

13 MAR 2008



**Queensland
Government**

Our ref: TN128157/T1681/DC24/DIP

C P P M 13 MAR 2008	
FILE REF:	303TOT-09.2
FOR	COPY
PT	

Department of
Infrastructure and Planning

Mr Peter Trathen
Group Executive – Property
City Pacific Limited
PO Box 783
Pacific Fair QLD 4218

Dear Mr Trathen

I refer to the copy of submissions received by the Coordinator-General in relation to the Environmental Impact Statement (EIS) for the Townsville Ocean Terminal Project and sent to you previously.

You are requested to address all the relevant matters raised in these submissions in a Supplementary EIS. To assist in this process I have enclosed an outline of requirements.

In relation to the Government Agency submissions, it is recommended that you contact the relevant Agencies when addressing their submissions to ensure that all matters are addressed to the extent required by the Agency. It is suggested that you provide each Agency with a draft of how you intend to address its submission prior to finalising the Supplementary EIS.

If you require any further information on this matter, please contact Doug Carey on 3234 0518 who will be pleased to assist.

Yours sincerely

Phil Dash
**Acting Assistant Coordinator-General
Major Projects Facilitation and Development**

Encl(1)

Executive Building
100 George Street
PO Box 15009
City East Queensland 4002
Telephone +61 7 3227 8548
Facsimile +61 7 3224 4683
Website www.infrastructure.qld.gov.au

Townsville Ocean Terminal Project

Outline requirements for a Supplementary Report to the Environmental Impact Statement

General

Address all relevant matters raised by TPA, TCC, DEWHA and State agencies

Provide an outline of developer commitments eg

- TCC infrastructure contributions
- Road network upgrades and pavement wear contribution
- Temporary bridge operational plan, including adjacent truck parking etc
- Description of the public boat landing in the marina, its dedication to the State & provision of adequate car parking
- The maintenance of navigation access to the Breakwater Marina during construction

Provide an outline of ongoing body corporate commitments eg

- Internal infrastructure maintenance and refurbishment, including breakwaters
- Disaster Management Plan
- TPA/EPA nuisance monitoring & reporting
- maintenance of canal water quality
- monitoring & management of settlement

Various clarifications to technical reports requested by EPA

Relevant legislation and policy requirements

- Include ERAs
- Include Coastal Management District triggers

Compatibility with the Port of Townsville

Emissions associated with port operations

Update the description of the potential for nuisance, health and amenity impacts within the proposed Breakwater Cove precinct associated with existing and future predicted emissions from the port. The description of emissions must include:

- Predicted acoustic and air quality (including dust fall out) within the FDA taking into account:
 - Consideration of all relevant activities including scrap metal loading, dredging and construction works.
 - Additional monitoring data collected since the EIS was published.
 - Predicted future development of the port through to 2050 including increased utilisation of existing berths and potential new trades through the port, as per TPA's advice
 - Exposure of upper storeys of medium density residential buildings that would be above the proposed acoustic barrier
 - Cumulative impacts from simultaneous loading operations at multiple berths & future construction activities in the port
 - More detail on seasonality
- Predict & discuss the relative dispersion of dust in the FDA from bulk mineral loading operations compared to other nearby sensitive places (eg casino & SCL) over a range of conditions
- Predicted odour nuisance at residential locations taking into account:
 - Odour impacts from live cattle loading operations using industry predicted trade volumes.
 - Impacts from other trades including molasses, petroleum products
 - Results to include probable number of days per year of impacts & annual variability.
- Lighting impacts from the port on the FDA and comparison with requirements of AS4282

- Predicted EMR impacts taking into account:
 - safety/security equipment, pacemakers, potential for short-term or unintended emissions eg testing
 - Exposure of upper storeys of medium density residential buildings
 - The submission from the port users group
- Supply details of all calculations including base data, modelling methodology & assumptions

Health and social impacts

Further describe the analysis of the risks and hazards to people and property in the proposed Breakwater Cove precinct to determine if the location of the residential development is appropriate considering the existing and proposed activities in the port area. Specific issues that must be considered include:

