

EAST ARM WHARF EXPANSION WORKS

EPBC APPROVAL 2010/5304

COMPLIANCE REPORT #5 FOR THE PERIOD ENDING 31 DECEMBER 2016

1. Introduction..... 3
 Figure 1 - Location..... 4

2. Purpose of Report..... 5
 Table 1..... 6

1. Introduction

The East Arm Wharf Expansion Works in Darwin Harbour consists of the construction and operation of three separate components:

- A Marine Supply Base (MSB) – (completed in 2014)
- A multi-user barge ramp facility - (completed in 2016); and
- A tug pen and small ships basin- (pre-construction).

Documentation for the tug pen and small ships basin has been completed with the dredge and dredge spoil placement management plan being approved by the Minister on 30 April 2016.

The East Arm Wharf was leased to private company Landbridge Group in October 2015. The lease is for 99 years and covers the proposed location and operation of the tug pens and small ships berth that were part of the original East Arm Wharf Expansion Project. The Marine Supply Base was completed in 2014 prior to the lease of the Port and is managed as a BOOT operation (Build, Own, Operate, Transfer) by the ASCO Group and will be managed under this arrangement for 20 years before reverting back to the Northern Territory Government.

The Multi User Barge Ramp Facility was joint funded with the Department of Defence and is part of the Land Development Corporation's Common User Facility. The Land Development Corporation is a Northern Territory Government Corporation, and as such is a commercial entity that has to make decisions based on business needs.

The tug pen and small ships basin is now under the control of the Landbridge Group and all decisions regarding whether it proceeds or does not proceed are commercially based. The current status is that the project has not commenced due to commercial reasons.

The dredge spoil ponds at East Arm Wharf (which are within the Landbridge Lease Area), contain Pond 'D' which has been set aside as a protected habitat for migratory birds. Condition 36(b) requires bird counts at the Pond for five years after dredge spoil was last placed in Pond D. The last dredge spoil was placed in 2012 making 2017 the last year that mandatory bird counts are required. As the birds were counted prior to the project, it is likely that interested parties will continue to count the birds in the years to come.

Condition 40 requires the implementation of the Coastal Offsets Plan. The Plan has been approved and some requirements of the Plan have been implemented including the use of the Indigenous Rangers to complete dolphin sightings and surveys, remove rubbish and to test the quality of the water in the harbour. The 50 Hectares of Habitat has not been formalised and gazetted and will require more time to complete.

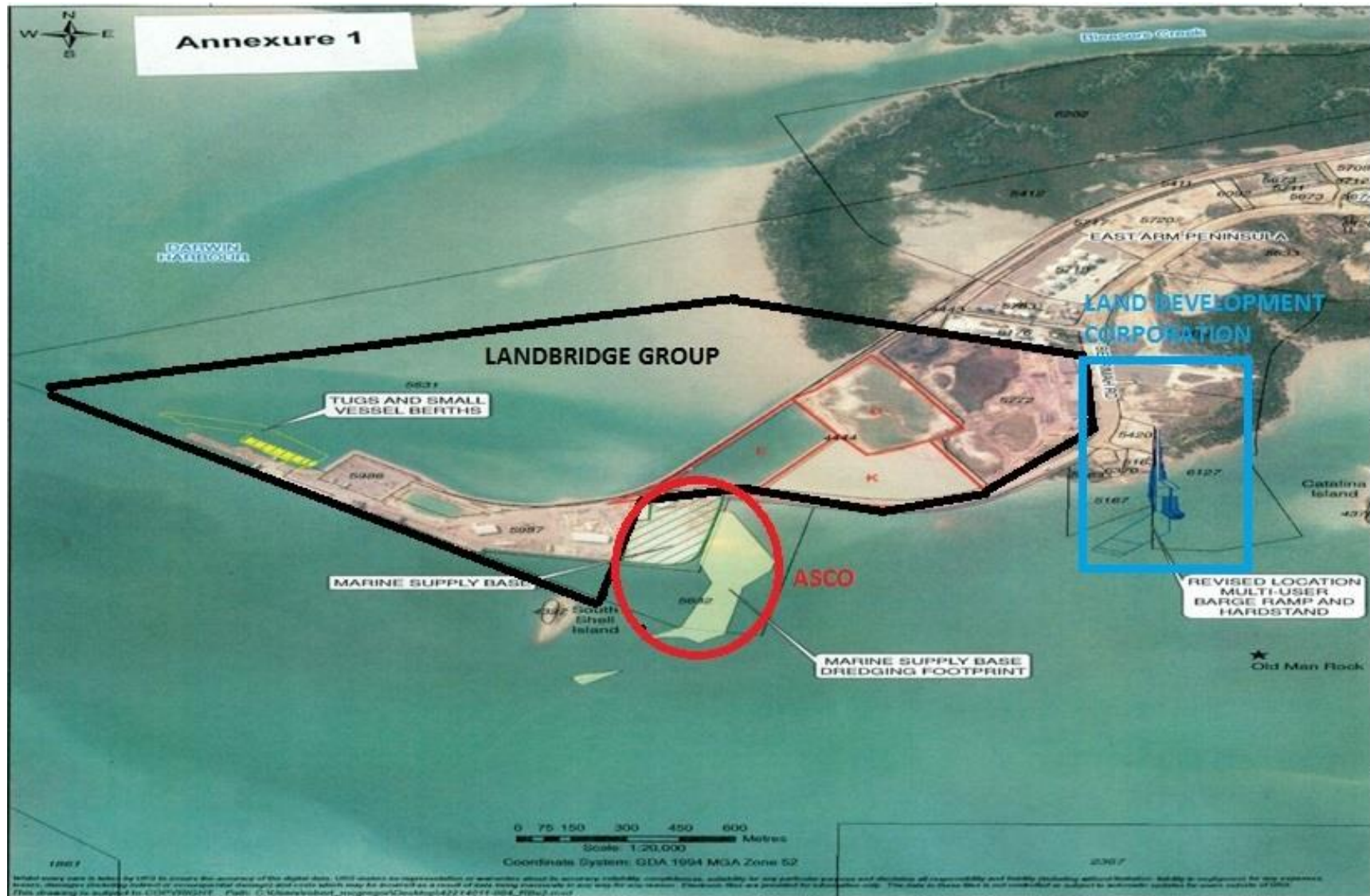


Figure 1 - Location

2. Purpose of Report

EPBC Approval 2010/5304 Condition 3 requires an annual compliance report to be published by 30 March each year.

