compliance with maximum permissible amounts. The Auditor concludes the available evidence adequately demonstrates Full Compliance with the Approval Condition.	Fully Compliant
Pre-	SDP 25	The North Queensland Bulk Ports Corporation Limited must, prior to 31 January each year, provide an annual report on the results of all field work, monitoring results and management requirements that form part of the Plans, as approved under Condition 10.	<ul style="list-style-type: none"> GBRMPA letter 23/1/19 	TSMD Brisbane commenced works on 31st March 2019. GBRMPA letter confirms "nil activity under the current permits for the purposes of any report due by the 31 January 2019." The Auditor concludes the available evidence	Fully Compliant

Sea Dumping Permit 19/01 Conditions					
Dredge Phase	Condition Number	Approval Condition	Available Evidence	Audit Findings and Comments	Compliance
				adequately demonstrates Full Compliance with the Approval Condition.	
Pre-	SDP 26	North Queensland Bulk Ports Corporation Limited must, prior to 1 March each year make available on the Permit Holder's website all monitoring reports in accordance with the approved Marine Environmental Monitoring Plan.	<ul style="list-style-type: none"> GBRMPA email 28/2/19 	<p>GBRMPA email confirms monitoring reports can be made available on NQBP webpage prior to 1st March 2020.</p> <p>The Auditor concludes the available evidence adequately demonstrates Full Compliance with the Approval Condition.</p>	Fully Compliant
Post-	SDP 27	<p>Within six (6) months of completion of each dredge campaign permitted herein, the Permit Holder must publish a report on their website addressing compliance with the requirements of the Environmental Thresholds Report, Maintenance Dredging Environmental Management Plan and the Marine Environmental Monitoring Plan, as verified by an independent audit. That audit report must include but not be limited to the following:</p> <p>a. deviations from the Environmental Thresholds Report; and</p> <p>b. identification of any changes that would be required to the Maintenance Dredging Environmental Management Plan, the Marine Environmental Monitoring Plan or the Environmental Thresholds Report before the next dredge campaign.</p>	<ul style="list-style-type: none"> Ethos NRM Interim Audit Report and this subsequent Final Audit Report Water Quality Monitoring report Coral Impact Monitoring Report Bathymetric survey analysis and report Performance of Environmental Monitoring Report 	<p>Ethos NRM Interim Audit Report and this subsequent Final Audit Report.</p> <p>The Auditor concludes the available evidence adequately demonstrates Full Compliance with the Approval Condition.</p>	Fully Compliant
Pre-	SDP 28	The Managing Agency must approve the auditor in writing prior to commencement of each independent audit referred to in Condition 27.	<ul style="list-style-type: none"> GBRMPA email 21/03/2019 	<p>GBRMPA email approved appointment of Ethos NRM as Independent Auditor.</p> <p>The Auditor concludes the available evidence adequately demonstrates Full Compliance</p>	Fully Compliant

Sea Dumping Permit 19/01 Conditions					
Dredge Phase	Condition Number	Approval Condition	Available Evidence	Audit Findings and Comments	Compliance
				with the Approval Condition.	
Post-	SDP 29	To facilitate annual reporting to the International Maritime Organization, North Queensland Bulk Ports Corporation Limited must report to the Department and the Managing Agency by 31 January each year, including on the day of the expiry of the permit or completion of all dredging under this permit, information at Appendix 2 to this permit, or in a format as approved by the Department from time to time.	<ul style="list-style-type: none"> Appendix 2 completed by Kevin Kane - Senior Manager Environment and Planning, NQBP, 31/5/2019. Issued to GBRMPA via email on 31/5/2019 	The Auditor concludes the available evidence adequately demonstrates Full Compliance with the Approval Condition.	Fully Compliant
Pre-	SDP 30	The Permit Holder must ensure that all notifications, plans and reports that require approval under this permit are submitted to the Managing Agency no less than 40 business days before the relevant works are proposed to commence.	<ul style="list-style-type: none"> GBRMPA emails 19/02/2019 and 28/02/2019 	<p>TSHD Brisbane commenced works on 31st March 2019.</p> <p>GBRMPA emails on 19/02/2019 and 28/02/2019, acknowledged that "that all endeavors have been made to supply the required pre-works notifications as soon as practicable after the permit was granted, being 19 February 2019".</p> <p>The Auditor concludes the available evidence adequately demonstrates Full Compliance with the Approval Condition.</p>	Fully Compliant

6.4 Appendix 1.4. Audit Findings for Development Approval - Operational (Tidal) Works – Ref 1805-5537 SPD

Development Approval - Operational (Tidal) Works – Ref 1805-5537 SPD Conditions					
Dredge Phase	Condition Number	Approval Condition	Available Evidence	Audit Findings and Comments	Compliance
COORDINATOR GENERAL CONDITIONS					
During	AM2	A research and monitoring program to determine the impact and mitigation of impacts shall be undertaken in accordance with the program design -"Deepwater seagrass and algae dynamics in Hay Point: measuring variability and monitoring impacts of capital dredging". This research and monitoring program shall commence prior to the disturbance of any marine plants associated with the capital dredging of the apron areas and departure path for the Port of Hay Point.		No Capital dredging undertaken. Condition not triggered. Annual seagrass surveys are undertaken in the Mackay and Hay Point areas through NQBP partnership with JCU TropWater.	Not Applicable
Pre-	AM3	Written notification of the date of commencement of dredging works must be provided to the District Officer, Queensland Boating and Fisheries Patrol ..., and the Department of Agriculture and Fisheries, at least 15 days prior to the commencement of dredging works.	<ul style="list-style-type: none"> NQBP email to DAF 31/03/2019 re. commencement of works and earlier advice in pre-dredging TACC meeting on 14/02/2019 	The Auditor concludes the available evidence adequately demonstrates Full Compliance with the Approval Condition.	Fully Compliant
Post-	AM4	A written report which details the completed development works must be provided to the District Officer, Queensland Boating and Fisheries Patrol ..., and the Department of Agriculture and Fisheries within 60 days of the completion of development works.	<ul style="list-style-type: none"> Bathymetric survey analysis and report NQBP email to DAF 02/07/2019 re. completion of works and bathymetric survey results 	The Auditor concludes the available evidence adequately demonstrates Full Compliance with the Approval Condition.	Fully Compliant
Pre-	AM5	A strategy to reduce the risk of introduction and spread of marine pest species must be developed	<ul style="list-style-type: none"> NQBP invasive marine pest (IMP) monitoring program 	The Auditor concludes the available evidence adequately demonstrates Full Compliance	Fully Compliant

Development Approval - Operational (Tidal) Works – Ref 1805-5537 SPD Conditions

Dredge Phase	Condition Number	Approval Condition	Available Evidence	Audit Findings and Comments	Compliance
		<p>by North Queensland Bulk Ports in consultation with the Department of Agriculture and Fisheries. The strategy must include:</p> <p>(a) protocols to minimise the risk of introduction of marine pests from the spoil pathways and hopper of the dredge, and</p> <p>(b) pre-and post-dredging sampling surveys for known introduced marine pests within the apron area, departure path and spoil disposal site according to minimum standards agreed between DPI&F and PCQ, and achievable within the projected timeframes of the project.</p>	<ul style="list-style-type: none"> Port of Hay Point Marine Environmental Monitoring Program Port of Brisbane IMS - TSHD Brisbane Hopper Management Plan Port of Brisbane TSHD Brisbane EMP 	with the Approval Condition.	

IPDC00339006A12 CONDITIONS**General**

During	G1	<p>All works are to be constructed in accordance with the attached approved drawings and the Specifications as detailed on these drawings.</p> <p>41-14520-001 D 08/12/2005</p> <p>41-14520-002 D 6/12/2005</p> <p>NQBP2018-029, Figure 1 28/11/2018</p>	<ul style="list-style-type: none"> Port of Hay Maintenance Dredging EMP TSHD Brisbane - Hay Point Maintenance Dredging EMP Marine Environment Monitoring-Program Bathymetric survey analysis and report 	<p>Specifications and listed drawings form part of various Plans which are subject to other conditions assessed in this Audit Report, and found to be compliant.</p> <p>The Auditor concludes the available evidence adequately demonstrates Full Compliance with the Approval Condition.</p>	Fully Compliant
Pre-	A1	<p>The administering authority must be advised in writing of the date of commencement of dredging, at least ten days prior to that date.</p>	<ul style="list-style-type: none"> NQBP email to DAF 31/03/2019 re. commencement of works, and TACC meeting 	<p>The Auditor concludes the available evidence adequately demonstrates Full Compliance with the Approval Condition.</p>	Fully Compliant

Development Approval - Operational (Tidal) Works – Ref 1805-5537 SPD Conditions					
Dredge Phase	Condition Number	Approval Condition	Available Evidence	Audit Findings and Comments	Compliance
			14/02/2019.		
During	A2	All reasonable and practicable measures must be taken to prevent environmental harm being caused and to minimise environmental harm where impact on the marine environment is unavoidable.		Not Applicable. Condition is an overarching statement.	Not Applicable
Long-term Maintenance Dredging Management Plan					
Pre-	A3	Prior to the commencement of maintenance dredging and disposal works, the permit holder must submit a Long-term Maintenance Dredging Management Plan to the administering authority.	<ul style="list-style-type: none"> NQBP letter to DES 19/02/2019 	<p>NQBP submitted Long-term Maintenance Dredging Management Plan to DES</p> <p>The Auditor concludes the available evidence adequately demonstrates Full Compliance with the Approval Condition.</p>	Fully Compliant
Pre-	A4	The permit holder must not carry out any of the maintenance dredging works permitted herein unless the administering authority has advised the permit holder in writing that the relevant components of the Long-term Maintenance Dredging Management Plan have been approved.	<ul style="list-style-type: none"> Port of Hay Point Long-term Maintenance Dredge Management Plan 2018 – 2043 Port of Hay Point Maintenance Dredging EMP TSHD Brisbane - Hay Point Maintenance Dredging EMP Marine Environment Monitoring-Program NQBP and DES emails approving IEMS 	<p>Long-term Maintenance Dredge Management Plan and associated EMPs and Monitoring Program were approved and implemented as documented by Monitoring reports and this Audit Report.</p> <p>The Auditor concludes the available evidence adequately demonstrates Full Compliance with the Approval Condition.</p>	Fully Compliant
Pre-	A5	The permit holder must provide any amendments to the Long-term Maintenance Dredging Management Plan to the administering authority at least 28 days prior to the implementation of the proposed amendments, except where amendments must be	<ul style="list-style-type: none"> Port of Hay Point Long-term Maintenance Dredge Management Plan 2018 – 2043 	Plans updated by NQBP and approved by Regulatory Authorities as an 'Integrated Environmental Management System' (IEMS) 28 days prior to dredging operations	Fully Compliant

Development Approval - Operational (Tidal) Works – Ref 1805-5537 SPD Conditions					
Dredge Phase	Condition Number	Approval Condition	Available Evidence	Audit Findings and Comments	Compliance
		implemented to prevent environmental harm or to ensure compliance with this development approval.	<ul style="list-style-type: none"> Port of Hay Maintenance Dredging EMP TSHD Brisbane - Hay Point Maintenance Dredging EMP Marine Environment Monitoring Program NQBP correspondence with Regulatory Authorities 	<p>commencing.</p> <p>The Auditor concludes the available evidence adequately demonstrates Full Compliance with the Approval Condition.</p>	
Pre-	A6	If the administering authority provides the permit holder with any comment on the proposed amendments (referenced in condition A5) within 21 days of receiving the document, the permit holder must have due regard to those comments when implementing the proposed amendments.	<ul style="list-style-type: none"> Various NQBP and DES emails discussing content and amendments to Long-term Maintenance Dredge Management Plan and associated EMPs, and Monitoring Program, which formed approved IEMS 	<p>All suggested improvements were incorporated into relevant documents</p> <p>The Auditor concludes the available evidence adequately demonstrates Full Compliance with the Approval Condition.</p>	Fully Compliant
During	A7	The permit holder, employees, officers, subcontractors and agents must comply with and ensure that all activities undertaken in connection with this development approval are undertaken in accordance with the development approval, and the Long Term Maintenance Dredging Management Plan approved by the administering authority from time to time.		<p>Not Applicable.</p> <p>Condition is an overarching statement.</p>	Not Applicable
Construction and Maintenance of the Departure Path and Apron					
During	A8	The removal of material from the departure channel, apron area and berth pockets is to be confined within the boundaries of the approved navigational infrastructure as shown in Figure 1 – Port of Hay	<ul style="list-style-type: none"> TSHD Brisbane GPS track plots TSHD Brisbane Daily Logs 	Track plots, hydrological survey plans and bathymetric analysis confirm that dredging remained within approved boundaries and that disposed material was evenly placed	Fully Compliant

