

Chapter 5: **Issues and Responses Trail**

Issues and Responses Trail

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5. ISSUES AND RESPONSES TRAIL

5.1 Review of issues raised

A primary objective of Scoping is to review all issues raised and to identify those issues that need to be included within the scope of the Environmental Impact Assessment process.

To guide this process of reviewing issues and identifying the key issues, the following questions are asked:

1. Whether or not the issue raised falls within the scope and responsibility of this EIA process for the additional activities being proposed at the Port of Ngqura by Transnet. If the issue is outside the scope of this EIA process, it is not considered further, with clear justification provided for this decision.
2. Whether or not sufficient information is available to respond to the issue or concern raised without further specialist investigation.
 - If sufficient information is already available, then the issue can be responded to directly in the scoping meetings and reporting, without the need for further specialist investigations.
 - If sufficient information is not readily available, then further technical and/or specialist inputs are required to source relevant information in order to be able to address this issue as part of the EIA process. In the case of this EIA process, this review led to three additional specialist studies being required, these being the studies on *Marine ecology, sediment toxicology and dredging* (Chapter 6), *Traffic and transportation* (Chapter 7), and *Socio-economic impacts* (Chapter 8). The marine study draws on the *Sediment Analysis and Assessment Data Report* undertaken as part of this EIA process in order to source current baseline information (Appendix G).

Furthermore, the following principles are applied when identifying key issues and conducting the subsequent environmental impact assessment:

- Focus on the key issues and associated impacts.
- Maximise the use of existing information.
- Adopt an impacts-driven approach that seeks to understand the impact pathways and ultimate receptors of impacts (e.g. instead of only focusing on the impact of dredge spoil disposal on, for example, the water column, to try to extrapolate the potential effect on marine species and ultimately on resource users such as the fishing industry).

5.2 Issues and responses

This section presents all environmental issues associated with the proposed project that have been raised through consultation with I&APs undertaken as part of this Scoping process; and identifies those that are considered key issues requiring more detailed investigation and assessment. To appreciate the context in which these issues have been raised, the reader is referred to Appendices D and F which provide notes from meetings and correspondence received from stakeholders. Responses to issues have been provided by the CSIR team and the project proponents (Transnet).

The issues raised by I&APs have been grouped as follows (number of issues raised is shown in brackets):

- Issues related to dredging and the disposal of dredge spoil (14 issues)
- Socio-economic issues (15 issues)
- EIA and public participation process (6 issues)
- Project planning, design and implementation (12 issues).

Based on the issues raised through Scoping (Section 5.2), as well as inputs from the authorities, the EIA team and the project proponent, a summary of the key issues that require further investigation and assessment are provided in Section 5.3. These issues formed the basis for setting the scope of work for the three Specialist Studies undertaken as part of this EIA process.

5.2.1 Issues related to dredging and the disposal of dredge spoil

NO.	ISSUES RAISED	DATE	COMMENTATOR	RESPONSE
1	My main concern is the effect of turbidity from the disposal material on the clarity of water. This will impact on the squid fishery since squid use visual communication in their spawning behaviour. The Marine ecology specialist study should include a component measuring levels of turbidity, spread of turbidity in the bay, and duration of turbidity levels. I do not know if that was done for the original study? Changes in the size distribution of squid in Algoa Bay have been noted, with squid maturing at much smaller sizes. This has not been related to Coega directly, but is of concern.	<i>Email, 13 Nov 2006</i>	Dr Ane Oosthuizen, SANParks	Addressed as part of the Marine ecology study (Chapter 6) – Please refer section 6.3.2.2 for details on turbidity effects in the bay. Potential impacts on squid spawning (section 6.4.2.2.2) and on the effects of turbidity on squid (section 6.4.2.2.3) are also investigated.
2	Dredging and land excavation to create an area for the container terminal and haulage of the dredge material is likely to cause dust pollution i) would you furnish the Assistant Manager (Mr Titima, Air Pollution and Noise Control) with proposed measures to abate dust nuisance which may effect surrounding industrial and residential areas. ii) It would be appreciated if a copy of recent air quality monitoring results including dust monitoring could be forwarded to the above.	<i>Emailed, 27 Oct 2006</i>	Mr Nodwela, NMBM Environmental Health	The NMMM is included as an I&AP and will be sent all relevant information pertaining to this environmental assessment. Mr Titima has been added to the I&AP register.
3	Was a survey conducted at the offshore disposal site after the original port construction to determine the effects of the dumping?	<i>Faxed, 23 Oct 2006</i>	Capt A Kampfer, SA Navy Hydrographic Office	Yes surveys were conducted at the disposal site after dredging and results are included in the annual monitoring reports produced for NPA. References include Klages et al, 2006, Klages and Bornman, 2005 and Klages and Bornman 2003.
4	When you start digging for the two berths will the water not flow into the dry areas and how will this impact on the dredging of the existing rock wall.	<i>9 Nov 2006</i>	Coega ELC Meeting	No. The construction of the two berths in the dry includes putting in place a clay barrier which prevents water within the port from flowing into the area of construction (refer to section 2.1.1. for further details).