This report presents the Northern Territory Government's compliance with the Conditions of Approval and addresses its actions in light of the approval from project commencement to the period ending 31 December 2016.

Table 1 outlines the Territory's compliance with approval conditions.

Note that the Conditions of Approval refer to the former Commonwealth Department of Sustainability, Environment, Water, Population and Communities (DSEWPaC) which is now known as the Department of the Environment (DoE). Further to this, the Department of Lands, Planning and Environment (DLPE) is now known as the Department of Infrastructure, Planning and Logistics (DIPL). The following Table will continue to reference the former departmental names where compliance with the relevant condition was gained during that period.

Table 1

Item	Action	Previous Comment Marine Supply Base Stage	Comment Multi-User Barge Ramp Stage	Comment Tug Pen Stage
1	Within 14 days after the commencement of the action, the person taking the action must advise the Department in writing of the actual date of commencement.	Notice submitted to SEWPaC 18 May 2012 that preparatory works commenced 30 April 2012. Advice of the commencement followed receipt of NT Development Consent on 22 May 2012 and was provided to SEWPaC 23 May 2012.	No change or update	No change or update
2	The person taking the action must maintain accurate records substantiating all activities associated with or relevant to the conditions of approval, including measures taken to implement the plans or strategy required by this approval, and make them available upon request to the Department. Such records may be subject to audit by the Department or an independent auditor in accordance with section 458 of the EPBC Act, or used to verify compliance with the conditions of approval. Summaries of audits	Ongoing – accurate records are being maintained	No change or update	No change or update

Item	Action	Previous Comment Marine Supply Base Stage	Comment Multi-User Barge Ramp Stage	Comment Tug Pen Stage
	will be posted on the Departments web site. The results of audits may also be published through the general media.			
3	By 30 March of each year after the commencement of the action, the person taking the action must publish a report on their web site addressing compliance with the conditions of the approval over the previous 12 months, including implementation of any management plans as specified in the conditions. Non-compliance with any of the conditions must be reported to the Department at the same time as the Compliance Report is published.	On 30 March 2013, the 1st Annual Compliance Report was uploaded. On 28 March 2014, the 2nd Annual Compliance Report was uploaded. This report covers the period 1 January 2014 to 31 December 2014 being the 3rd Annual Report.	On 22 March 2015 the 4th Compliance Report was uploaded. That report covered the period from 1 January 2015 to 31 December 2015.	This report covers the period 1 January 2016 to 31 December 2016 being the 5th Annual Report.
4	Upon the direction of the Minister, the person taking the action must ensure that an Independent Audit of compliance with the conditions of approval is conducted and a report submitted to the	Not applicable. The Minister has not required that an independent audit be undertaken.	No change or update	No change or update

Item	Action	Previous Comment Marine Supply Base Stage	Comment Multi-User Barge Ramp Stage	Comment Tug Pen Stage
	<p>Minister. The independent auditor must be approved by the Minister prior to the commencement of the audit. Audit criteria must be agreed by the Minister and the audit report must address the criteria to the satisfaction of the Minister.</p>			
5	<p>If the person taking the action wishes to carry out an activity otherwise than in accordance with the plans or strategy as specified in the Conditions, the person taking the action must submit to the Department for the Minister’s written approval a revised version of the plans or strategy. The varied activity shall not commence until the Minister has approved the varied plans or strategy in writing. The Minister will not approve a varied plan or strategy unless the revised plans or strategy result in an equivalent or improved environmental outcome over</p>	<p>Approved Plans and strategies – Sediment Sampling and Analysis Plan (SSAP); Dredge and Dredge Spoil Disposal Management Plan (DDSPMP); BIMOS (refer Condition 8) During the period 1 January 2014 to 31 December 2014, there has been minimal work undertaken. A site specific SSAP for the Tug Pens was approved and sampling undertaken to inform the revised DDSPMP.</p>	<p>Approved plans uploaded onto the web site include the dredge management plan for the tug and small ships basin and the dredging and dredge spoil placement management plan for the multi user barge ramp facility.</p>	<p>Revised Approved Dredge and Dredge Spoil Placement Management Plan and a revised Coastal Offset Plan were uploaded to the Website</p>

Item	Action	Previous Comment Marine Supply Base Stage	Comment Multi-User Barge Ramp Stage	Comment Tug Pen Stage
	<p>time. If the Minister approves the revised plans or strategy, the plans or strategy must be implemented in place of the plans or strategy originally approved.</p>			
6	<p>If the Minister believes that it is necessary or convenient for the better protection of listed threatened or listed migratory species to do so, the Minister may request that the person taking the action make specified revision to the plans or strategy specified in the conditions and submit the revised plans or strategy for the Minister’s written approval. The person taking the action must comply with any such request. The revised approved plans or strategy must be implemented. Unless the Minister has approved the revised plans or strategy, the person taking the action must continue to implement the plans or strategy originally</p>	<p>Not Applicable - The Minister has not submitted a request for a revised plan.</p>	<p>No change or update</p>	<p>No change or update</p>