Development Approval - Operational (Tidal) Works – Ref 1805-5537 SPD Conditions					
Dredge Phase	Condition Number	Approval Condition	Available Evidence	Audit Findings and Comments	Compliance
		Point Maintenance Dredge Areas or alternatively used for beach nourishment or beneficial use on land. Spoil is to be deposited in a mosaic pattern within the spoil disposal site to minimise impact on the regeneration of benthic flora and fauna, in accordance with the Environmental Management Plan (referenced in condition A3).	<ul style="list-style-type: none"> Hydrological survey plans Bathymetric survey analysis and report 	<p>throughout the DMPA.</p> <p>The Auditor concludes the available evidence adequately demonstrates Full Compliance with the Approval Condition.</p>	
During	A9	The maximum depth of the departure path and apron is to be limited to 15.6 metres below Lowest Astronomical Tide, including over dredging.	<ul style="list-style-type: none"> TSHD Brisbane GPS track plots TSHD Brisbane Daily Logs Hydrological survey plans Bathymetric survey analysis and report Discussions with NQBP staff 	<p>Hydrological survey plans and bathymetric analysis confirm that max dredging depth was 15.6m LAT, except directly adjacent to berth pockets (i.e. DBCT Berth 4 where maximum depth reached 19.1m below LAT). Dredging of the berth batter slopes in the apron region to this depth was permitted based on drawing 41-14520-002 (Adaptive Strategies, 2019). Hence the increased depth does not constitute a non-compliance.</p> <p>The Auditor concludes the available evidence adequately demonstrates Full Compliance with the Approval Condition.</p>	Fully Compliant
During	A10	If material has been removed from outside of the boundaries specified, or if the batters are steeper than those designated, those areas may need to be repaired to the satisfaction of the administering authority.		<p>Not Applicable.</p> <p>No material was removed from outside of the specified approved boundaries.</p>	Not Applicable
During	A11	Dredging is to be carried out using a trailer suction hopper dredge only.	<ul style="list-style-type: none"> NQBP contract with Port Of Brisbane Pty Ltd to use TSHD Brisbane Auditor's Observations 	<p>TSHD Brisbane is a trailing suction hopper dredge.</p> <p>The Auditor concludes the available evidence adequately demonstrates Full Compliance</p>	Fully Compliant

Development Approval - Operational (Tidal) Works – Ref 1805-5537 SPD Conditions					
Dredge Phase	Condition Number	Approval Condition	Available Evidence	Audit Findings and Comments	Compliance
				with the Approval Condition.	
During	A12	No blasting is to be undertaken.	<ul style="list-style-type: none">Discussions with NQBP staffAuditor’s observations	No Blasting occurred. The Auditor concludes the available evidence adequately demonstrates Full Compliance with the Approval Condition.	Fully Compliant
Dredge Spoil Disposal					
During	A14	Dredge spoil is to be disposed of within the Material Relocation Area defined by the following coordinates (in GDA94) and shown in Figure 1: Port of Hay Point – Maintenance Dredging Areas. Longitude Latitude 149.3019269 -21.21998327 149.3348576 -21.20192259 149.3342955 -21.1655219 149.2806085 -21.19450986	<ul style="list-style-type: none">TSHD Brisbane GPS track plotsTSHD Brisbane Daily LogsHydrological survey plansBathymetric survey analysis and report	Track plots, hydrological survey plans and bathymetric analysis confirm that disposal of dredge spoil remained within the approved DMPA. The Auditor concludes the available evidence adequately demonstrates Full Compliance with the Approval Condition.	Fully Compliant
During	A15	The level of dredge spoil within the spoil ground must not exceed a maximum height of 10 metres below Lowest Astronomical Tide.	<ul style="list-style-type: none">Hay Point Dredge Material Placement Area : Post-Dredge Hydrographic Survey, 7 May, 2019Bathymetric survey analysis and reportPerformance of Environmental Monitoring Report	Post-Dredge hydrographic survey and analysis indicates dredge spoil did not exceed a maximum height of 10 metres below Lowest Astronomical Tide. The Auditor concludes the available evidence adequately demonstrates Full Compliance with the Approval Condition.	Fully Compliant
During	A16	Any material that is deposited outside of the		Not Applicable.	Not Applicable

Development Approval - Operational (Tidal) Works – Ref 1805-5537 SPD Conditions					
Dredge Phase	Condition Number	Approval Condition	Available Evidence	Audit Findings and Comments	Compliance
		boundaries of the proposed spoil ground may be required to be removed to the satisfaction of the administering authority.		No material was deposited outside of the approved boundaries.	
Protected Species					
During	A17	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.	<ul style="list-style-type: none"> Auditor's on-board observations and photographs 	<p>Fauna exclusion deflectors / chains and hydro jets observed on dredge head by Auditor. Single chain missing and was listed on maintenance schedule for repair.</p> <p>The Auditor concludes the available evidence adequately demonstrates Full Compliance with the Approval Condition.</p>	Fully Compliant
Pre-	A18	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, and implemented, to the satisfaction of the administering authority.	<ul style="list-style-type: none"> Port of Hay Point Maintenance Dredging EMP TSHD Brisbane - Hay Point Maintenance Dredging EMP NQBP and DES emails approving IEMS 	<p>Measures to reduce risk of injury to turtles and marine species of conservation significance were incorporated into EMPs and approved by DES.</p> <p>The Auditor concludes the available evidence adequately demonstrates Full Compliance with the Approval Condition.</p>	Fully Compliant
During	A19	Dredging and spoil disposal activities must cease, or relocate to another site, if dugongs, turtles, or other marine species of conservation significance, are either likely to be struck or captured, or are observed within 150 metres of the activities being undertaken.	<ul style="list-style-type: none"> TSHD Brisbane Daily Logs Auditor's on-board observations and photographs Observation log on bridge 	<p>No recorded sightings of dugongs, turtles, or cetaceans.</p> <p>Auditor observed binoculars on bridge.</p> <p>Auditor observed observation log on bridge.</p> <p>The Auditor concludes the available evidence adequately demonstrates Full Compliance with the Approval Condition.</p>	Fully Compliant

Development Approval - Operational (Tidal) Works – Ref 1805-5537 SPD Conditions					
Dredge Phase	Condition Number	Approval Condition	Available Evidence	Audit Findings and Comments	Compliance
During	A20	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.	<ul style="list-style-type: none"> • TSHD Brisbane Daily Logs • Auditor's on-board observations and photographs • Observation log on bridge 	<p>No recorded sightings of dugongs, turtles, or cetaceans.</p> <p>No notification required.</p> <p>The Auditor concludes the available evidence adequately demonstrates Full Compliance with the Approval Condition.</p>	Fully Compliant
Water Quality Management					
Pre-	A21	Monitoring of coral communities for the effect of suspended sediment on coral health, must be undertaken as per the requirements of the Long-term Maintenance Dredging Management Plan	<ul style="list-style-type: none"> • Marine Environmental Monitoring Program • Coral Impact Monitoring Report 	<p>Coral Monitoring in accordance with approved Marine Environmental Monitoring Program was undertaken by Vision Environment. Results were documented in the Coral Impact Monitoring Report.</p> <p>The Auditor concludes the available evidence adequately demonstrates Full Compliance with the Approval Condition.</p>	Fully Compliant
During	A22	Sediment plume validation monitoring must be undertaken over a range of sea state conditions during the first four (4) weeks of commencement of dredging activities in accordance with methodology defined in consultation with the administering authority.	<ul style="list-style-type: none"> • Sediment plume monitoring by Vision Environment (surface water quality) and James Cook University (benthic water quality) • Sediment plume 'validation' by Port & Coastal Solutions 	<p>Monitoring was undertaken and documented as required.</p> <p>The Auditor concludes the available evidence adequately demonstrates Full Compliance with the Approval Condition.</p>	Fully Compliant
During	A23	Dredge track records that are time stamped and indicate the draught of the dredge are to be retained.	<ul style="list-style-type: none"> • TSHD Brisbane GPS track plots • TSHD Brisbane Daily Logs • Electronic copies provided to Auditor by NQBP 	<p>The Auditor concludes the available evidence adequately demonstrates Full Compliance with the Approval Condition.</p>	Fully Compliant

Development Approval - Operational (Tidal) Works – Ref 1805-5537 SPD Conditions					
Dredge Phase	Condition Number	Approval Condition	Available Evidence	Audit Findings and Comments	Compliance
Post-	A24	A report detailing the extent to which modelled data correlates with recorded data, and the implications of any significant variation for biodiversity values within areas affected by the sediment plume, must be submitted to the administering authority within 1 month of completion of the sediment plume validation monitoring.	<ul style="list-style-type: none"> Sediment plume monitoring by Vision Environment (surface water quality) and James Cook University (benthic water quality) Sediment plume 'validation' by Port & Coastal Solutions. NQBP submitted to DES on 13-06-2019 	<p>Monitoring was undertaken, documented and submitted to regulatory authorities as required.</p> <p>The Auditor concludes the available evidence adequately demonstrates Full Compliance with the Approval Condition.</p>	Fully Compliant
During	A25	If water quality thresholds, as a measure of coral health impact, specified in the Long-term Maintenance Dredging Management Plan are exceeded, measures must be implemented to reduce the impact of water quality as per requirements of the Long-term Maintenance Dredging Management Plan.	<ul style="list-style-type: none"> Water Quality Monitoring report Coral Impact Monitoring Report Performance of Environmental Monitoring Report 	<p>No water quality thresholds, as a measure of coral health impact, were exceeded.</p> <p>No Applicable.</p>	Not Applicable
During	A26	If the turbidity impact limits specified in the Long-term Maintenance Dredging Management Plan are exceeded, the administering authority must be advised, within 24 hours of the event, of the corrective action that has been or will be implemented.	<ul style="list-style-type: none"> Water Quality Monitoring report Coral Impact Monitoring Report Performance of Environmental Monitoring Report 	<p>Turbidity at Round Top Island exceeded the 90th percentile duration exceedance, with site entering into Management Zone C – 'Respond'. Adaptive management measures were implemented and 'Cease dredging' level was not reached.</p> <p>The Auditor concludes the available evidence adequately demonstrates Full Compliance with the Approval Condition.</p>	Fully Compliant
Reporting					
Pre-	A27a	Prior to the commencement of maintenance dredging, a report shall be provided to the	<ul style="list-style-type: none"> NQBP email 27/03/2019 Hydrological survey plans 	NQBP provided bathymetric surveys completed by MSQ to GBRMPA / DES via	Fully Compliant