NO.	ISSUES RAISED	DATE	COMMENTATOR	RESPONSE
5	The additional dredging & disposal will require a permit.	9 Nov 2006	Coega ELC Meeting	Yes it will. A process of obtaining a permit has already been initiated by Transnet with DEAT MCM.
6	Has an alternative disposal site for dredge material been investigated? Need to include this in the EIA as per London protocol. Also need to look at the cumulative effect and not just volume as from the first two berths.	9 Nov 2006	Coega ELC Meeting	Yes an alternative disposal site in deeper water was investigated (in the original EIA, CES 2001). The potential use of this alternative site was reviewed as part the current EIA process with the conclusion reached that the existing site is environmentally more suitable (Refer to section 2.2.3)
7	What alternative sites are being assessed for the disposal of the dredge spoil? It is understood that no alternative sites are being assessed?	Pub Mtg, 25 Oct 2006	Johan Brink, Coega Development Corporation	See response above
8	Where will the material that will be taken out from the dry area be disposed of? Will trucks be used?	9 Nov 2006	Coega ELC Meeting	The material as excavated in the dry for the construction of the quay wall will be used as back-filling behind the new quay walls, as well as the levelling off of the area behind the quay wall. It is unlikely that any of this material will be spoiled. The core and armour rock in the temporary bund (at the additional container terminals) will be utilised for the Coega river revetment.
9	There is a need to create a balance between the economics of disposal of the dredge spoil and negative environmental impacts.	Pub Mtg, 25 Oct 2006	Johan Brink, Coega Development Corporation	Agreed. The use of the site in deeper water would add to the costs of dredging operations, nonetheless the existing site is considered preferable from an environmental perspective notwithstanding the economic imperatives. Refer to section 2.2.3 for more information.
10	The impact of the dredge spoil on the dynamics of the Sundays River mouth and the ecology of the Sundays River as a spawning ground for fish needs to be assessed? It is thought that the previous deposits of dredge spoil may have resulted in more	Pub Mtg, 25 Oct 2006	Chris Jordaan, Colchester	The construction of the Port of Ngqura has temporarily interrupted the natural movement in the surfzone, which has a net movement along the shoreline in an easterly direction. As a result, one can currently observe minor