Item	Action	Previous Comment Marine Supply Base Stage	Comment Multi-User Barge Ramp Stage	Comment Tug Pen Stage
	approved, as specified in the conditions.			
7	If, at any time after 5 years from the date of this Approval, the Person taking the action has not substantially commenced the action, then the person taking the action must not substantially commence the action without the written agreement of the Minister	Work has commenced, so this condition is no longer applicable.	No change or update	No change or update
8	Unless otherwise agreed in writing by the Minister, the person taking the action must publish all plans and strategies referred in these conditions of approval on their website. Each plan or strategy must be published on the website within one month of being approved.	At time of publishing this report all approved plans have been uploaded to the following web site www.eastarmwharf-eis.nt.gov.au ,	No change or update	No change or update
9	The expansion of the East Arm Wharf must be constructed in accordance with the footprint as shown at Annexure 1 of this approval, subject to the Conditions set out below.	The project is progressing as per the approved Annexure 1	No change or update	No change or update

Item	Action	Previous Comment Marine Supply Base Stage	Comment Multi-User Barge Ramp Stage	Comment Tug Pen Stage
10	No Blasting Works are to be undertaken	No blasting was undertaken during the period.	No change or update	No change or update
11	The person taking the action must ensure a dredging Technical Advisory Group (TAG) is established, prior to and for the duration of dredging operations, to provide advice to the person taking the action on the development, endorsement, implementation and review for adaptive management purposes of the Dredge and Dredge Spoil Placement Management Plan (DDSPMP), referred to at condition 16.	The TAG was appointed 25 March 2012, prior to the commencement of dredge operations on 2 October 2012. The TAG was utilised for input into the revised DDSPMP for the tug pen dredging operation (yet to begin)	The Multi User Barge Ramp Project has appointed a TAG to oversee dredging operations.	The Multi User Barge Ramp Project TAG reviewed the DDSPMP and provided approval to the DDSPMP and the subsequent dredging that occurred in January and February 2016. The approval by the TAG was dated 23 December 2016.
12	The members of the TAG must include at least three independent scientific experts, with expertise in water quality, migratory birds, and large marine fauna species, and an independent dredging technical advisor. The membership of the TAG must be submitted to the Department for approval in writing prior to the	The TAG includes independent experts on water quality, turtles, dolphins, migratory birds, water quality and dredging.	The Tag includes Dr Ian Poiner, David Williams, Stephen Garnett, Michael Guinea, Frans Hoogerwerf and Prof Lars Bejdar	The Tag includes Dr Ian Poiner, Dr Oleg Makarynskyy; A/Prof Lars Bejder; Frans Hoogerwerf; Professor Stephen Garnett; and Michael Guinea.

Item	Action	Previous Comment Marine Supply Base Stage	Comment Multi-User Barge Ramp Stage	Comment Tug Pen Stage
	development and submission of the DDSPMP to the Minister for Approval.			
13	<p>The person taking the action must ensure that the TAG undertakes the following:</p> <p>a) provide advice on the design and ongoing review of the DDSPMP, including development and revision of appropriate trigger levels, monitoring programs, management actions, interaction with the INPEX LNG Project (EPBC2008/4208) dredging program, and dredge and spoil placement methodology to protect water quality, dolphins, marine turtles, dugongs, migratory birds and their habitat; and</p> <p>b) Provide advice on exceedance of trigger values and changes to dredge practices, through the DDSPMP, as required.</p>	The TAG is providing advice on the range of matters specified in the approval.	The TAG is providing input and advice on a range of dredging matters.	The TAG is providing input and advice on a range of dredging matters.
14	The person taking the action must provide to the Minister, a copy of all advice and	All TAG advices/recommendations have been referred to DoE.	All TAG advices/recommendations have been referred to DoE	The Dredging report was finalised in December 2016 and sent to DoE.

Item	Action	Previous Comment Marine Supply Base Stage	Comment Multi-User Barge Ramp Stage	Comment Tug Pen Stage
	<p>recommendations made by the TAG and an explanation of how this advice and recommendations will be implemented or an explanation of why the person taking the action does not propose to implement certain recommendations. This information must be provided to the Minister within one week of the person taking the action receiving advice from the TAG in respect to Condition 13a) and within 48 hours in respect to condition 13b)</p>			
15	Condition 15 revoked	Not Applicable.	No change or update	No change or update
16	The person taking the action must submit a DDSPMP to the Minister for approval.	The original DDSPMP was approved on 2 October 2012.	The MUBRF DDSPMP was submitted on March 20 2015	The Tug Pen DDSPMP was submitted on 20 April 2016
17	<p>The DDSPMP must include the following Monitoring, trigger levels and management actions to ensure that areas outside the zones of high impact, moderate impact and influences as identified in</p>		Capital Dredging occurred between the 11th January and 6th of February 2016.	No Capital Dredging for the Tug Pens and small ships basin project has occurred.