Development Approval - Operational (Tidal) Works – Ref 1805-5537 SPD Conditions					
Dredge Phase	Condition Number	Approval Condition	Available Evidence	Audit Findings and Comments	Compliance
		administering authority containing information on the rate of siltation within areas to be dredged, the quantity of material to be removed, and the extent of migration of dredge spoil within and outside of the spoil ground.		email on 27/03/2019. The Auditor concludes the available evidence adequately demonstrates Full Compliance with the Approval Condition.	
Post-	A27	Monitoring reports must be prepared and submitted to the administering authority upon completion of the dredging and spoil disposal works. This report shall include: - results of the monitoring required by this development approval and the Long-term Maintenance Dredging Management Plan; - a daily summary of dredge movements and disposal activity (map based); - an evaluation or explanation of the data from these monitoring programs; - details of any turtle captures by the dredge and the species involved; - details of any complaints received including investigations undertaken, conclusions formed, and action taken; - a summary of significant equipment failures or events that have potential environmental management consequences; - an outline of corrective actions that will or have been taken to minimise or reduce environmental harm; and - the quantity (volume in cubic metres) and location of dredging material removed and disposed of.	<ul style="list-style-type: none"> Hydrological survey plans Hydrological survey plans Bathymetric survey analysis and report Water Quality Monitoring report Coral Health Monitoring report Performance of Environmental Monitoring Report NQBL and DES emails 28/5/2019 and 28/6/2019 re. issuing reports This final audit report 	All monitoring reports have been completed and submitted to regulatory authorities as required. The Auditor concludes the available evidence adequately demonstrates Full Compliance with the Approval Condition.	Fully Compliant

Development Approval - Operational (Tidal) Works – Ref 1805-5537 SPD Conditions					
Dredge Phase	Condition Number	Approval Condition	Available Evidence	Audit Findings and Comments	Compliance
Post-	A28	Within three (3) months of completion of maintenance dredging and associated spoil disposal, submit a report from a Registered Professional Engineer of Queensland to the administering authority certifying that the works (including any other associated works) have been constructed in accordance with the approved drawings and these conditions	<ul style="list-style-type: none"> Hydrological survey plans Bathymetric survey analysis and report Performance of Environmental Monitoring Report NQBP and DES emails 28/6/2019 re. issuing report 	<p>Bathymetric survey analysis and report includes assessment by Marine Safety Queensland (MSQ) that concludes dredge volumes are compliant.</p> <p>Plans and report were issued to regulatory authorities.</p> <p>The Auditor concludes the available evidence adequately demonstrates Full Compliance with the Approval Condition.</p>	Fully Compliant
Hydrographic Survey Requirements					
Pre- Post-	A29	Prior to the commencement of the capital or maintenance dredging and associated spoil disposal, and within three (3) months of completion of these works, hydrographic surveys of the bed levels of the area dredged and spoil disposal site must be completed.	<ul style="list-style-type: none"> Hydrological survey plans Bathymetric survey analysis and report Performance of Environmental Monitoring Report NQBP emails 27/03/2019 and 28/6/2019 	<p>NQBP provided pre- and post- dredging bathymetric surveys and associated bathymetric analysis report to regulatory authorities.</p> <p>The Auditor concludes the available evidence adequately demonstrates Full Compliance with the Approval Condition.</p>	Fully Compliant
Pre- Post	A30	<p>The hydrographic surveys must be carried out in accordance with the following requirements:</p> <ul style="list-style-type: none"> Sounding lines shall be spaced at not more than 20 metre centres along the entire survey area (or over a lesser area or density if supported by the administering authority); Soundings shall include all areas where dredged material was removed and deposited, and shall continue 100 metres beyond those areas; 	<ul style="list-style-type: none"> Email approval by DES of MSQ survey method, 13-03-2019 Hydrological survey plans Bathymetric survey analysis and report Performance of Environmental Monitoring Report 	<p>Bathymetric surveys undertaken by Queensland Government Hydrographic Services - Marine Safety Queensland (MSQ) in accordance with approved methodology.</p> <p>The Auditor concludes the available evidence adequately demonstrates Full Compliance with the Approval Condition.</p>	Fully Compliant

Development Approval - Operational (Tidal) Works – Ref 1805-5537 SPD Conditions					
Dredge Phase	Condition Number	Approval Condition	Available Evidence	Audit Findings and Comments	Compliance
		<ul style="list-style-type: none"> - Soundings shall be taken at every change in grade so as to accurately define the profile of the bed along the line; - Soundings shall be plotted on a plan to a suitable scale; - The datum for levels shall be Port Datum (Lowest Astronomical Tide); - The plans of the surveys shall clearly identify the location of the batters, departure path, apron, adjacent berths, and other features; - The report shall include representative cross sections from the hydrographic survey, detailing the previous and current bed levels, and design depth; and - The plans of the surveys and cross sections shall be forwarded in duplicate to the administering authority, within one month of completion of each survey. 			

6.5 Appendix 1.5. Audit Findings for TSHD Brisbane – Environmental Management Plan

TSHD Brisbane – Environmental Management Plan: Hay Point Maintenance Works (March 2019)					
Dredge Phase	Condition Number	Approval Condition	Available Evidence	Audit Findings and Comments	Compliance
3.1 Waste Management - General and Recycling Wastes					
During	EMP 1	Supply of appropriate collection bins in areas such as galley, crew quarters and mess	<ul style="list-style-type: none"> Auditor's on-board observations and photographs 	The Auditor concludes the available evidence adequately demonstrates Full Compliance with the Approval Condition.	Fully Compliant
During	EMP 2	Transfer of bins as required to large bins on-deck	<ul style="list-style-type: none"> Auditor's on-board observations and photographs 	The Auditor concludes the available evidence adequately demonstrates Full Compliance with the Approval Condition.	Fully Compliant
During	EMP 3	All on-deck bins secured in position to prevent movement whilst at sea	<ul style="list-style-type: none"> Auditor's on-board observations and photographs 	The Auditor concludes the available evidence adequately demonstrates Full Compliance with the Approval Condition.	Fully Compliant
During	EMP 4	Material placed in bin to be as compacted as possible to reduce space requirements	<ul style="list-style-type: none"> Auditor's on-board observations and photographs 	The Auditor concludes the available evidence adequately demonstrates Full Compliance with the Approval Condition.	Fully Compliant
During	EMP 5	Where facilities exist to recycle material, appropriate separation of refuse	<ul style="list-style-type: none"> Auditor's on-board observations and photographs 	The Auditor concludes the available evidence adequately demonstrates Full Compliance with the Approval Condition.	Fully Compliant
During	EMP 6	Bin lids to be chained down to prevent wind-blown material loss at all times	<ul style="list-style-type: none"> Auditor's on-board observations and photographs 	The Auditor concludes the available evidence adequately demonstrates Full Compliance with the Approval Condition.	Fully Compliant
During	EMP 7	All collection points to be emptied to on-deck bin when 75% capacity	<ul style="list-style-type: none"> Auditor's on-board observations and photographs Discussions with TSHD 	The Auditor concludes the available evidence adequately demonstrates Full Compliance with the Approval Condition.	Fully Compliant

TSHD Brisbane – Environmental Management Plan: Hay Point Maintenance Works (March 2019)					
Dredge Phase	Condition Number	Approval Condition	Available Evidence	Audit Findings and Comments	Compliance
			Brisbane crew		
During	EMP 8	Visual check to ensure that on-deck bins have sufficient capacity to retain general waste until next scheduled on-shore transfer	<ul style="list-style-type: none"> Discussions with TSHD Brisbane crew 	The Auditor concludes the available evidence adequately demonstrates Full Compliance with the Approval Condition.	Fully Compliant
During	EMP 9	Wastes shall not be burnt	<ul style="list-style-type: none"> Auditor's on-board observations and photographs Discussions with TSHD Brisbane crew 	The Auditor concludes the available evidence adequately demonstrates Full Compliance with the Approval Condition.	Fully Compliant
During	EMP 10	Licensed collector to be used to collect general refuse for transfer to approved facility	<ul style="list-style-type: none"> TSHD Brisbane waste receipts ToxFree Waste online literature 	<p>TSHD Brisbane waste receipts confirm segregated waste was collected by ToxFree.</p> <p>Toxfree (part of Cleanaway Group) is licenced for Regulated Waste.</p> <p>The Auditor concludes the available evidence adequately demonstrates Full Compliance with the Approval Condition.</p>	Fully Compliant
During	EMP 11	Bin lids to be chained in position during transfer to prevent material loss	<ul style="list-style-type: none"> Auditor's dock-side observations and photographs Discussions with TSHD Brisbane crew 	The Auditor concludes the available evidence adequately demonstrates Full Compliance with the Approval Condition.	Fully Compliant
8.3.2 Waste Management – Sewage Treatment					
During	EMP 12	All sewage effluent (including greywaters and blackwater) generated onboard shall be directed to the onboard treatment system	<ul style="list-style-type: none"> Auditor's on-board observations and photographs Discussions with TSHD Brisbane crew 	<p>Onboard tanks and treatment system observed.</p> <p>The Auditor concludes the available evidence adequately demonstrates Full Compliance with the Approval Condition.</p>	Fully Compliant

TSHD Brisbane – Environmental Management Plan: Hay Point Maintenance Works (March 2019)					
Dredge Phase	Condition Number	Approval Condition	Available Evidence	Audit Findings and Comments	Compliance
During	EMP 13	Treated effluent shall be diverted to onboard holding tanks	<ul style="list-style-type: none"> Auditor's on-board observations and photographs Discussions with TSHD Brisbane crew 	<p>Onboard tanks and treatment system observed.</p> <p>The Auditor concludes the available evidence adequately demonstrates Full Compliance with the Approval Condition.</p>	Fully Compliant
During	EMP 14	Effluent from the treatment system and holding tank is to be discharged in appropriate locations to ensure compliance with relevant legislation	<ul style="list-style-type: none"> Auditor's on-board observations and photographs Auditor's dock-side observations Discussions with TSHD Brisbane crew 	<p>Dock-side effluent disposal points observed.</p> <p>The Auditor concludes the available evidence adequately demonstrates Full Compliance with the Approval Condition.</p>	Fully Compliant
During	EMP 15	Sludge tank to be pumped out as required by Chief Engineer. Operation of the sewage treatment system is in accordance with the Waste Management Plan	<ul style="list-style-type: none"> Auditor's on-board observations and photographs Discussions with TSHD Brisbane crew 	The Auditor concludes the available evidence adequately demonstrates Full Compliance with the Approval Condition.	Fully Compliant
During	EMP 16	Pump-out of sludge tank to be managed as for untreated sewage discharges and, by way of appropriately licensed contractors	<ul style="list-style-type: none"> Auditor's on-board observations and photographs Discussions with TSHD Brisbane crew 	The Auditor concludes the available evidence adequately demonstrates Full Compliance with the Approval Condition.	Fully Compliant
During	EMP 17	The sewage treatment system is to be managed and maintained as described in the sewage treatment manual), operational procedures manual, sewage log book and MP2	<ul style="list-style-type: none"> Auditor's on-board observations and photographs Discussions with TSHD Brisbane crew 	<p>Auditor observed documentation.</p> <p>The Auditor concludes the available evidence adequately demonstrates Full Compliance with the Approval Condition.</p>	Fully Compliant

8.3.3 Waste Management – Hazardous Waste

During	EMP 18	All hazardous waste to be stored in appropriate manner and clearly marked in accordance with legislative requirements	<ul style="list-style-type: none"> Auditor's on-board observations and photographs Discussions with TSHD Brisbane crew 	The Auditor concludes the available evidence adequately demonstrates Full Compliance with the Approval Condition.	Fully Compliant
During	EMP 19	All procedures to minimise and respond to spills shall be followed. Spill response equipment shall be easily identifiable and conveniently located. Spills will be cleaned up as soon as practicable	<ul style="list-style-type: none"> Auditor's on-board observations and photographs Discussions with TSHD Brisbane crew 	<p>Spill kits and the relevant instructions/emergency procedures were observed by the Auditor.</p> <p>The Auditor concludes the available evidence adequately demonstrates Full Compliance with the Approval Condition.</p>	Fully Compliant
During	EMP 20	A register of hazardous substances stored / used on the dredger will be kept and SDS sheets available via ChemAlert	<ul style="list-style-type: none"> Auditor's on-board observations and photographs Discussions with TSHD Brisbane crew 	The Auditor concludes the available evidence adequately demonstrates Full Compliance with the Approval Condition.	Fully Compliant
During	EMP 21	Hazardous waste to be collected by licensed contractor only, for disposal at approved facility. Appropriate waste tracking records will be retained	<ul style="list-style-type: none"> TSHD Brisbane waste receipts ToxFree Waste online literature 	<p>Toxfree (part of Cleanaway Group) is licenced for Regulated Waste. Waste is disposed of in accordance with state-specific regulatory requirements, however no evidence of waste tracking records retained by TSHD Brisbane.</p> <p>Auditor concludes the available evidence adequately demonstrates Compliance with the Approval Condition but that improvements are required.</p> <p>Improvement:</p> <p>There is an opportunity for improvement by TSHD Brisbane crew obtaining the necessary information form Toxfree regarding how and where the collected waste is treated and</p>	Compliant but Improvements Required