- fire and explosions, including 400m exclusion zone around berth 10, petroleum products at berth 1, transit cargoes. Refer to TPA submission and current regulatory requirements (eg http://www.dme.qld.gov.au/zone_files/explosives_pdf/infobul50.pdf)
- Assessment of potential heavy metals in the dust fall-out, particularly lead and nickel.
- Address all issues raised by Queensland Health, including Qfever risks from export of live cattle and other products.
- Recommended sleep disturbance range is 30-35 dBA

Economic impacts

Update the description of potential economic impacts to the port, taking into account:

- The potential for higher environmental compliance costs for the Townsville Port Authority or port users as a result of the Project
- TPA costs in managing complaints, administering the PPA etc.
- Potential bring forward costs of new equipment, port expansion etc

Mitigation

Update the assessment of actual number of complaints

Provide an updated discussion of the Project's proposed mitigation measures including an outline of the key elements in the latest version of the draft Port Protection Agreement and the proposed statutory covenants

Discuss the potential loss of effectiveness of the proposed mitigation measures over time

Case studies of similarly located residential development adjacent to industrial/port facilities – proximity, actual nuisance and amenity impacts, development controls

Provide an illustrative acoustic report from a registered practitioner demonstrating that internal noise criteria can be met & estimates of additional building costs

Discussion of the potential for complaints or other actions arising despite the port operating lawfully, considering:

- Cumulative impacts from multiple berth operations etc
- The use of ship's horns cannot be restricted
- complaints about dust fall out may be generated despite actual rates significantly lower than current limits ie 120 mg/m²/day
- actual and/or perceived health risks from dust fall-out

Ecological Sustainable Development

Discuss the apparent nexus between ESD principles and likely requirements of the port protection code. Include a discussion of TCC's suggested adoption of sustainable building guidelines.

Concept master plan

Present an updated version of the draft FDA Scheme and all associated documents including the Port Protection Code. Address:

- Issues raised by DIP (ex-DLGP), including number of car parks per marina berth
- Proposed modifications to the masterplan, including consideration of the 400m separation from Berth 10
- Any proposed additions to the development codes, including provisions for disaster management, ASS and sustainable building design. This should include consideration of the suggestions provided by Kevin Macks.

Update details of the proposed tenure of the land following development

Construction

Describe performance bonds and/or other guarantees that would be provided to ensure the amenity of the area and/or the reputation of the State is protected in the event of failure of the Project.

Describe the impacts of an extreme event such as a tropical cyclone on the construction works including mitigation of any potential environmental harm.

Construction methodology and sequencing

Discuss the need for dredging to mitigate impacts from the closure of the existing Breakwater Marina channel

Material extraction and delivery

Update the analysis of the delivery of construction materials to the site:

- Describe the key characteristics of the proposed temporary bridge crossing of Ross Creek including
 - Location & dimensions
 - Key design criteria, including resistance to collision impact
 - Opening arrangements, waiting times, predicted queuing
 - Parking of trucks, manoeuvring of boats
- Comparison of the Port Access Road / barge option (described as option 5 by DMR) against the preferred option including:
 - impacts to residents adjacent to roads & bridge including noise, vibration, loss of access
 - relative pavement wear costs
 - Disruption of temporary bridge to Ross Creek navigation including risk assessment for recreational craft
 - Contribution to development of the Port Access Road
 - Environmental impacts of barge landing
 - Other economic impacts eg project timing
- Estimate post-Project construction traffic (non-material haulage) including likely numbers of trips, routes and types of vehicle, parking

Land use suitability

Discuss the potential for salt leaching into buildings & risk of corrosion

Traffic and transport

Existing transport infrastructure

Update the description of the existing transport infrastructure

- non-port waterway traffic in Ross Creek
- Traffic counts on Boundary Street

Potential impacts and mitigation measures – land based transport

Update the analysis of impacts on the State-controlled and local government road networks. This will require comparison of the projected traffic situation with, and without, the Project taking into account:

- TCC & DMR submissions
- Cumulative increases from other approved developments
- Fuel tankers for cruise/military ships
- Construction traffic beyond the initial operational works

Revised prediction of increases in traffic as a result of the proposed development to include presentation of peak hour traffic volumes.