Item	Action	Previous Comment Marine Supply Base Stage	Comment Multi-User Barge Ramp Stage	Comment Tug Pen Stage
	<p>Annexure 2 are not impacted by suspended sediment concentrations.</p> <p>Monitoring, trigger levels and management actions which consider the dredging program for the INPEX LNG Project (EBC2008/4208) and areas that may be impacted by both dredging programs;</p> <p>Consider the results of the Sediment Sampling and Analysis Plan required at Condition 24;</p> <p>Management measures, including consideration of avoiding dredging outgoing tides and low tidal heights to minimise impact upon sensitive receptors;</p> <p>Management measures, trigger levels, contingency measures, corrective actions, operational procedures and responsible persons to minimise the impacts to marine turtles, dolphins, dugong, sawfishes, migratory birds and their</p>	<p>Complied - refer Condition 16</p> <p>The monitoring report for the 2013 calendar year prepared and published in March 2014. There was no Capital Dredging undertaken associated with the project</p>	<p>The Dredge management report was completed in December 2016 and submitted to DOE.</p> <p>The MUBRF has surrendered the Waste Discharge Licence and will not be undertaking any further</p>	

Item	Action	Previous Comment Marine Supply Base Stage	Comment Multi-User Barge Ramp Stage	Comment Tug Pen Stage
	<p>habitat during dredging and dredge spoil placement; Ongoing management measures to ensure the existing pond D, as labelled in Annexure 1, is maintained or enhanced as suitable high tide roosting habitat for migratory birds in perpetuity. This must include undertaking at least two summer surveys each year in the existing Pond D, as labelled in Annexure 1, until five years after the cessation of dredge spoil placement at Pond D, to monitor the use of the dredge spoil ponds by migratory birds and the effectiveness of management measures at Pond D. The surveys identified in 17(f)(i) must be compliant with the current Significant impact guidelines for 36 migratory shorebird species policy statement, produced by the Department</p>	<p>during 2014. Must note that there was maintenance dredging undertaken on 23 January 2014. A single 8 hour shift. The dredging was to remove loose material that had fallen to the floor after the piles were cleaned. A total of 200m³ of material was removed. Dredging Practical Completion for the MSB was gained on 29 January 2014. A monitoring report for the dredging covering the period was published by 30 March 2015.</p>	<p>dredging operations associated with construction.</p>	

Item	Action	Previous Comment Marine Supply Base Stage	Comment Multi-User Barge Ramp Stage	Comment Tug Pen Stage
	<p>Reporting within one business day to the Minister when injury to, or mortality of EPBC Act listed threatened Species or EPBC Act listed migratory species occurs from dredging or dredge spoil placement activities.</p> <p>Unless otherwise agreed in writing by the Minister, the person taking the action must publish a monitoring program report which shows the monitoring results for the DDSPMP on their website each year for the previous 12 months on 30 March of each year, from the start of dredging operations until 6 months after dredging operations are completed.</p>			
18	<p>Following receipt of advice from the TAG, the DDSPMP must be submitted for approval by the Minister prior to the commencement of dredging, unless otherwise approved in writing by the Minister.</p>	<p>The Dredge operation commenced immediately following receipt of the Minister's approval of the DDSPMP on 2 October 2012.</p>	<p>The DDSPMP for the MUBRF was approved on 30 April 2015.</p>	<p>The revised DDSPMP for the Tug Pen and small ship basin was approved on 30 April 2016.</p>

Item	Action	Previous Comment Marine Supply Base Stage	Comment Multi-User Barge Ramp Stage	Comment Tug Pen Stage
19	The DDSPMP must be reviewed and revised upon the advice of the TAG, referred to in Condition 11, to enable continuous improvement and adaptive management of the dredge and spoil placement methodology	The TAG reviews all weekly, monthly and exceedance reports in association with the DDSPMP. Various comments/recommendations have been made and appropriate adaptive management steps implemented. There was limited dredging during the 2014 year. The TAG reviewed information provided.	Capital Dredging occurred between January 11 2016 and was completed on the 6th of February 2016. The TAG reviewed prior to dredging operations taking place.	No dredging occurred
20	Any proposed alteration to Monitoring, trigger levels or Management actions must be referred to TAG for advice, referred to at Condition 11, prior to submission to the Minister, in accordance with Condition 5	Complied	Complied	No dredging occurred
21	The person taking the action must not commence Dredging unless the Minister has approved the DDSPMP. If the Minister approves the DDSPMP then the approved DDSPMP must be implemented	Complied	Complied	No dredging occurred

Item	Action	Previous Comment Marine Supply Base Stage	Comment Multi-User Barge Ramp Stage	Comment Tug Pen Stage
22	The person taking the action must ensure all water flows out from the ponds must be controlled.	Weir boxes and bund walls regulate and control tailwater flows out from the ponds.	Complied	No dredging occurred
23	The person taking the action must not undertake any overwater maintenance, to limit impacts to listed threatened species or listed migratory species.	No overwater maintenance was undertaken	No overwater maintenance is proposed to be undertaken	No overwater maintenance is proposed to be undertaken
24	The person taking the action must submit a Sediment Sampling and Analysis Plan (SAP) to determine the status of sediments, including all potential contaminants and acid sulphate soils.	The MSB SAP was submitted and approved	The barge ramp SAP was submitted and approved	The Tug Pen SAP was submitted and approved
25	The SAP must detail the sampling and testing methodology in accordance with the National Assessment Guidelines for Dredging (2009). The SAP must be submitted for approval by the Minister. If the Minister approves the SAP then the approved SAP must be implemented.	The MSB SAP was approved 9 May 2012, and implemented.	The Tug Pen and small vessel SAP and the Multi-User Barge Ramp SAP were approved on 7 March 2014.	No change or update
26	The person taking the action	SAP provided to SEWPaC 9	The relevant information was	No change or update

Item	Action	Previous Comment Marine Supply Base Stage	Comment Multi-User Barge Ramp Stage	Comment Tug Pen Stage
	must not commence Dredging or Dredge Spoil Placement until the results of the SAP are provided to the Department and incorporated into the Water Quality Management Plan referred to at Condition 27	May 2012 and incorporated into the WQMP contained in the DDSPMP approved 2 October 2012.	incorporated into the respectively approved DDSPMP's.	
27	The person taking the action must submit a Water Quality Management Plan (WQMP) to the Minister for approval, to minimise the impacts to marine turtles, dolphins, dugongs, sawfish, migratory birds and their habitat during dredging, dredge spoil placement and dewatering	The WQMP forms part of the approved DDSPMP	No change or update	No change or update
28	<p>The WQMP must include the following:</p> <p>a) Consideration of the results of the SAP (Condition 24);</p> <p>b) Monitoring program, management triggers, contingency measures, corrective actions and responsible persons to manage impacts to the marine</p>	The WQMP forms part of the approved DDSPMP	Comment is still current.	No change or update