TSHD Brisbane – Environmental Management Plan: Hay Point Maintenance Works (March 2019)					
Dredge Phase	Condition Number	Approval Condition	Available Evidence	Audit Findings and Comments	Compliance
				disposed of, including tracking records.	
During	EMP 22	All procedures to minimise spills during transfer of hazardous waste to contractor shall be followed. Spill response equipment shall be easily identifiable and conveniently located	<ul style="list-style-type: none"> Auditor's on-board observations and photographs Discussions with TSHD Brisbane crew 	The Auditor concludes the available evidence adequately demonstrates Full Compliance with the Approval Condition.	Fully Compliant
During	EMP 23	Disposal of all hazardous waste to be recorded in accordance with the requirements of section A20 of the TSHD Brisbane Operational and Administration Procedures Manual	<ul style="list-style-type: none"> Auditor's on-board observations and photographs Discussions with TSHD Brisbane crew 	<p>TSHD Brisbane crew confirmed disposal of hazardous waste was undertaken in accordance with Section A20 of the TSHD Brisbane Operational and Administration Procedures Manual, however Auditor did not sight manual or records.</p> <p>Auditor concludes the available evidence adequately demonstrates Compliance with the Approval Condition but that improvements are required.</p> <p>Improvement:</p> <p>There is an opportunity for improvement by TSHD Brisbane crew by making TSHD Brisbane Operational and Administration Procedures Manual and associated records available</p>	Compliant but Improvements Required
8.4 Emissions Management					
During	EMP 24	All noise reduction equipment to be maintained as per manufacturers' specifications	<ul style="list-style-type: none"> Auditor's on-board observations and photographs On-board equipment 	The Auditor concludes the available evidence adequately demonstrates Full Compliance with the Approval Condition.	Fully Compliant

TSHD Brisbane – Environmental Management Plan: Hay Point Maintenance Works (March 2019)					
Dredge Phase	Condition Number	Approval Condition	Available Evidence	Audit Findings and Comments	Compliance
			maintenance procedures and records • Discussions with TSHD Brisbane crew		
During	EMP 25	Where the vessel is operating in an especially noise sensitive environment (e.g. close proximity to residential areas), crew are to be informed to minimise noise where possible	• Discussions with NQBP staff • Discussions with TSHD Brisbane crew	Dredging occurred within an operating port with multiple berths capable of accommodating vessels 2-3 times larger than the Brisbane TSHD. Dredging by TSHD Brisbane would have created less noise than 'normal background' operating noise. The Auditor concludes the available evidence adequately demonstrates Full Compliance with the Approval Condition.	Fully Compliant
During	EMP 26	All noise from activities must not exceed the acoustic quality objectives specified in the Environmental Protection Noise Policy 2008	• Discussions with NQBP staff • Discussions with TSHD Brisbane crew	Dredging occurred within an operating port with multiple berths capable of accommodating vessels 2-3 times larger than the Brisbane TSHD. Dredging by TSHD Brisbane would have created less noise than 'normal background' operating noise. The Auditor concludes the available evidence adequately demonstrates Full Compliance with the Approval Condition.	Fully Compliant
During	EMP 27	All lighting to be maintained as per manufacturers' specifications	• Auditor's on-board observations and photographs • On-board equipment maintenance procedures	The Auditor concludes the available evidence adequately demonstrates Full Compliance with the Approval Condition.	Fully Compliant

TSHD Brisbane – Environmental Management Plan: Hay Point Maintenance Works (March 2019)					
Dredge Phase	Condition Number	Approval Condition	Available Evidence	Audit Findings and Comments	Compliance
			and records • Discussions with TSHD Brisbane crew		
During	EMP 28	Where practicable, LED lighting will be used to provide more direct illumination of tasks and reduce light spill	• Auditor's on-board observations and photographs • On-board equipment maintenance procedures and records • Discussions with TSHD Brisbane crew	The Auditor concludes the available evidence adequately demonstrates Full Compliance with the Approval Condition.	Fully Compliant
During	EMP 29	Use of external vessel lighting will be minimised unless required for safety purposes	• Auditor's on-board observations and photographs • Discussions with TSHD Brisbane crew	The Auditor concludes the available evidence adequately demonstrates Full Compliance with the Approval Condition.	Fully Compliant
During	EMP 30	All combustion plant particularly main and auxiliary engines to be maintained as per manufactures' specifications	• Auditor's on-board observations and photographs • On-board equipment maintenance procedures and records • Discussions with TSHD Brisbane crew	The Auditor concludes the available evidence adequately demonstrates Full Compliance with the Approval Condition.	Fully Compliant
During	EMP 31	Appropriate adjustment of trim and ballast to ensure effective operation	• Auditor's on-board observations and photographs • Discussions with TSHD Brisbane crew	The Auditor concludes the available evidence adequately demonstrates Full Compliance with the Approval Condition.	Fully Compliant

TSHD Brisbane – Environmental Management Plan: Hay Point Maintenance Works (March 2019)

Dredge Phase	Condition Number	Approval Condition	Available Evidence	Audit Findings and Comments	Compliance
During	EMP 32	Exhaust stack to be visually monitored to ensure no visual dark emissions	<ul style="list-style-type: none"> Auditor's on-board observations and photographs Discussions with TSHD Brisbane crew 	The Auditor concludes the available evidence adequately demonstrates Full Compliance with the Approval Condition.	Fully Compliant
During	EMP 33	All equipment on board the TSHD Brisbane to be maintained as per manufacturers' specifications	<ul style="list-style-type: none"> Auditor's on-board observations and photographs On-board equipment maintenance procedures and records Discussions with TSHD Brisbane crew 	The Auditor concludes the available evidence adequately demonstrates Full Compliance with the Approval Condition.	Fully Compliant

8.5 Turbidity Management

During	EMP 34	Within the practicalities of the vessel, minimise the generation of plumes by control of the discharge weir system.	<ul style="list-style-type: none"> Auditor's on-board observations and photographs 	<p>Anti-turbidity control valves observed and operational procedure for below-keel discharge was noted by Auditor.</p> <p>The Auditor concludes the available evidence adequately demonstrates Full Compliance with the Approval Condition.</p>	Fully Compliant
During	EMP 35	Ensure dredging and material relocation is undertaken within the approved areas only by reference to electronic navigation aids and visual marks as required	<ul style="list-style-type: none"> TSHD Brisbane GPS navigation and track plots TSHD Brisbane Daily Logs 	Track Plots and Daily Logs indicate dredge operated within approved Maintenance Dredging Areas and approved Dredge Material Placement Area (DMPA), except one instance as described in Condition EA-G2 above.	Fully Compliant
During	EMP 36	Observe all site-specific requirements, which may influence dredging times or the use of overflow	<ul style="list-style-type: none"> Discussions with TSHD Brisbane crew 	Anti-turbidity control valves observed and operational procedure for below-keel	Fully Compliant

TSHD Brisbane – Environmental Management Plan: Hay Point Maintenance Works (March 2019)					
Dredge Phase	Condition Number	Approval Condition	Available Evidence	Audit Findings and Comments	Compliance
		dredging (e.g. tides, wind direction and velocity etc	<ul style="list-style-type: none"> Auditor's on-board observations and photographs 	<p>discharge was noted by Auditor.</p> <p>The Auditor concludes the available evidence adequately demonstrates Full Compliance with the Approval Condition.</p>	
During	EMP 37	NQBP to implement monitoring programs in accordance with their approved LMDMP and approvals	<ul style="list-style-type: none"> Marine Environment Monitoring-Program Water Quality Monitoring report Coral Impact Monitoring Report Bathymetric survey analysis and report Performance of Environmental Monitoring Report 	<p>Integrated Environmental Management System (IEMS) comprises of a series of documents approved by DES: Port of Hay Maintenance Dredging EMP, TSHD Brisbane - Hay Point Maintenance Dredging EMP, and Marine Environment Monitoring Program.</p> <p>IEMS address all DES requirements.</p> <p>Water Quality, Coral Health, Bathymetric and Performance reports submitted to regulatory authorities.</p> <p>The Auditor concludes the available evidence adequately demonstrates Full Compliance with the Approval Condition.</p>	Fully Compliant
8.6 Protected Marine Fauna					
During	EMP 38	Dredging and material placement only in approved areas	<ul style="list-style-type: none"> TSHD Brisbane GPS track plots TSHD Brisbane Daily Logs Electronic copies provided to Auditor by NQBP. Verbal advice from TSHD Brisbane Captain and Dredge Operations Manager 	<p>Track Plots and Daily Logs indicate dredge operated within approved Maintenance Dredging Areas and approved Dredge Material Placement Area (DMPA), except one instance as described in Condition EA – G2 above.</p> <p>The Auditor concludes the available evidence adequately demonstrates Full Compliance with the Approval Condition.</p>	Fully Compliant

TSHD Brisbane – Environmental Management Plan: Hay Point Maintenance Works (March 2019)					
Dredge Phase	Condition Number	Approval Condition	Available Evidence	Audit Findings and Comments	Compliance
			<ul style="list-style-type: none"> Verbal advice from NQBP Auditor's on-board observations and photographs Incident Report Ref.A1375058 		
During	EMP 39	Turtle deflectors must be fitted during all operations	<ul style="list-style-type: none"> Auditor's on-board observations and photographs 	<p>Fauna exclusion deflectors / chains and hydro jets observed on dredge head by Auditor. Single chain missing and was listed on maintenance schedule for repair.</p> <p>The Auditor concludes the available evidence adequately demonstrates Full Compliance with the Approval Condition.</p>	Fully Compliant
During	EMP 40	Load to be inspected on an opportunistic basis for marine fauna remains	<ul style="list-style-type: none"> Auditor's on-board observations and photographs Discussions with TSHD Brisbane crew 	<p>Opportunistic inspection of dredge load for marine fauna remains possible by dredge master from bridge</p> <p>The Auditor concludes the available evidence adequately demonstrates Full Compliance with the Approval Condition..</p>	Fully Compliant
During	EMP 41	Procedure for minimising turtle capture as set out in Dredging and Dredged Material Management Plan – TSHD Brisbane to be followed	<ul style="list-style-type: none"> Auditor's on-board observations and photographs 	<p>Fauna exclusion deflectors / chains and hydro jets observed on dredge head by Auditor. Single chain missing and was listed on maintenance schedule for repair.</p> <p>The Auditor concludes the available evidence adequately demonstrates Full Compliance with the Approval Condition.</p>	Fully Compliant
During	EMP 42	Final suction at the dredge head will be minimised when not in contact with the sea bed	<ul style="list-style-type: none"> Discussions with TSHD Brisbane crew 	The Auditor concludes the available evidence adequately demonstrates Full Compliance with the Approval Condition.	Fully Compliant