NO.	ISSUES RAISED	DATE	COMMENTATOR	RESPONSE
	frequent closure of the Sundays River mouth and a negative impact on fish stocks in the river. Should construction result in a negative affect on the Sundays River, what remedial action can be taken?			beach erosion immediately east of the eastern breakwater. However, the sand by-pass system, which is being commissioned early in 2007, will restore this natural sediment movement. Subsequently, the Port structure is not expected to result in any significant impact on the sediment movement along the shoreline in the vicinity of the Sundays River mouth. It needs to be borne in mind that river mouths are highly dynamic and affected by numerous factors, extending from wind and wave conditions through to catchment management.
11	Is there a possibility that, should the dredge spoil have resulted in the closure of the Sundays River Mouth, that the mouth can be dredged open?	<i>Pub Mtg, 25 Oct 2006</i>	Chris Jordaan, Colchester	Monitoring of the offshore dredge disposal site (refer to Figure 6.3 in Chapter 6) shows that the material deposited offshore has remained within the boundary of the disposal site. Bearing in mind that the Sundays River mouth is approximately 17km from the closest corner of the offshore disposal site, it is not expected that the dredge material reached the Sundays River mouth, influencing mouth closure.
12	It is understood that the sand bypass system at the Port is not yet in operation. When will it come into operation? What affect has the non operation of the sand bypass system had on the port basin and will further dredging of the basin be required as a result of this? What will be the impact on the Sundays River mouth as a result of the sand bypass system?	<i>Pub Mtg, 25 Oct 2006</i>	Chris Rhodes	Yes, the sand bypass is not currently operational. The net movement of sediment in the surf zone is eastwards and therefore the unavailability of the sand bypass system has resulted in a build-up of sand against the western breakwater and a slight erosion of the beach at the eastern breakwater. This situation is expected to be remedied when the sand-bypass comes into operation in early 2007.
13	Will the dredge spoil be deposited at the same off-shore site as previously used? What has been the affect on marine ecology from the dredge spoil previously deposited at this site?	<i>Pub Mtg, 25 Oct 2006</i>	Chris Rhodes	Yes. Marine ecology surveys were conducted at the disposal site after dredging and results are included in the annual monitoring reports produced for NPA. References include Klages et al, 2006, Klages and

NO.	ISSUES RAISED	DATE	COMMENTATOR	RESPONSE
				Bornman, 2005 and Klages and Bornman 2003. Also refer to section 6.3
14	What will be the impacts from dust on the Colchester community?	<i>Pub Mtg, 25 Oct 2006</i>	Patrick Nodwele, NMBay Municipality	No dust impacts on Colchester as a direct result of the proposed developments is expected.

5.2.2 Socio-economic issues

NO.	ISSUES RAISED	DATE	COMMENTATOR	RESPONSE
1	What will be the benefits to communities for the construction of the container terminal? How many jobs will be created by the project?	<i>16 Nov 2006</i>	Mlungisi Hina, Langa Meeting	Socio-Economic benefits are discussed in detail in Chapter 8. Approximately 840 - 960 jobs during construction (peak labour requirements) and in the order of 320 jobs will be available when the container terminal is fully operational.
2	Will there be any opportunities for SMME's?	<i>16 Nov 2006</i>	Mlungisi Hina, Langa Meeting	Yes and actions to maximise use of SMME's has been highlighted in Chapter 8.
3	Will there be a specific requirement for local people to be employed in the running and operation of the container terminal?	<i>16 Nov 2006</i>	Mlungisi Hina, Langa Meeting	Yes provided that people required for operation of the port are locally available. Measures to promote use of local labour are provided in section 8.5.1.
4	The port expansion will be supported by the number of jobs that are created. Will local people be employed or will people from outside the area be brought in to work on the project?	<i>7 Nov 2006</i>	WE Mandla, Motherwell Meeting	See comment above.1

NO.	ISSUES RAISED	DATE	COMMENTATOR	RESPONSE
5	What skills will be required for employment and will training be provided to ensure the employment of local people?	7 Nov 2006	WE Mandla, Motherwell Meeting	A broad breakdown of skills required is provided in Table 8.1. It is recommended that training be provided to promote local employment. Refer to section 8.5.1
6	Unemployment levels in the area are high. Is there a training programme to facilitate the employment of local people?	7 Nov 2006	ME Stemele, Motherwell Meeting	It is recommended that training be provided to promote local employment. Refer to section 8.5.1
7	What opportunities will be created or SMME's?	9 Nov 2006	Monwabisi Gans, SANCO Meeting	Actions to maximise use of SMME's have been highlighted in Chapter 8.
8	How many jobs will be created by the project and will training be provided for local people to be employed during the operational phases for the container terminal?	7 Nov 2006	Belinda Gqozo, Zwide Meeting	Approximately 840 - 960 jobs during construction (peak labour requirements) and in the order of 320 jobs will be available when the container terminal is fully operational.
9	What opportunities will there be for SMME's? Will attempts be made to involve them in the delivery of containers?	7 Nov 2006	Zanele Madyosi, Zwide Meeting	Actions to maximise use of SMME's have been highlighted in Chapter 8.
10	How many jobs will be created by the project during construction and operational phases?	8 Nov 2006	Cllr Makoni, Kwazakele & New Brighton Meeting	Approximately 840 - 960 jobs during construction (peak labour requirements) and in the order of 320 jobs will be available when the container terminal is fully operational
11	Is there a specific requirement on the recruitment of local people to run the container terminal or will training be provided?	8 Nov 2006	Cllr Makoni, Kwazakele & New Brighton Meeting	A broad breakdown of skills required is provided in Table 8.1. It is recommended that training be provided to promote local employment. Refer to section 8.5.1
12	What type of job opportunities would be available?	8 Nov 2006	Cllr Ranyele, Kwazakele & New Brighton Meeting	A broad breakdown of skills required is provided in Table 8.1. At this stage the specific job requirements have not been determined.
13	Will this project open opportunities for the local people or will existing personnel be used?	8 Nov 2006	Cllr Ranyele, Kwazakele & New Brighton Meeting	Both existing personnel and local people will have opportunities of being employed.
14	Will there be any opportunities for SMME's in the transportation and delivery of containers?	8 Nov 2006	Khuselwa Faku, Kwazakele & New Brighton Meeting	Actions to maximise use of SMME's have been highlighted in Chapter 8. Note that Transnet are not