Item	Action	Previous Comment Marine Supply Base Stage	Comment Multi-User Barge Ramp Stage	Comment Tug Pen Stage
	<p>environment from potential contaminants as identified by the SAP at Condition 24, as a result of dredging, dredge spoil placement and dewatering.</p> <p>c) Design methodology and management of the bund walls to ensure appropriate design to prevent water quality impacts by leaching material through the bund wall, decant waters and storm water run-off.</p>			
29	<p>The WQMP must be submitted for approval by the Minister prior to the Commencement of dredging, unless otherwise approved in writing by the Minister. The approved WQMP must be implemented.</p>	<p>The WQMP forms part of the approved DDSPMP</p>	<p>Comment is still current</p>	<p>No change or update</p>
30	<p>The person taking the action must undertake marine piling in the following way:</p> <p>a) Marine piling exclusion zones must be established and implemented so to ensure that marine turtles, Dugongs and dolphins are not</p>	<p>Marine Piling was undertaken in accordance with the requirements of the condition.</p> <p>An independent underwater noise expert (PGM Consulting) was engaged to</p>	<p>Piling was undertaken between February and March of 2016.</p> <p>Marine Piling was undertaken in accordance with the requirements of the condition</p>	<p>No Piling was undertaken for the Tug Pen and small ships basin project</p>

Item	Action	Previous Comment Marine Supply Base Stage	Comment Multi-User Barge Ramp Stage	Comment Tug Pen Stage
	<p>exposed to sound exposure levels (SEL) of greater than or equal to 183 dBre 1µ Pa².s for longer than 5 continuous minutes. The marine piling exclusion zones must consider the range of marine piling source energy and the marine piling exclusion zones must not be less than 500 metres from the pile hammer.</p> <p>b) Pre-start-up visual observations: Visual observations for marine turtles, Dugongs and dolphins must be undertaken to the extent of the marine piling exclusion zones by a dedicated and suitably trained crew member, for at least 30 minutes before the commencement of marine piling activities.</p> <p>c) Operating procedures: While marine piling is undertaken, the following procedures must be implemented:</p>	<p>assess and determine appropriate marine piling exclusion zones in accordance with condition 30.</p> <p>The consultant's recommended exclusion zones were then implemented by the marine piling contractor.</p>		

Item	Action	Previous Comment Marine Supply Base Stage	Comment Multi-User Barge Ramp Stage	Comment Tug Pen Stage
	<p>i. Visual observations covering the extent of the marine piling exclusion zones must be maintained continuously to identify if there are any marine turtles, Dugongs or dolphins present.</p> <p>ii. If marine turtles, Dugongs or dolphins are sighted within the marine piling exclusion zones, action to cease all marine piling within 2 minutes or soon as safely possible.</p> <p>iii. Marine piling activities must not recommence until marine turtles, Dugongs or dolphins are observed to move outside the marine piling exclusion zones or 30 minutes have passed since the last sighting.</p> <p>iv. Soft 'fairy taps' start procedure: Marine piling must be initiated at the soft 'fairy taps' start level and then build up to full operating impact force. The soft 'fairy taps' start procedures may only</p>			

Item	Action	Previous Comment Marine Supply Base Stage	Comment Multi-User Barge Ramp Stage	Comment Tug Pen Stage
	<p>commence if no marine turtles, Dugongs or dolphins have been sighted within the marine piling exclusion zone during the pre start up visual observations as required by condition 30 (b)</p> <p>v. Marine piling commenced prior to sunset or prior to a period of low visibility can continue between the hours of sunset and sunrise, unless marine piling is suspended for more than 15 minutes or there have been three or more marine turtle, Dugong or dolphin instigated shut-down situations within the previous 12 hours.</p>			
31	<p>The person undertaking the action must undertake Piling in the following way:</p> <p>a) Establish a 500m exclusion zone for marine turtles, dugongs and dolphins;</p> <p>b) Pre-start visual observations: Visual</p>	<p>The piling was undertaken in accordance with the conditions.</p>	<p>The piling was undertaken in accordance with the conditions.</p>	<p>Piling is proposed to be undertaken as per the current conditions</p>

Item	Action	Previous Comment Marine Supply Base Stage	Comment Multi-User Barge Ramp Stage	Comment Tug Pen Stage
	<p>observations for marine turtles, dugongs and dolphins must be undertaken to the 500m exclusion zone by a dedicated and suitably trained crew member for at least 30 minutes before the commencement of piling activities.</p> <p>c) Operating procedure: While piling is undertaken, the following procedures must be implemented:</p> <ul style="list-style-type: none"> i. Visual observations of the 500m exclusion zones from the pile hammer must be maintained continuously to identify if there are any marine turtles, dugongs or dolphins present. ii. If marine turtles, dugongs or dolphins are sighted within the exclusion zone action to cease all piling within 2 minutes or as soon as is safely possible. iii. Piling activities must not recommence until marine turtles, dugongs, dolphins are observed to move out of the exclusion zone or 30 minutes have passed since the last sighting. 			