TSHD Brisbane – Environmental Management Plan: Hay Point Maintenance Works (March 2019)					
Dredge Phase	Condition Number	Approval Condition	Available Evidence	Audit Findings and Comments	Compliance
During	EMP 43	Vessel watch personnel to maintain watch in high risk areas and take necessary action where risk of collision exists	<ul style="list-style-type: none"> Discussions with TSHD Brisbane crew 	The Auditor concludes the available evidence adequately demonstrates Full Compliance with the Approval Condition.	Fully Compliant
During	EMP 44	Before commencing dredging, transport of dredge material to spoil ground or placement of dredge material at the placement area, the area within 300m from the vessel (the monitoring zone) shall be observed from an observation platform (with binoculars) for the presence of marine mammals and/or turtles in accordance with the sea dumping and marine park approval	<ul style="list-style-type: none"> TSHD Brisbane Daily Logs Auditor's on-board observations and photographs Observation log on bridge 	<p>No recorded sightings of dugongs, turtles, or cetaceans.</p> <p>Auditor observed binoculars on bridge.</p> <p>Auditor observed observation log on bridge.</p> <p>The Auditor concludes the available evidence adequately demonstrates Full Compliance with the Approval Condition.</p>	Fully Compliant
During	EMP 45	If marine mammals and/or turtles are observed within the monitoring zone, dredging, transport of dredge material to the spoil ground or placement of dredge material at the placement area may not commence for 20 minutes after last marine species has been sighted within the monitoring zone, or the vessel is to move to another area of the approved dredge or placement area to maintain a minimum distance of 300 metres between the vessel and any marine mammals and/or turtles	<ul style="list-style-type: none"> TSHD Brisbane Daily Logs Auditor's on-board observations and photographs Observation log on bridge 	<p>No recorded sightings of dugongs, turtles, or cetaceans.</p> <p>Auditor observed binoculars on bridge.</p> <p>Auditor observed observation log on bridge.</p> <p>The Auditor concludes the available evidence adequately demonstrates Full Compliance with the Approval Condition.</p>	Fully Compliant
During	EMP 46	Records of the observation and name(s) of observers to be recorded in the vessel log	<ul style="list-style-type: none"> TSHD Brisbane Daily Logs Auditor's on-board observations and photographs Observation log on bridge 	<p>Crew names recorded on Daily Logs and Observation log.</p> <p>The Auditor concludes the available evidence adequately demonstrates Full Compliance with the Approval Condition.</p>	Fully Compliant

8.7 Cultural Heritage

During	EMP 47	Ensure dredging and material relocation is undertaken within the approved areas only by reference to electronic navigation aids and visual marks as required	<ul style="list-style-type: none"> • TSHD Brisbane GPS track plots 	<p>TSHD Brisbane navigation and track plots GPS determined by GPS.</p> <p>The Auditor concludes the available evidence adequately demonstrates Full Compliance with the Approval Condition.</p>	Fully Compliant
During	EMP 48	Undertake opportunistic visual inspection of dredge load and dredge heads, reporting any items of suspected cultural significance. If items are found, retain and report to relevant authorities through Vessel Master, Environment Advisor and NQBP	<ul style="list-style-type: none"> • Discussions with TSHD Brisbane crew 	<p>No items of suspected cultural significance observed by crew.</p>	Fully Compliant
During	EMP 49	Observe all site-specific requirements which may influence dredge operations	<ul style="list-style-type: none"> • TSHD Brisbane Daily Logs • Auditor's on-board observations and photographs • Discussions with TSHD Brisbane crew 	<p>The Auditor concludes the available evidence adequately demonstrates Full Compliance with the Approval Condition.</p>	Fully Compliant

8.8 Ballast Water Management

During	EMP 50	Ballast tanks filled with freshwaters will be retained without treatment	<ul style="list-style-type: none"> • TSHD Brisbane Daily Logs • Auditor's on-board observations and photographs • Discussions with TSHD Brisbane crew 	<p>The Auditor concludes the available evidence adequately demonstrates Full Compliance with the Approval Condition.</p>	Fully Compliant
During	EMP 51	Any ballast tanks holding seawaters will be exchanged prior to arrival with seawaters at a location as distant from the coastline or other shallow (<100m) areas as possible, but not less than 12nm	<ul style="list-style-type: none"> • TSHD Brisbane Daily Logs • Auditor's on-board observations and photographs • Discussions with TSHD 	<p>The Auditor concludes the available evidence adequately demonstrates Full Compliance with the Approval Condition.</p>	Fully Compliant

TSHD Brisbane – Environmental Management Plan: Hay Point Maintenance Works (March 2019)					
Dredge Phase	Condition Number	Approval Condition	Available Evidence	Audit Findings and Comments	Compliance
			Brisbane crew		
During	EMP 52	A record will be kept of volumes, location and times of ballasting and de-ballasting operations	<ul style="list-style-type: none"> TSHD Brisbane Daily Logs Auditor's on-board observations and photographs Discussions with TSHD Brisbane crew 	Ballasting and de-ballasting operations recorded in ship's log. The Auditor concludes the available evidence adequately demonstrates Full Compliance with the Approval Condition.	Fully Compliant
8.9 Vessel Washdown					
During	EMP 53	Sweeping of deck in preference to washing where possible. Washdown of the deck and or dredge head shall only occur within the designated dredging or disposal areas. Only dredged material to be release as a result of vessel washing activities (i.e. no release of oil or other contaminants)	<ul style="list-style-type: none"> Auditor's on-board observations and photographs Discussions with TSHD Brisbane crew 	The Auditor concludes the available evidence adequately demonstrates Full Compliance with the Approval Condition.	Fully Compliant
8.10 Hopper Management					
During	EMP 54	Washdown of hopper from time to time and when TSHD Brisbane leaves the port area for other destinations	<ul style="list-style-type: none"> Discussions with TSHD Brisbane crew 	The Auditor concludes the available evidence adequately demonstrates Full Compliance with the Approval Condition.	Not Applicable
During	EMP 55	Washdown of the hopper within the designated placement area	<ul style="list-style-type: none"> Discussions with TSHD Brisbane crew 	The Auditor concludes the available evidence adequately demonstrates Full Compliance with the Approval Condition.	Fully Compliant
During	EMP 56	Consideration of weather and current conditions prior to discharge in material placement area	<ul style="list-style-type: none"> TSHD Brisbane GPS track plots 	The Auditor concludes the available evidence adequately demonstrates Full Compliance	Not Applicable

TSHD Brisbane – Environmental Management Plan: Hay Point Maintenance Works (March 2019)					
Dredge Phase	Condition Number	Approval Condition	Available Evidence	Audit Findings and Comments	Compliance
			<ul style="list-style-type: none"> Discussions with TSHD Brisbane crew 	with the Approval Condition.	
During	EMP 57	During discharge the TSHD Brisbane will move in such a way that the dislodging of material is assisted by the vessel movement	<ul style="list-style-type: none"> TSHD Brisbane GPS track plots Discussions with TSHD Brisbane crew 	The Auditor concludes the available evidence adequately demonstrates Full Compliance with the Approval Condition.	Fully Compliant
During	EMP 58	Hopper exchange activities carried out between ports will be recorded in the hopper exchange log	<ul style="list-style-type: none"> Discussions with TSHD Brisbane crew Auditor's on-board observations and photographs 	<p>Auditor's discussions with TSHD Brisbane crew indicate no hopper exchange activities were undertaken between ports.</p> <p>The Auditor concludes the available evidence adequately demonstrates Full Compliance with the Approval Condition.</p>	Fully Compliant
8.11 Bunkering of Fuel					
During	EMP 59	Licensed contractor is used to transfer fuels and levels shall be monitored	<ul style="list-style-type: none"> Auditor's on-board observations and photographs Discussions with TSHD Brisbane crew TSHD Brisbane bunkering records 	<p>Fuel bunkering for TSHD Brisbane completed by licenced operator.</p> <p>The Auditor concludes the available evidence adequately demonstrates Full Compliance with the Approval Condition.</p>	Fully Compliant
During	EMP 60	All appropriate spill kit equipment will be on site and all personnel will be trained in the use of spill kits	<ul style="list-style-type: none"> Auditor's on-board observations and photographs NQBP Internal Audit 	<p>Spill kits and the relevant instructions/emergency procedures were observed by the Auditor and noted in the Internal Audit.</p> <p>The Auditor concludes the available evidence adequately demonstrates Full Compliance with the Approval Condition.</p>	Fully Compliant

9.0 Incident Reporting

During	EMP 61	Incident Reporting for Non-emergency EMP non-conformances	<ul style="list-style-type: none"> Discussions with TSHD Brisbane crew Incident Reports 	<p>Incident Reports for 'non environmental harm' incidents were documented for:</p> <ul style="list-style-type: none"> An instance when dredge track plots extended beyond the designated dredging zone, and A power outage on the TSHD Brisbane while steaming. <p>Refer to Section 3.9 in Audit report</p>	Fully Compliant
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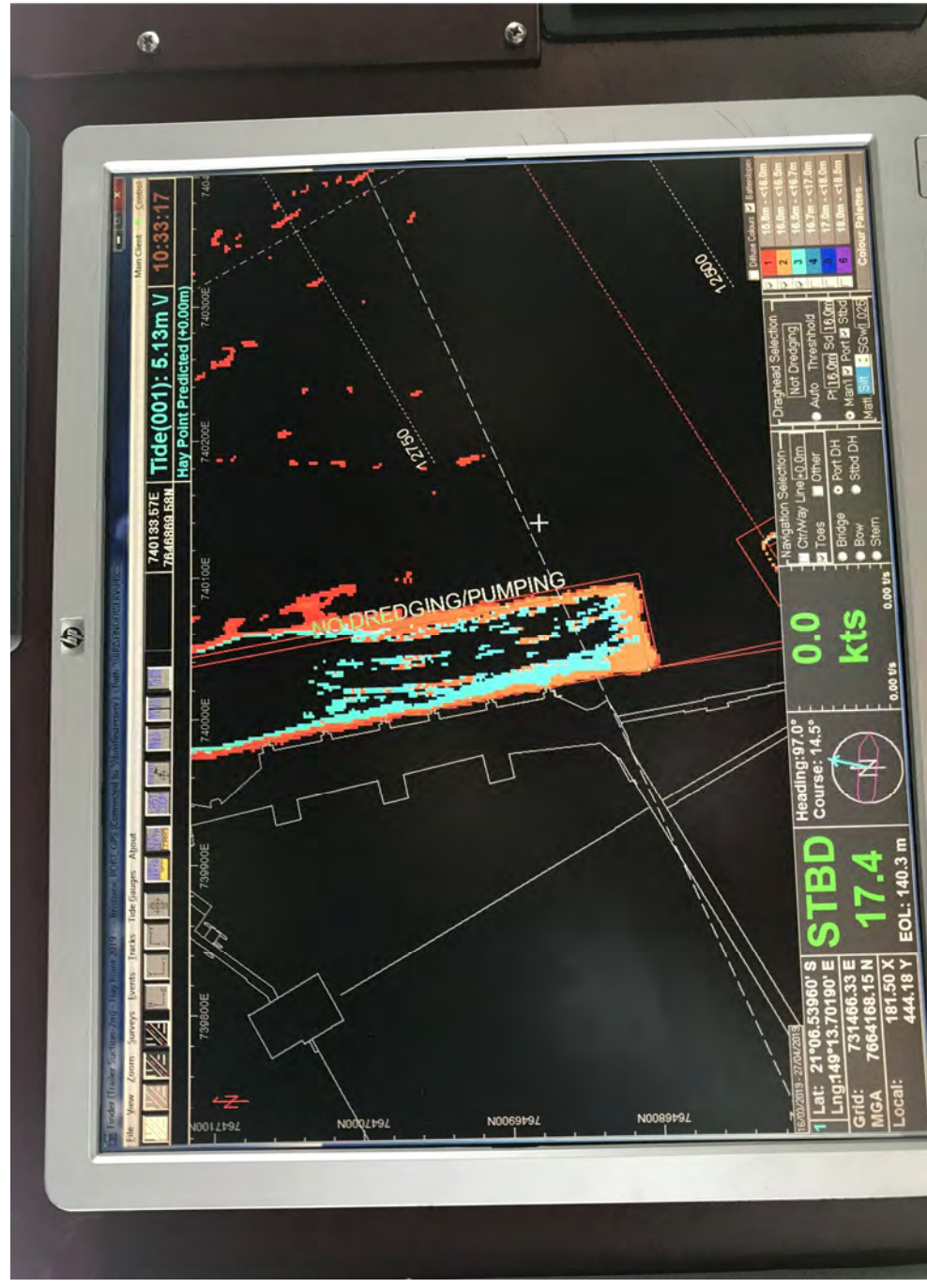
10.0 Environmental Monitoring