NO.	ISSUES RAISED	DATE	COMMENTATOR	RESPONSE
			Brighton Meeting	directly involved in road haulage of containers.
15	<p>The development of a container terminal, and more specifically a hub port for east-west trade, has been mooted for about 10 years. There was a commercial initiative by P&O Nedlloyd/TCI in the late 1990's but other priorities found favour.</p> <p>It is understood that the proposed container terminal will primarily service trade to and from Gauteng and a rail service will be provided to facilitate this. Eventually, the current container terminal in the Port of PE will be phased out and the implementation of the plans for holistic development of that port and the historic centre of the city can proceed.</p> <p>For the foreseeable future, the volumes of container traffic which will be generated by the Metropolitan area and the Coega IDZ will not be sufficient to justify a major container terminal at Coega. Hence, the terminal needs to be considered in the light of servicing Gauteng, if that is cost effective, and preferably the hub port concept. The challenge with just servicing Gauteng is that rail slots are taken up by container trains and there is no capacity for bringing additional manganese ore for export and beneficiation, and volumes of chromite, iron ore, coal and fluxes also for beneficiation.</p>	<p><i>Written comment, 6 Dec 2006</i></p>	<p>Andrea von Holdt, Coega Development Corporation</p>	<p>Comments noted. The challenges of balancing existing and future rail and port usage will have to be addressed by Transnet as part of their on-going planning and operational management.</p>

5.2.3 EIA and public participation process

NO.	ISSUES RAISED	DATE	COMMENTATOR	RESPONSE
1	As you are aware, iGas is involved (with Eskom) in a project to set up an LNG terminal and CCGT power plant adjacent to the proposed craft basin and we need to be kept informed of developments which may affect our plans.	<i>Email, 19 Oct 2006</i>	Dr Michael J Ellman, iGas	This I&AP was placed on the project database and provided with the Background Information Document on the project.
2	Why wasn't the admin craft basin done in phase 1?	<i>9 Nov 2006</i>	Coega ELC Meeting	At the time of conducting the overall Port EIA (CES 2001), it was proposed that service vessels would be accommodated within the harbour in PE. Recent development trends require that the service vessels are located with the Port of Ngqura.
3	Meetings like the one at the PE City Hall are also required in the areas like Motherwell. The City Hall is too far for people from these areas to travel and they need to be informed of the project and provided an opportunity to give their input into the project.	<i>Pub Mtg, 25 Oct 2006</i>	Johan Brink, Coega Development Corporation	In order to ensure the participation from organizations in communities, one-on-one meetings are held with identified groups.
4	The specialist studies need to assess the potential impacts of the development on the islands.	<i>Pub Mtg, 25 Oct 2006</i>	Andrea von Holdt, Coega Development Corporation	Yes. The potential impacts on the islands have been investigated and the impacts are described in Chapter 6.
5	What is the outcome of previous marine monitoring studies during and after construction of the existing port structures; and will these results be taken into account in the assessment of impacts from this additional dredging and disposal?	<i>Pub Mtg, 25 Oct 2006</i>	Andrea von Holdt, Coega Development Corporation	A summary of the outcomes of recent Marine monitoring studies are provided in section 6.2., which provides a baseline on which future impacts can be assessed.
6	What infrastructure and services will be required by the Port and are these taken into account in the environmental impact assessment process?	<i>Pub Mtg, 25 Oct 2006</i>	Andrea von Holdt, Coega Development Corporation	An overview of the project description is provided in Chapter 2 and forms the basis for this EIA.