Item	Action	Previous Comment Marine Supply Base Stage	Comment Multi-User Barge Ramp Stage	Comment Tug Pen Stage
	<p>iv. Soft Fairy Taps start procedures: Piling activities must be initiated at the soft fairy taps start level and then build up to full operating impact force, the soft fairy start procures may only commence if no marine turtles, dugongs or dolphins have been sighted within the exclusion zone during the pre start up visual observations.</p> <p>v. Piling commenced prior to sunset or prior to a period of low visibility can continue between the hours o sunset to sunrise, unless piling has been suspended for more than 15 minutes or there have been three or more marine turtle, dugong, dolphin instigated shut down situations within the previous 12 hours.</p>			
32	<p>The person taking the action must submit a Biodiversity Impact Mitigation and Offset Strategy [BIMOS] to the Minister for approval. The strategy must address the consequential and residual</p>	<p>The BIMOS was approved on 2 October 2012.</p>	<p>No change or update</p>	<p>No change or update</p>

Item	Action	Previous Comment Marine Supply Base Stage	Comment Multi-User Barge Ramp Stage	Comment Tug Pen Stage
	impacts to EPBC Act listed dolphins, migratory birds, dugongs and marine turtles from the expansion of the East Arm Wharf, including dredging, increases vessel usage of the area and associated impacts to the species.			
33	To address residual impacts to listed and threatened migratory marine species, the BIMOS must include the establishment and operation of a regional indigenous marine rangers program to be operated out of Darwin. The Program should fully fund all costs associated with supporting a minimum of two full time equivalent ranger positions until the marine works are completed. The program should: Address threats to listed threatened species and listed migratory species in Darwin Harbour and Surrounds Provide harbour surveillance patrols and reporting for vessel	The BIMOS was approved on 2 October 2012.	No change or update	No change or update

Item	Action	Previous Comment Marine Supply Base Stage	Comment Multi-User Barge Ramp Stage	Comment Tug Pen Stage
	<p>speed and vessel interactions with listed threatened species and listed migratory species. Monitor and handle stranded, injured or dead large marine fauna species. Increase community awareness about marine debris. Assist with the implementation of the education campaign at Condition 45d).</p>			
34	<p>The BIMOS must include a timeline for submission and implementation of the Migratory Bird Management Plan (MBMP), at Condition 36, the Coastal Offset Plan (COP), at Condition 40, and the Port Environmental Protection Plan (PEPP), at Condition 45.</p>	<p>The BIMOS was approved on 2 October 2012.</p>	<p>No change or update</p>	<p>No change or update</p>
35	<p>The person taking the action must not commence marine works unless the Minister has approved the BIMOS. If the Minister approves the BIMOS then the approved BIMOS must be implemented.</p>	<p>The BIMOS was implemented with the engagement of the Indigenous Rangers. A report has been loaded onto the website.</p>	<p>No change or update</p>	<p>No change or update</p>
36	<p>The person taking the action</p>	<p>A MBMP was submitted in</p>	<p>No change or update</p>	<p>No change or update</p>

Item	Action	Previous Comment Marine Supply Base Stage	Comment Multi-User Barge Ramp Stage	Comment Tug Pen Stage
	<p>must submit a Migratory Bird management Plan (MBMP) to the Minister for approval. The MBMP must address the consequential and residual impacts to EPBC Act listed migratory birds from the expansion of East Arm Wharf, including dredge and dredge spoil disposal and the associated impacts to the species. The MBMP must include, but may not be limited to the following:</p> <ul style="list-style-type: none"> Protection and maintenance of the existing Pond D, as identified in Annexure 1, as suitable high tide roosting habitat for migratory birds in perpetuity, including: Restriction of access to public and animals (dogs); Management and control of feral animals and invasive species within the area to be protected. <p>Undertake at least two summer surveys each year compliant</p>	<p>November 2012 and approved on 3 June 2013</p>		

Item	Action	Previous Comment Marine Supply Base Stage	Comment Multi-User Barge Ramp Stage	Comment Tug Pen Stage
	<p>with the current Significant impact guidelines for 36 migratory shorebird species policy statement, produced by the Department, in the existing pond sites, including Pond D, until 5 years after the cessation of dredge spoil placement at Pond D to monitor the use of the dredge spoil ponds by the migratory birds and to measure the effectiveness of the management measures at pond D.</p> <p>Consideration of capturing, banding and marking migratory shorebirds that currently use the East Arm Wharf dredge Spoil Ponds, to track their response to the expansion works and to monitor the effectiveness of the management measures referred to under section 36a).</p> <p>Undertake adaptive Management Measures for 36a), taking into account the surveys completed through</p>			

Item	Action	Previous Comment Marine Supply Base Stage	Comment Multi-User Barge Ramp Stage	Comment Tug Pen Stage
	Conditions 36b) and 36 c).			
37	The MBMP must be submitted for approval by the Minister no later than one year from commencement of action	The MBMP plan was submitted to the Commonwealth 27 Nov 2012.	No change or update	No change or update
38	The person taking the action must not commence work on the Tug and small vessel berths or barge ramp and hardstand area, as identified in Annexure 1, until the Minister has approved the MBMP.	The MBMP was approved on 3 June 2013	No change or update	No change or update
39	If the Minister approves the MBMP then the approved MBMP must be implemented.	The MBMP has been implemented. Latest reports are on the website.	No change or update	No change or update
40	The person taking the action must submit a Coastal Offset Plan (COP) to the Minister for approval. The strategy must address the consequential and residual impact to the EPBC Act listed threatened and migratory marine fauna from the expansion of East Arm Wharf, including dredging and increased vessel usage of the area and associated impacts to species.	As of the end of 2014 the CoP was under development. The plan has since been approved at the start of the 2015 year.	The Coastal Offsets Plan is in the process of being implemented.	A revised Coastal Offset Plan dated 12 February 2016 was uploaded to the website. The revision in the plan was to address the mandatory timeframes for gazettal of a dolphin reserve in the Northern Territory.