Update the assessment of predicted pavement damage associated with the haulage options and estimate the bring forward costs to council etc.

Provide an updated assessment of the public transport requirements of the development in terms of existing transport networks and frequency of services and the requirement for provision of additional facilities within the development.

Potential impacts and mitigation measures - marine transport

Update the description of impacts to marine transport that may be potentially affected by the Project, including:

- Outline any required modifications to existing port infrastructure including navigation markers and beacons.
- Ship-ship interactions when cruise/military ship is at berth and departure of panamax vessel from berth 10.
- Describe the impact of the construction and operation activities of the Project on non-port waterway traffic including dredging of the berth pocket & swing basin
- Operation of the temporary bridge including potential for collisions, backing up into the port
- Describe any constraints to navigation whilst military vessels are berthed (100m buffer around the vessel) and during berthing and departure of ships using the Ocean Terminal. QPS issue with enforcement.
- Assess the potential of the project to increase the demand for public boat launching facilities (ramps and pontoons) in the Breakwater Cove precinct and surrounding areas.

Non-transport infrastructure

Address the requirements for augmentation of existing water and sewerage services to handle the proposed development.

Coastal environment

State Coastal Plan

Address the Project's consistency with the relevant policies of the *State Coastal Management Plan 2001* in the context of requirements of the *Breakwater Island Casino Agreement Act 1984*. In particular, port compatibility (policy 2.1.1) and residential uses (policies 2.1.3, 2.2.4, 2.1.9 and 2.8.1).

Dredging

Provide further discussion of dredging including:

- Monitoring triggers ie hydrographic surveys & water quality management criteria. Who does this and how often.
- Reassess siltation rates compared to TPA dredging rates. Estimate upper bound maintenance dredging volumes due to extreme events.
- Describe arrangements for dredge material rehandling (dewatering ponds etc) for land based disposal of contaminated material and cutter suction dredging.
- Update the discussion on access to disposal sites.
- Description and discussion of impacts of proposed offshore disposal of dredged material, including cumulative impacts from TPA disposal operations

- Describe water quality impacts associated with dredging including plume modelling, prediction of fate of contaminants. Discuss monitoring and other EMP actions to manage water quality during dredging operations.

Water Quality

Update the discussion on the potential threats to the water quality and sediment quality within surrounding waters associated with the construction and operation of the facilities. This assessment shall include:

- Nutrients in sediment and waters of the development site
- The potential intersection with groundwater during deep excavation
- Ammonia in groundwater
- Stormwater runoff from developed areas, including dust contamination (see EPA submission page 10) and nutrient “spikes” from landscaping activities.
- Interaction of stormwater flows with existing stormwater drainage ie TEC, casino, SCL
- Provide a presentation of residence time in artificial waterways, including the existing Breakwater Marina.
- Provide more detail on the susceptibility to algal blooms in the artificial waterways, including an operational response plan for algal blooms.
- Elevated turbidity during early stages of construction caused by placement of quarry material and breakwater construction.
- Description of the dewatering operations, size of ponds, criteria for release to receiving waters. Discuss impacts of high rainfall events on dewatering operations.
- Where discharge waters are predicted to have poorer quality than the receiving waters, plume modelling and an assessment of the potential impacts on adjacent fisheries habitats (i.e. seagrass beds) is required.

Coastal Engineering

Discuss the impact of the reduced storm buffer on the Strand beach as a result of the predicted changes in beach alignment. Discuss proposed mitigation.

Update the discussion of the potential impacts on the development associated with extreme events such as tropical cyclones. Provide recommended design parameters for detailed design and physical model testing of coastal structures. This must specify crest levels, acceptable wave overtopping rates and damage probabilities and include discussion of:

- the selection of an appropriate DSTE considering potential costs to the community associated with risk profiles greater than the 100year average recurrence interval.
- The potential for global sea level rise greater than the allowance of 0.3m.
- Cost of retrofitting protection works
- mitigation of extreme wave overtopping and threats to people and property, particularly the detached housing proposed on the northern breakwater.