5.2.4 Project planning, design and implementation

NO.	ISSUES RAISED	DATE	COMMENTATOR	RESPONSE
1	When will the project start?	7 Nov 2006	Mr ME Stemele, Motherwell Meeting	Construction due to start mid to latter part of 2007. Refer to Chapter 2 for details.
2	You have indicated that the Port will be open and operational in 2009. Does this mean fully operational and when in 2009 will it be opened?	Pub Mtg, 25 Oct 2006	Wendy Lester, PERCCI	Construction is planned to be completed by end 2009. Refer to Table 2.1 in Chapter 2.
3	Will the rocks be coming from Coega Kop Quarry? The haul road has been rehabilitated between Coega Kop Quarry and the port. Will Neptune road be used?	9 Nov 2006	Coega ELC Meeting	No core or armour rock will be sourced from the Coega Kop quarry. The existing stockpile of overburden (i.e. left over rock, not large enough to be used as armour rock) at the Coega Kop quarry will be crushed and transported via Neptune Road for use as concrete aggregate within the port. The core and armour rock will be sourced from a commercial quarry.
4	The proposed container berth has temporary rock armour protection. Has it been investigated that the rock be used as a possible source? Do you plan on using the existing rock rather than source other rock?	9 Nov 2006	Coega ELC Meeting	The armour rock in the temporary berm at the container berth will be used for the Coega River revetment. Refer to section 2.2.1
5	What area of the port is proposed to be paved?	Pub Mtg, 25 Oct 2006	Chris Jordaan, Colchester	The area behind the container berth as shown in Figure 2.3 in Chapter 2
6	Will the paving consist of brick or concrete?	Pub Mtg, 25 Oct 2006	Mark Marshall, NMBM Conservation	A concrete slab of 430 mm thickness will be used.
7	It is understood that the concept master plan for the Port of Ngura is under consideration by Transnet Projects, NPA, SAPO and	Written comment, 6	Andrea von Holdt, Coega Development	Commented noted. Alignment of planning between Transnet and CDC is beyond the scope of this EIA.

NO.	ISSUES RAISED	DATE	COMMENTATOR	RESPONSE
	<p>Spoornet. That plan is currently not aligned with The IDZ's Master Plan and, more importantly, does not address the requirements of potential investors in the IDZ.</p> <p>Further, there are likely to be requirements for rail marshalling yards in the IDZ and additional space for logistics operations. All such requirements need to be holistically planned as there are other imperatives in the IDZ.</p>	<i>Dec 2006</i>	Corporation	
8	<p>It is understood that NPA is intending to provide infrastructure such as roads and storm water management within the port precinct. However, it is also understood that the NPA is requiring other bodies to provide and manage utility services to tenants/ concessionaires in the Port. Such tenants/ concessionaires include SAPO for the initial container terminal, Alcan for the aluminium receiving and out loading facilities and iGas for the LNG receiving facilities. NPA have advised that they will provide their own utility services distribution networks and hence integration of utility services provisions will be problematic and there may well be duplication.</p>	<i>Written comment, 6 Dec 2006</i>	Andrea von Holdt, Coega Development Corporation	<p>In line with the promulgated Port Bill, it is the intention that the services to the various tenants not be provided by the NPA due to the inability to recover the costs associated with the maintenance thereof, particularly with respect to power supply. The preliminary design for the electrical reticulation makes provision for the separate metering of power to the tenants without impacting upon the reticulation or duplication thereof. This is covered in the original ROD and not an issue with regard to the current EIA process.</p>
9	<p>Once a properly integrated and aligned Master Plan for the Coega Project is available, a properly integrated and aligned infrastructure and utility services plan can be prepared. The implementation of that plan then needs to be considered from a legal, financial and commercial perspective. It is problematic to service tenants/ concessionaires cost-effectively unless the entity responsible for utility services provisions is party to all NPA's engagements with such tenants/ concessionaires. A private entity may not prefer electrically powered Rail Mounted Gantries which are currently being considered by TP/ SAPO/ NPA for the first two container berths. The entity responsible for utility services</p>	<i>Written comment, 6 Dec 2006</i>	Andrea von Holdt, Coega Development Corporation	<p>It will not be practical to sub-divide the container terminal, therefore with SAPO operating the first two berths, it will also operate the additional two berths, noting that the rail terminal that is supported by the RMG must be constructed along the full length of the terminal in order to facilitate the size of trains, i.e. 50 wagons.</p>