Item	Action	Previous Comment Marine Supply Base Stage	Comment Multi-User Barge Ramp Stage	Comment Tug Pen Stage
41	The COP must include identification of 50 hectares of verified habitat for dolphins and provision for the protection and management of the area in perpetuity.	Plan under development.	50 hectares of habitat has been identified and the NTG is working on the process of protection.	Declaration of the reserve is a future act for the purposes for the Native Title Act. The Department is preparing a non-claimant application seeking protection for the declaration of the reserve.
42	The COP must be submitted for approval by the Minister no later than two years from the commencement of the action.	DoE advised that commencement of preparatory works began on May 18 2012. COP was submitted before May 18 2014.	No change or update	A revised COP dated 12 February 2016 is the current approved COP
43	The person undertaking the action must not commence work on the tug and small vessel berths or barge ramp and hardstand area, as identified in Annexure 1, unless the Minister has approved the COP.	Preliminary investigations and design work underway. No civil or preparatory works or alterations to site have commenced	The COP has been approved and therefore clears the way for works to commence.	No change or update
44	If the Minister approves the COP then the approved COP must be implemented.	Not Applicable.	The COP is being implemented	The COP is being implemented
45	The person taking the action must submit a Port Environment Protection Plan (PEPP) to the Minister for approval. The PEPP must	The PEPP was submitted to the Commonwealth on 10 October 2012.	No change or update	No change or update

Item	Action	Previous Comment Marine Supply Base Stage	Comment Multi-User Barge Ramp Stage	Comment Tug Pen Stage
	<p>address the consequential and residual impacts of EPBC Act listed threatened and migratory marine fauna from the expansion of East Arm Wharf. The PEPP must be implemented for the life of the project and must include:</p> <p>Measures to manage the risk of vessel strike to marine fauna. The must include prescribed maximum commercial vessel speed limits; enforcement of speed limits; monitoring and reporting of vessel strike; and adaptive management measures.</p> <p>Measures to increase the response capacity of Darwin Harbour to respond to accidental fuel, oil or chemical spills to address the increased likelihood of a spill as a result of increased vessel usage of the wharf.</p> <p>Measures that minimise the risk of introduced marine pest species over the life of the</p>			

Item	Action	Previous Comment Marine Supply Base Stage	Comment Multi-User Barge Ramp Stage	Comment Tug Pen Stage
	<p>project, including ballast water management and vessel inspections for non-domestic vessels.</p> <p>An educational campaign for all port personnel including the provision of information that fosters a culture of awareness of the environmental values, including the EPBC Act listed species that may occur within the project area, and the related responsibilities of the port personnel.</p>			
46	The PEPP must be submitted for approval by the Minister no later than six months from the commencement of the action.	The PEPP was submitted on 10 October 2012.	No change or update	No change or update
47	The person undertaking the action must not commence work on the Tug and small vessels berths or barge ramp and hardstand area, as identified in Annexure 1, unless the Minister has approved the PEPP.	The revised PEPP was approved on 3 June 2013	No change or update	No change or update
48	Commercial use of the MSB cannot begin until the Minister	The PEPP was approved on 3 June 2013	No change or update	No change or update

Item	Action	Previous Comment Marine Supply Base Stage	Comment Multi-User Barge Ramp Stage	Comment Tug Pen Stage
	has approved the PEPP			
49	If the Minister approves the PEPP then the approved PEPP must be implemented.	The PEPP was implemented when the MSB became operational on 25 June 2014.	The PEPP continues to be in operation.	The PEPP continues to be in operation.

Bird Counts January 2016

Date	11-Jan-16	11-Jan-16	11-Jan-16	11-Jan-16
Start time	17:40	18:11	17:23	17:30
Tide time	19:44	19:44	19:44	19:44
High tide (m)	7.61	7.61	7.61	7.61
Site	Pond D	Pond K	Pond B	Pond E
Time difference with high tide	2:04	1:33	2:21	2:14
Target species observed				
Latham's snipe				
Pin-tailed snipe				
Swinhoe's snipe				
Black-tailed godwit	5			
Bar-tailed godwit	13	12		
Little curlew				
Whimbrel	4	2		
Eastern curlew		32		
Common redshank				
Marsh sandpiper	2			
Common greenshank	67	3		
Wood sandpiper				
Terek sandpiper				
Common sandpiper	2			
Grey-tailed tattler				
Wandering tattler				
Ruddy turnstone				
Asian dowitcher				
Great knot		20		
Red knot				
Sanderling				
Red-necked stint		60		
Long-toed stint				
Pectoral sandpiper				
Sharp-tailed sandpiper	1	5		
Curlew sandpiper				
Broad-billed sandpiper				
Ruff				
Red-necked phalarope				
Golden plover				
Grey plover		1		
Double-banded plover				
Lesser sand plover		5		
Greater sand plover		161		
Oriental plover				

Oriental pratincole				
Unidentified				
No. species	7	10	0	0
No. Individuals	94	301	0	0
Non-target species observed				
Australasian Grebe				
Australian Darter				
Australian Pelican	52			
Australian Pipit				
Australian Pratincole				
Bar-Shouldered Dove				
Beach Stone-curlew				
Black Kite				
Black-faced Cuckoo-shrike				
Black-fronted Dotteral				
Black-necked Stork			2	
Black-winged Stilt	23		2	
Brahminy Kite				
Brown Booby				
Brown Honeyeater				
Brown Quail				
Bush Stone-curlew				
Chestnut-breasted Mannikin				
Collared Kingfisher				
Common Tern				
Crested Tern				
Crimson Finch			2	
Double-barred Finch				
Eastern Reef Egret				
Fairy Martin				
Franklin's Gull				
Golden-headed Cisticola				
Great Egret	1			
Grey Teal				
Gull-billed Tern				
Hardhead Duck				
Hoary-headed Grebe				
Intermediate Egret				
Little Black Cormorant				
Little Corella				
Little Egret	2			
Little Friarbird				
Little Pied Cormorant				