Describe the incidence of long waves in Cleveland Bay. Response of harbour to long waves with and without the TOT berth pocket.

Noise and vibration

Provide an updated assessment of off-site noise and vibration impacts that could arise due to increased road transportation directly resulting from the project in particular haulage truck traffic.

Nature conservation

Terrestrial fauna

Update the description of the fauna present or likely to be present in the area including use of the area by migratory birds, nomadic birds, fish and terrestrial fauna.

Discuss breakwaters as habitat for species listed under the *Nature Conservation Act 1992* and/or *Environment Protection and Biodiversity Conservation Act 1999* (Cwlth) as presumed extinct, endangered, vulnerable or rare.

Aquatic biology and fisheries

Describe the nature and extent of existing seagrass beds within the proposed area of development and in the areas adjacent to the Project site.

Describe the predicted loss of seagrasses in relation to the extent and regional significance of seagrass communities and associated impact on fisheries, dugongs, turtles and dolphins etc. This should include assessment of works around the proposed temporary bridge.

Update the discussion of offsets for loss of seagrasses.

Provide a revised seagrass monitoring program including possible incorporation with existing TPA program

Describe the management of trapped fish and mammals during initial construction of sheet piling enclosure considering DPIF fish salvage guidelines.

Provide an updated impact assessment on dolphins & dugong in Cleveland Bay including:

- habitat loss
- noise impacts
- risk of boat strike
- proposed mitigation
- revised monitoring proposal

Social

Provide an updated report on impacts on people who live, recreate, travel along, or work near the areas affected by the Project for both the construction and operation phases of the development. This must be based on submissions received on the EIS, stakeholder meetings, responses to the project team via the free-call number and any further consultation conducted. Update the social impacts “scorecard” (EIS section 2.1).

Provide a response to the concerns of members of the TMBYC including:

- the potential for a permanent Strand bridge
- The 100m exclusion zone around navy ships
- Safety concerns around operation of the temporary bridge
- Noise impacts of trucks on TMBYC
- Financial impacts on TMBYC including loss of trade & devaluation of marina berths.

Discuss the potential for increased insurance premiums in Townsville as a result of the project.

Economy

Discuss potential mitigation options to address the shortage of rental accommodation for the construction workforce, such as providing assistance for workers to secure short-term and permanent accommodation.

Update the project’s cost-benefit analysis taking into account relevant comments received and updated impact assessment information, including:

- consequences of the preferred construction material haulage option
- potential economic impacts on the port and port users
- environmental offsets
- demands on infrastructure and services

Hazard and risk

Review the risk assessment, particularly taking into account the results of the TCC risk workshop and the EPA submission. This must:

- Review all High and Extreme risks suggested by the TCC risk workshop
- Identify mitigation treatments

- Consider the updated noise, odour & air quality assessments.

Provide an outline Disaster Management Plan including consideration of:

- Awareness of residents and visitors
- Evacuation of TOT, marina and residential areas and provision of on-site safe refuges for cyclones, toxic plumes etc
- Impact on existing counter-disaster planning for the area, including the potential need for providing evacuation centre(s) for an additional approximate 2000 persons.
- Risk of explosion and terrorist actions

Environmental management plan

Update the EMP following recommendations from EPA

The updated construction EMP must consider:

- establishing a scientific advisory panel
- management of all elevated turbidity risks including breakwater/bund construction
- arrangements to avoid environmental harm during extreme climatic conditions such as tropical cyclones
- management of trapped fish & mammals
- additional ASS requirements
- dolphins & dugong
- mosquitoes
- consultation/communication with affected stakeholders

The updated operations EMP must consider:

- stormwater & specific disease risk to coastal dolphins
- marina operations including fuelling, sewerage reception
- TCC's suggested sustainable building guidelines

A2. Development approvals

An updated list of the development approvals required by the project should be presented including ERAs and CMD triggers. Transport Infrastructure Act requirements (DMR)