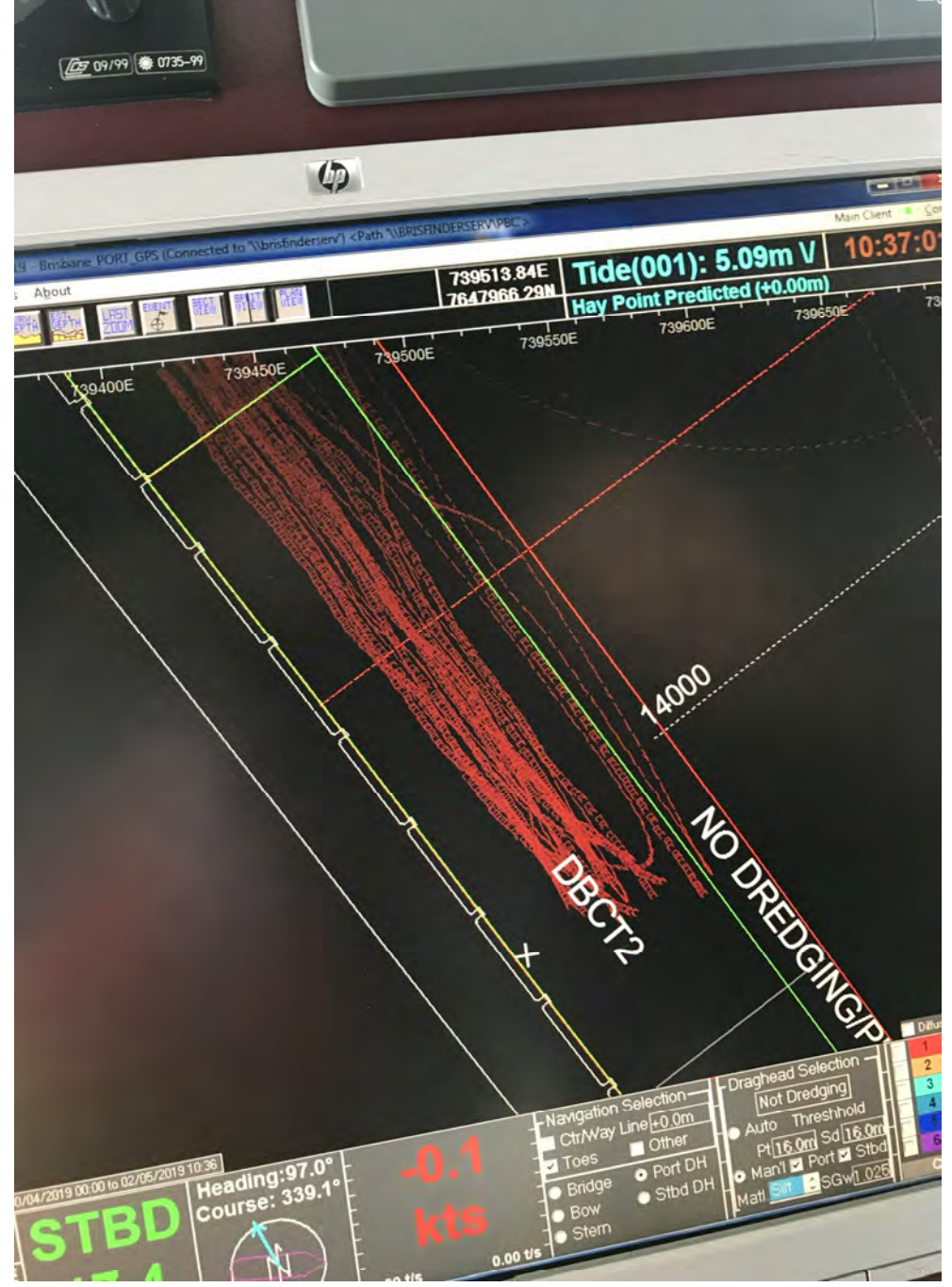
During	EMP 62	Environmental Monitoring of Items in Section 8 of EMP	<ul style="list-style-type: none"> Marine Environment Monitoring-Program Water Quality Monitoring report Coral Impact Monitoring Report Bathymetric survey analysis and report Performance of Environmental Monitoring Report TSHD Brisbane Marine Mammal observations log 	<p>Integrated Environmental Management System (IEMS) comprising of a series of documents were approved by DES: Port of Hay Maintenance Dredging EMP, TSHD Brisbane - Hay Point Maintenance Dredging EMP, and Marine Environment Monitoring Program.</p> <p>Reporting for Marine Environment Monitoring Program comprises of Water Quality, Coral Health, Bathymetric Analysis and Performance reports.</p> <p>Marine Mammal observations log retained on bridge.</p> <p>Equipment operational and maintenance manuals / logs retained on-board.</p> <p>The Auditor concludes the available evidence adequately demonstrates Full Compliance with the Approval Condition.</p>	Fully Compliant
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7 TSHD Brisbane On-board Photographs

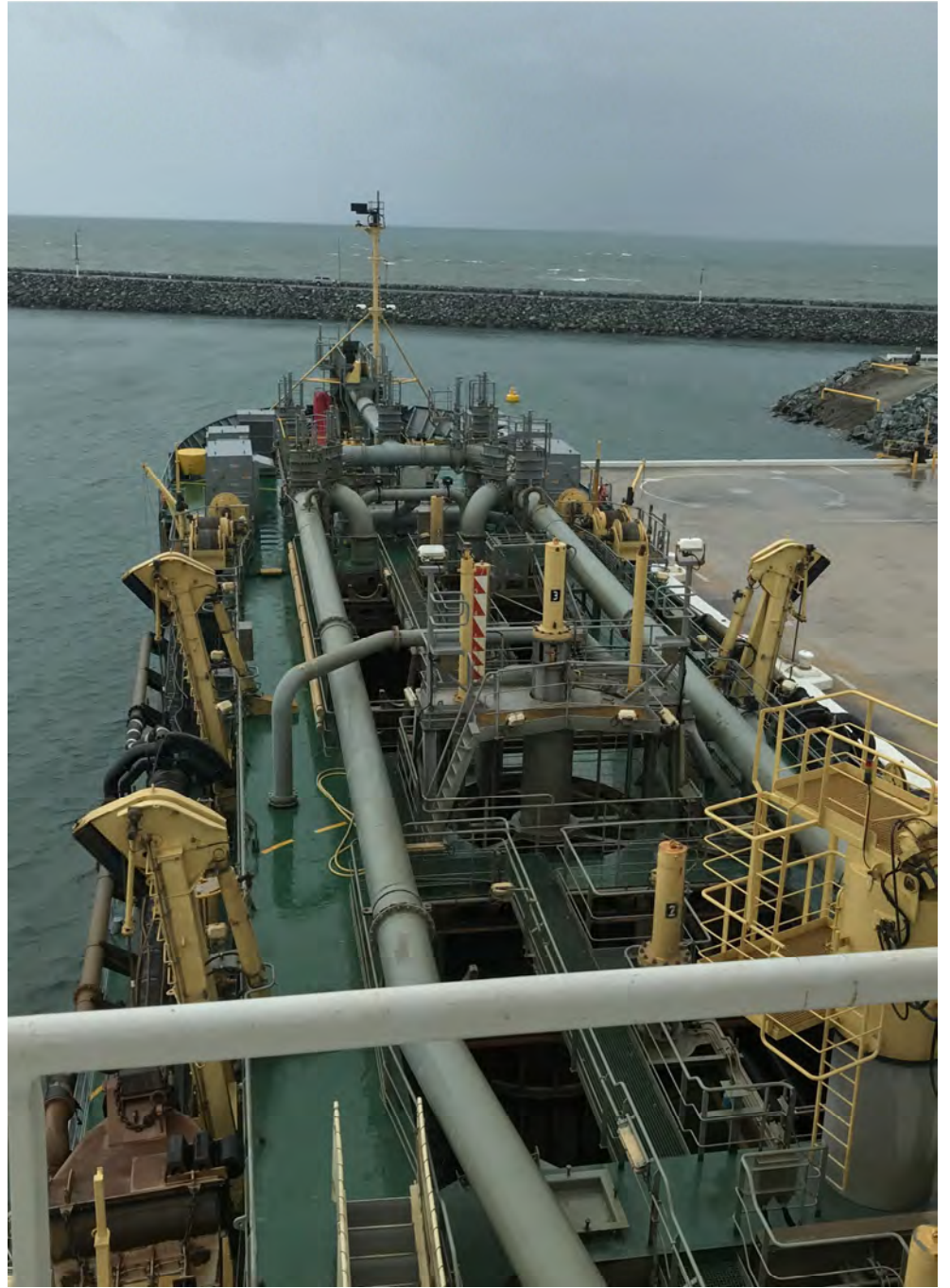
A selection of photographs from on-board TSHD Brisbane taken on 1st May, 2019 is presented below.