NO.	ISSUES RAISED	DATE	COMMENTATOR	RESPONSE
	provisions cannot be expected to subsidize Transnet's operations.			
10	The mandate of the CDC is to ensure the integrated development and servicing of the Coega IDZ and the servicing of the Port of Ngqura is not specifically included. The CDC's mandate will need to be extended before servicing of the port precinct can even be considered by the CDC.	<i>Written comment, 6 Dec 2006</i>	Andrea von Holdt, Coega Development Corporation	This is a matter that needs to be taken by CDC and NPA and is outside of the scope of this EIA.
11	The planning of the port precinct does not seem to have been done holistically to take account of possible adjacent developments. The draft Scoping Report for the CIP Project indicates a possible sea water cooling intake near the root of the eastern breakwater. Further, the LNG Berth, the cryogenic pipelines and the LNG storage facilities, and their concomitant infrastructure and utility services do not seem to have been integrated into the planning of the Administration Craft Basin.	<i>Written comment, 6 Dec 2006</i>	Andrea von Holdt, Coega Development Corporation	The positioning of the administration craft basin was based on strong engineering grounds and the available realistic information at the time, with the Port of Ngqura Master Planning process running concurrently with the engineering study. The layout of the container terminal was incorporated into the Master Planning exercise to the extent that the work to be constructed would not be abortive.
12	The project is supported.	<i>9 Nov 2006</i>	Mike Bonya, SANCO Meeting	Noted.

5.3 Specific issues to be addressed in specialist studies

This section provides a summary of the key issues that require further investigation and assessment. These issues formed the basis for setting the scope of work for the three Specialist Studies undertaken as part of this EIA process.

5.3.1 *Issues addressed in the Specialist Study on marine ecology, sediment toxicology and dredging*

The study will include the following:

- Identify the type and location of habitats and important species/taxa that may be sensitive to, or disturbed by, the proposed activities.
- Identify the specific stress agents associated with the proposed developments, the marine ecological receptors of the disturbance(s).
- Assess the impacts of the proposed development on the marine biota (including benthic fauna and flora, marine mammals and seabirds) of Algoa Bay through, e.g. turbidity, re-suspension of contaminants in dredge spoil and inundation.
- Assess the potential impact on mariculture and squid fisheries.
- Provide an update on the environmental baseline at the off-shore disposal site using recent monitoring reports.

5.3.2 *Issues addressed in the Specialist Study on traffic and transportation*

During Construction:

- The disposal of spoil material to locations to be advised via road based transport.
- The identification of sources for, and the transportation of construction materials from source to the port.
- Transport of these materials on the existing road network if required.
- Assessment of ability of existing Coega Kop haul road to accommodate additional material transportation if required.
- Possible transport of ship-to-shore container cranes and container handling equipment via road (abnormal loads) including identification of routes for this purpose.
- Construction worker transport requirements.

During Operations:

- Transport of containers via road to various points.
- Trip generation of admin basin activities and impact on road network.

5.3.3 Issues addressed in the Specialist Study on socio-economic impacts

- Employment opportunities during construction and operation.
- Investigating opportunities for SMME's, local labour, training and skills development.
- Effects on users of coastal waters (eg. fisherman, recreational sports and marine traffic).
- Effects on marine and coastal ecotourism.