Little Tern				
Magpie Goose				
Magpie-lark				
Masked Lapwing	3	1		
Nankeen Kestrel				
Nankeen Night-heron				
Northern Fantail				
Osprey				
Pacific Black Duck				
Peaceful Dove				
Peregrine Falcon				
Pheasant Coucal				
Pied Heron				
Pied Oystercatcher		3		
Pink-eared Duck				
Radjah Shelduck				
Rainbow Bee Eater				
Red-backed Button Quail				
Red-capped Plover	1	4		
Red-headed Honeyeater				
Red-kneed Dotteral				
Red-necked Avocet				
Red-winged Parrot				
Roseate Tern				
Royal Spoonbill	2			
Rufous-banded Honeyeater			2	
Silver Gull	15			
Striated Heron				
Tree Martin				
Wandering Whistling Duck			1	
Welcome Swallow				
Whiskered Tern				
Whistling Kite				
White-bellied Cockoo Shrike				
White-bellied Sea Eagle				
White-breasted Woodswallow				
White-gaped honeyeater				
White-winged Black Tern				
Yellow White-eye				
No. species	8	3	5	0
No. Individuals	99	8	9	0
Weather	Warm, still.			

Notes	Dredge pump in Pond K on and dredge spoil from harbour being pumped out into the Pond. The water level in K is the same as last few weeks and water is flowing naturally from K to E. Pond E water level still high, but has receded enough to create muddy edge, yet birds are not using Pond E.
Observers	Amanda Lilleyman

Bird Counts November 2016

Date	15-Nov-16	15-Nov-16	15-Nov-16	15-Nov-16
Start time	18:10	17:39	17:11	17:20
Tide time	18:59	18:59	18:59	18:59
High tide (m)	7.93	7.93	7.93	7.93
Site	Pond D	Pond K	Pond B	Pond E
Time difference with high tide	0:49	1:20	1:48	1:39
Target species observed				
Latham's snipe				
Pin-tailed snipe				
Swinhoe's snipe				
Black-tailed godwit	1			
Bar-tailed godwit	30			
Little curlew				
Whimbrel	114	303		
Eastern curlew	3	261		
Common redshank				
Marsh sandpiper	7			
Common greenshank	60			
Wood sandpiper				
Terek sandpiper		1		
Common sandpiper				
Grey-tailed tattler		1		
Wandering tattler				
Ruddy turnstone				
Asian dowitcher				
Great knot	8			
Red knot	1			
Sanderling				
Red-necked stint		57		
Long-toed stint				
Pectoral sandpiper				
Sharp-tailed sandpiper	177	28		
Curlew sandpiper				
Broad-billed sandpiper		2		
Ruff				
Red-necked phalarope				
Golden plover				
Grey plover	2			
Double-banded plover				
Lesser sand plover		4		
Greater sand plover		176		
Oriental plover				
Oriental pratincole				
Unidentified				
No. species	10	9	0	0
No. Individuals	403	833	0	0

Non-target species observed

Australasian Grebe			
Australian Darter			
Australian Pelican		31	24
Australian Pipit			
Australian Pratincole			
Bar-Shouldered Dove			
Beach Stone-curlew			
Black Kite			
Black-faced Cuckoo-shrike			
Black-fronted Dotteral			
Black-necked Stork			
Black-winged Stilt			2
Brahminy Kite			
Brown Booby			
Brown Honeyeater			
Brown Quail			
Buff-banded Rail			
Bush Stone-curlew			
Chestnut-breasted Mannikin			
Collared Kingfisher			
Common Tern			
Crested Tern			
Crimson Finch			
Double-barred Finch			
Eastern Reef Egret			
Fairy Martin			
Franklin's Gull			
Golden-headed Cisticola			
Great Egret			
Grey Teal			
Gull-billed Tern		64	
Hardhead Duck			
Hoary-headed Grebe			
Intermediate Egret			
Little Black Cormorant			
Little Corella			
Little Egret			
Little Friarbird			
Little Pied Cormorant			
Little Tern			
Magpie Goose			
Magpie-lark			
Masked Lapwing			
Nankeen Kestrel			
Nankeen Night-heron			
Northern Fantail			

Osprey				
Pacific Black Duck			1	
Peaceful Dove				
Peregrine Falcon				
Pheasant Coucal				
Pied Heron				
Pied Oystercatcher				2
Pink-eared Duck				
Radjah Shelduck			1	
Rainbow Bee Eater				
Red-backed Button Quail				
Red-capped Plover				
Red-headed Honeyeater				
Red-kneed Dotteral				
Red-necked Avocet				
Red-winged Parrot				
Roseate Tern				
Royal Spoonbill			8	
Rufous-banded Honeyeater				
Silver Gull				
Striated Heron				
Tree Martin				
Wandering Whistling Duck				
Welcome Swallow				
Whiskered Tern		20		
Whistling Kite				
White-bellied Cockoo Shrike				
White-bellied Sea Eagle				
White-breasted Woodswallow				
White-gaped honeyeater				
White-winged Black Tern		100		
Yellow White-eye				
No. species	0	4	5	1
No. Individuals	0	215	36	2
Weather	Warm, still, clouds and storms in the distance.			
Notes	Two Gull-billed Tern were the Asian subspecies Affinis. Pond B still prohibited access but I could see some birds from my vantage point. It is likely that I missed birds that were hidden by the hill of gravel. Storm/rain water has created small pools of water in Ponds D, B and expanded water in K. No birds using E; some did but then they were spooked and moved to K.			
Observers	Amanda Lilleyman			