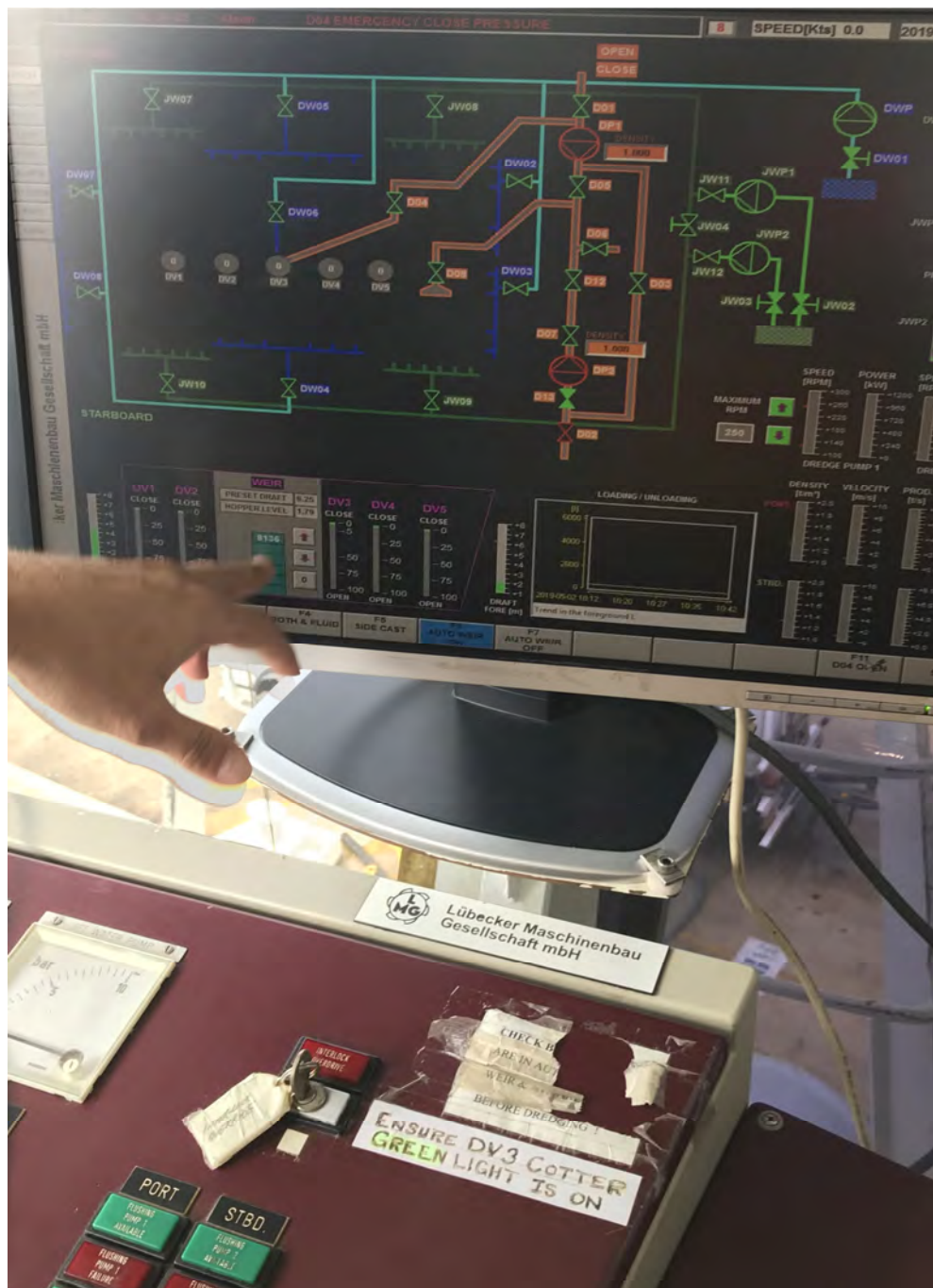




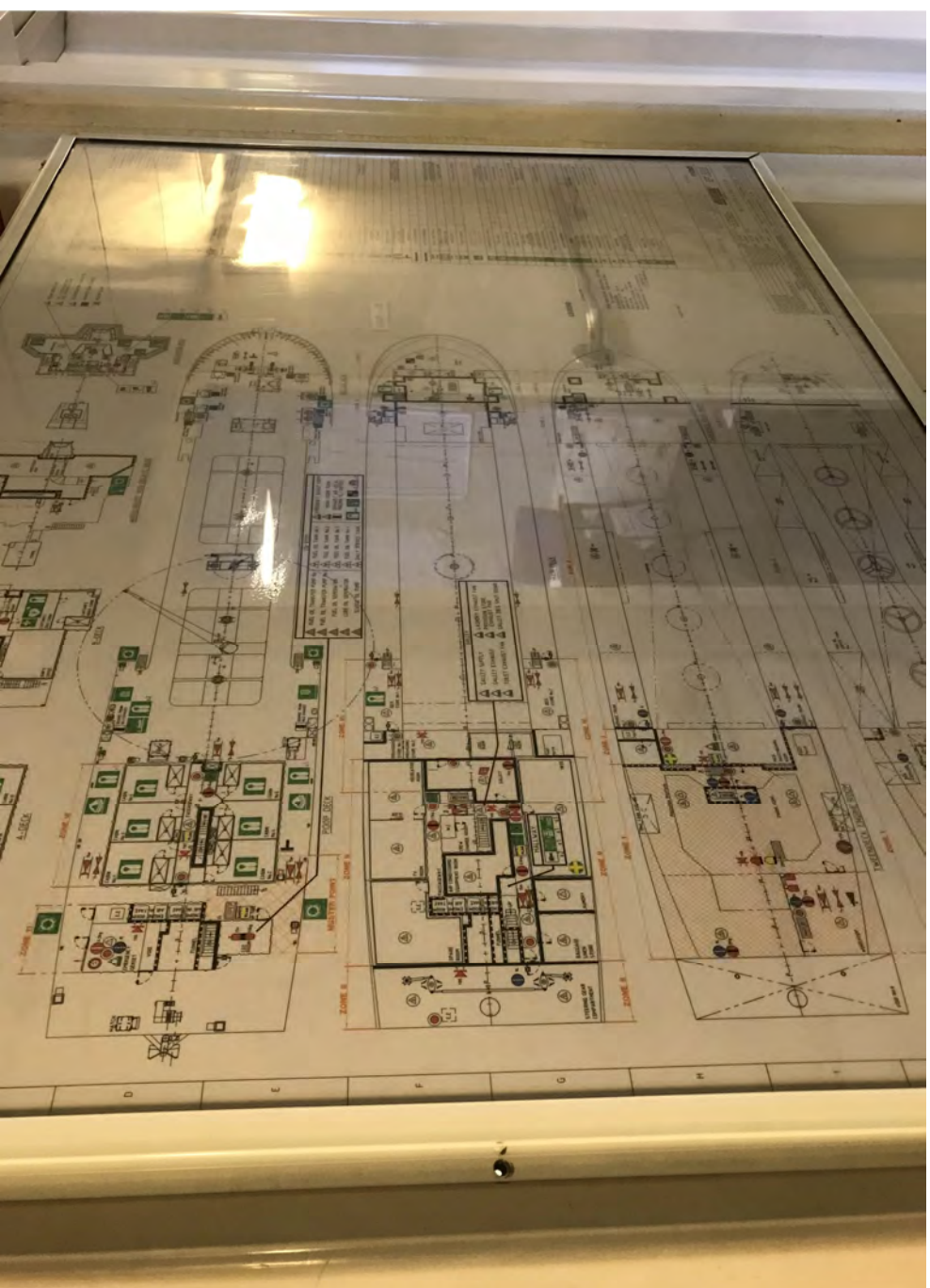
















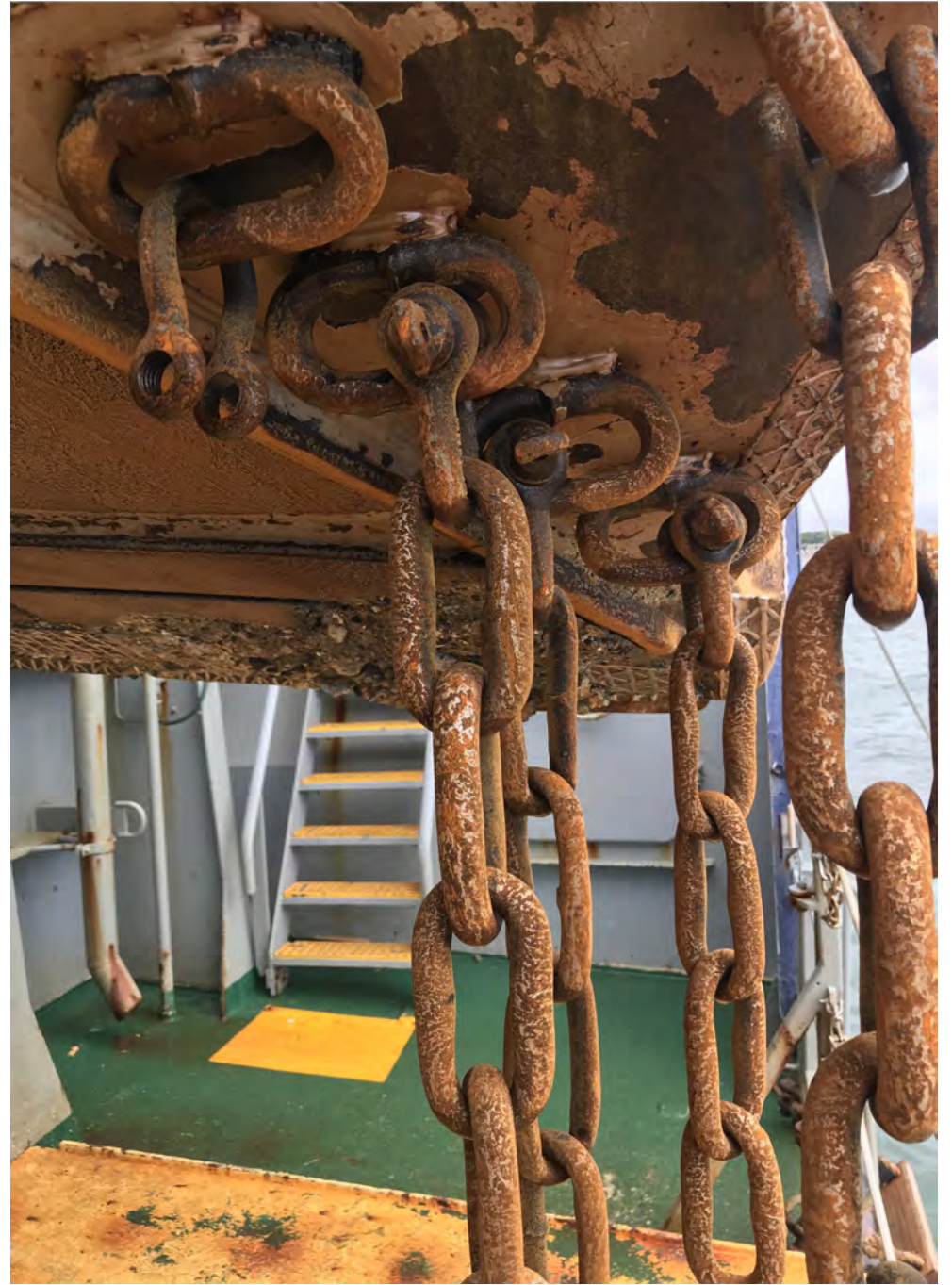
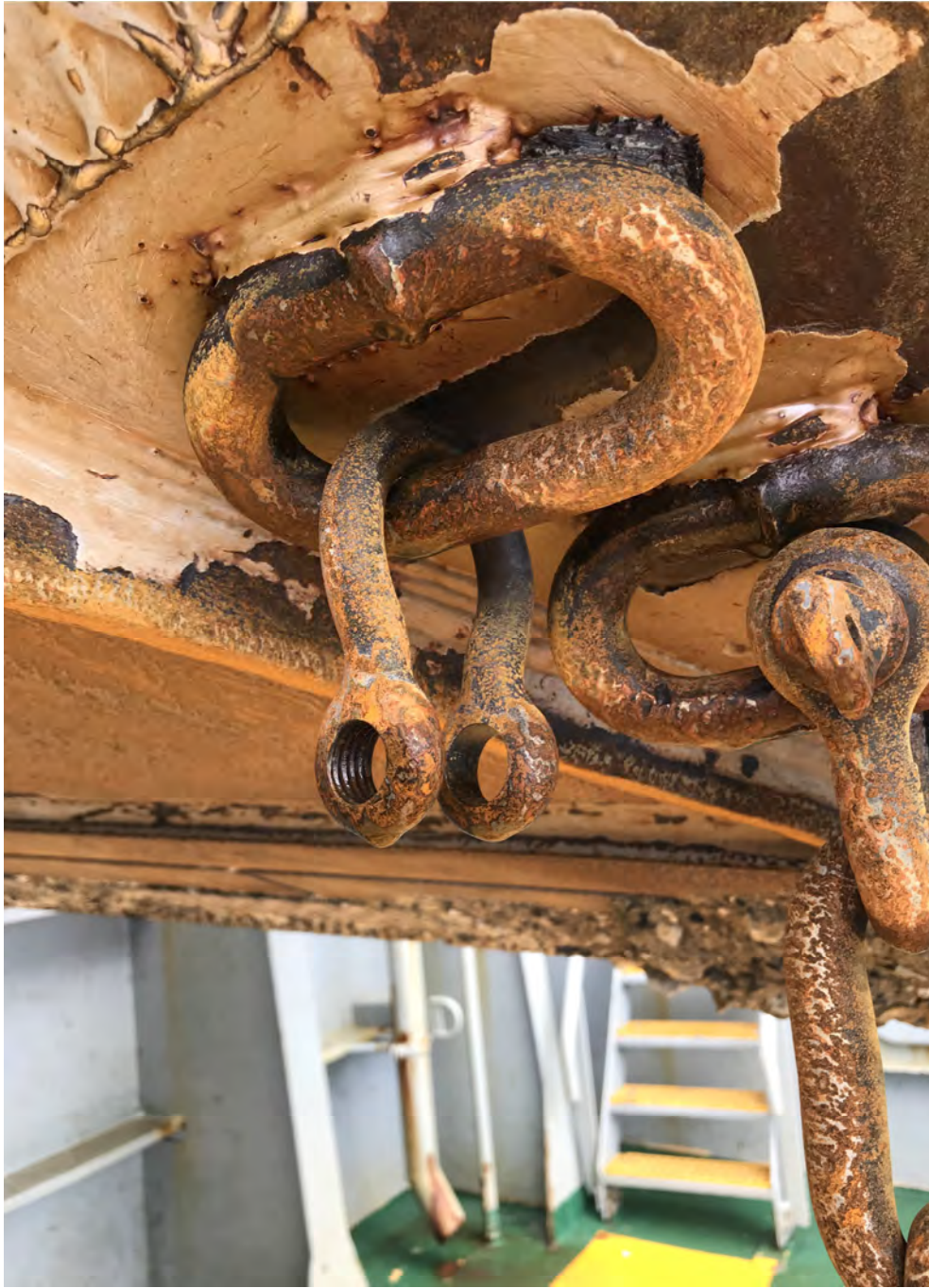


























Hay Point March/April/May 2019 EMP crew sign off sheet

Name	Signature
M Islam	<i>[Signature]</i>
D. Lamb	<i>[Signature]</i>
M Knight	<i>[Signature]</i>
L Lesina	<i>[Signature]</i>
A Gudge	<i>[Signature]</i>
M Polzi	<i>[Signature]</i>
S Nibbs	<i>[Signature]</i>
A Brown	<i>[Signature]</i>
S Ellwood	<i>[Signature]</i>
G Tonks	<i>[Signature]</i>
D Cracknell	<i>[Signature]</i>
E. McIlwain	<i>[Signature]</i>
D Hewson	<i>[Signature]</i>
A Haque	<i>[Signature]</i>
F Seymour	<i>[Signature]</i>
J Haigh	<i>[Signature]</i>
P McGeechan	<i>[Signature]</i>
C English	<i>[Signature]</i>
S. Hall	<i>[Signature]</i>
D. Volk	<i>[Signature]</i>
R. Stormonth	<i>[Signature]</i>
T Beaven	<i>[Signature]</i>
S Randell	<i>[Signature]</i>
J. Smith	<i>[Signature]</i>
D. Koch	<i>[Signature]</i>
D. Clarke	<i>[Signature]</i>
R Collins	<i>[Signature]</i>
R Haze	<i>[Signature]</i>
P Kozarov	<i>[Signature]</i>
P. Walsh	<i>[Signature]</i>
A Cullen	<i>[Signature]</i>
E Craig	<i>[Signature]</i>
S Johnson	<i>[Signature]</i>
K Chugg	<i>[Signature]</i>
N. Craike	<i>[Signature]</i>

M. SODING -

5/4/18.

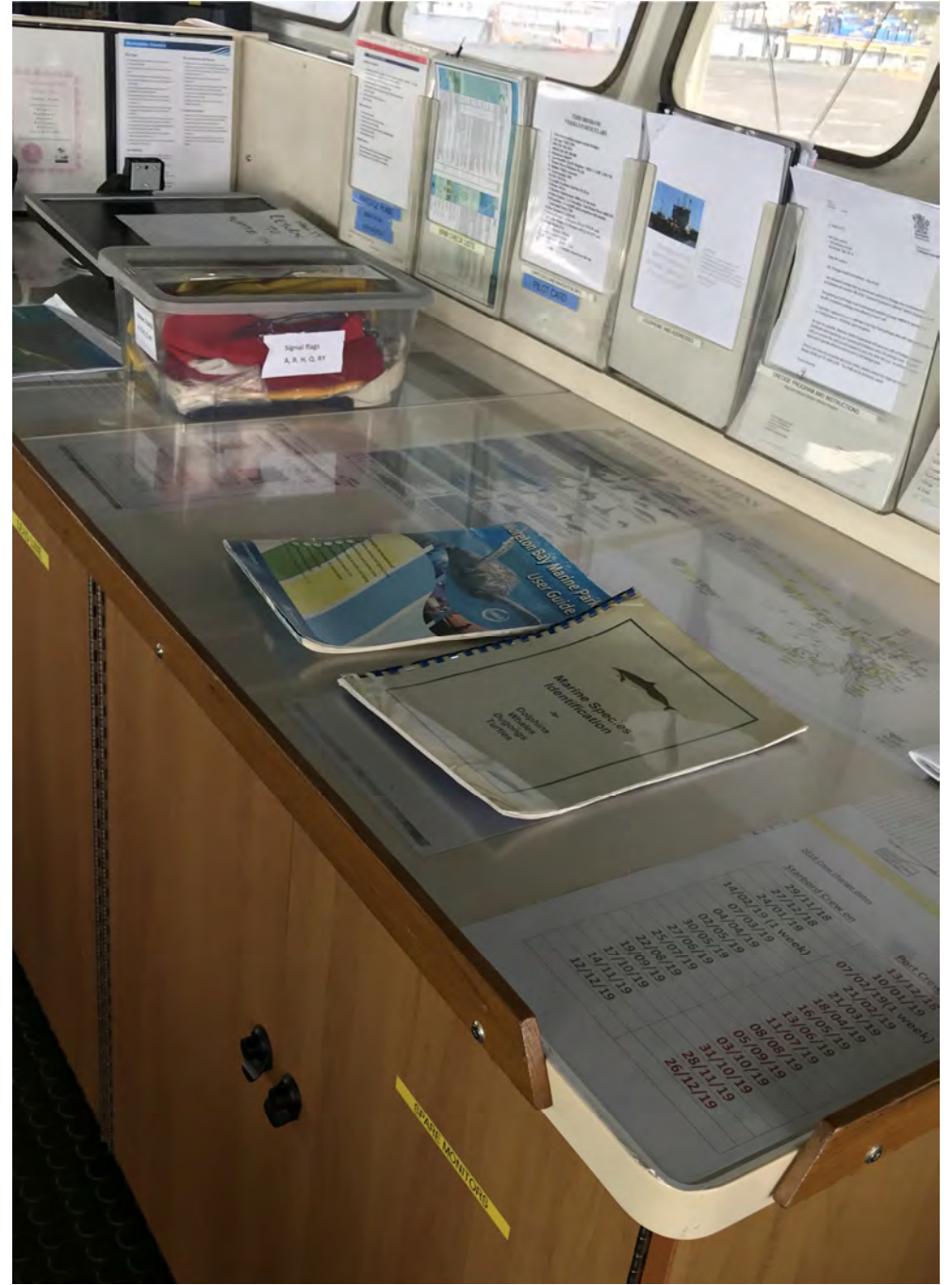
PORT of BRISBANE
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Environmental Management Plan – TSHD Brisbane

Hay Point Maintenance Works

March 2019



Work list for Thursday 01/09/18
0745 hours: Starboard side to Mackay HNS wharf

Task description	Personnel	Priority	Start	End	Remarks
Deck cleaning	crew	Low	0745	0800	
Deck up for rock ball	crew	Low	0800	0815	
Deck	crew	Low	0815	0830	
Deckage repairs & garbage bins	crew	Low	0830	0845	
Inspection of MFL unit	crew	Low	0845	0900	
Environmental Audit	crew	Low	0900	0915	
Deck transport	crew	Low	0915	0930	
Stores at land	crew	Low	0930	0945	
Start engine	crew	Low	0945	1000	

ETD: 1600 1600

Note: While travelling to or from the vessel everyone must wear suitcases footwear. "Things or cables" are not allowed

From: 11/09/18 to 11/09/18
STARBOARD LIFERAFT NO. 1

Rank	Name	Cable	Head count
Master	C. King	B Deck	
Bridge Master 1	S. E. Round	A Deck-Lab 1	
C. Chief Engineer	A. Hager	B Deck	
Sec. 1st Eng.	V. McArthur	A Deck-Lab 1 Port	
Sec. 2nd Eng.	T. Brown	Pump Deck-Lab 1	
Sec. 3rd Eng.	S. Mandell	Pump Deck-Lab 1	
C. Cook	B. C. King	Pump Deck-Lab 1	

PORT LIFERAFT NO. 1

Rank	Name	Cable	Head count
Bridge master 1	A. Lodge	A Deck-Lab 1 Inlet	
Bridge Master 2	D. E. Randall	A Deck-Lab 1 Inlet	
Sec. 1st Eng.	C. English	A Deck-Lab 1 Port	
C. P.	P. Korrer	Pump Deck-Lab 1	
C. P.	D. Korb	Pump Deck-Lab 1	
C. P.	P. Shage	A Deck-Lab 1 Inlet	

CHIEF OFFICERS LOG BOOK

From: 01/09/18 to 01/09/18
Mackay HNS wharf

Time	Task description	Personnel	Priority	Start	End	Remarks
0745	Deck cleaning	crew	Low	0745	0800	
0800	Deck up for rock ball	crew	Low	0800	0815	
0815	Deck	crew	Low	0815	0830	
0830	Deckage repairs & garbage bins	crew	Low	0830	0845	
0845	Inspection of MFL unit	crew	Low	0845	0900	
0900	Environmental Audit	crew	Low	0900	0915	
0915	Deck transport	crew	Low	0915	0930	
0930	Stores at land	crew	Low	0930	0945	
0945	Start engine	crew	Low	0945	1000	

ETD: 1600 1600

Note: While travelling to or from the vessel everyone must wear suitcases footwear. "Things or cables" are not allowed

From: 11/09/18 to 11/09/18
STARBOARD LIFERAFT NO. 1

Rank	Name	Cable	Head count
Master	C. King	B Deck	
Bridge Master 1	S. E. Round	A Deck-Lab 1	
C. Chief Engineer	A. Hager	B Deck	
Sec. 1st Eng.	V. McArthur	A Deck-Lab 1 Port	
Sec. 2nd Eng.	T. Brown	Pump Deck-Lab 1	
Sec. 3rd Eng.	S. Mandell	Pump Deck-Lab 1	
C. Cook	B. C. King	Pump Deck-Lab 1	

PORT LIFERAFT NO. 1

Rank	Name	Cable	Head count
Bridge master 1	A. Lodge	A Deck-Lab 1 Inlet	
Bridge Master 2	D. E. Randall	A Deck-Lab 1 Inlet	
Sec. 1st Eng.	C. English	A Deck-Lab 1 Port	
C. P.	P. Korrer	Pump Deck-Lab 1	
C. P.	D. Korb	Pump Deck-Lab 1	
C. P.	P. Shage	A Deck-Lab 1 Inlet	

Dredgemaster Handover Notes

From Crew: Port

Date: 02/05/2019

Dredgemaster Area Endorsements Status:

Oncoming D/M to check and update their own status in spreadsheet located on the console desktop Current, 6mth check required, Expired.

Inform the Master of any changes/Updates.

This Port: Mackay

Next Port: Cairns??? Or Townsville (Maybe)

Passage Plan to next Port: N/A

Departure Date (if known) N/A

Equipment:

Bow Thruster: Glen Fry has found a issue with the PLC that controls the bow thruster/Pitch controls when changing to wing stations. Same issue as reported last crew change, I believe it may be getting fixed at refit.

Generators/Power: ok

Steering Gear: Ok

Doppler Log: Same as usual

Hydraulics - off
Cotters - in
BNWAS - OFF
Bow thruster - OFF
STEERING - OFF
SLIDES - IN
BRAVO FLAG - up

ETD: 1400-1430

Note: While travelling to or from the

From: 21/04/19
STARBOARD

Rash
Master
Dredge Master 2
Chief Engineer
Sew. 2nd Eng.
Sew. C/P
Cook

PORT LIFERA

Dredge master 1
Dredge Master 2
Sew. 2nd Eng.
G.P.
G.P.
Superintendent



Standing
Orders

Risk Assessment Form

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