

*Appendix I:*  
**Archaeological and  
palaeontological heritage reviews**

**LETTER OF RECOMMENDATION (WITH CONDITIONS) FOR THE EXEMPTION OF A FULL PHASE 1 ARCHAEOLOGICAL HERITAGE IMPACT ASSESSMENT FOR THE PROPOSED EXTENTIONS OF THE CONTAINER BERTH AND CONSTRUCTION OF AN ADMINISTRATION CRAFT BASIN AT THE PORT OF NGQURA (COEGA), EASTERN CAPE**

**Prepared for:** CSIR

P O Box 320  
Stellenbosch  
7599  
Tel: 27-21-888 2486  
Fax: 27-21- 888 2693  
email: plochner@csir.co.za

**Compiled by:** Dr Johan Binneman

Department of Archaeology  
Albany museum  
Somerset Street  
Grahamstown  
6139  
Tel.: 046 6222312  
Fax: 046 6222398  
Email: J.Binneman@ru.ac.za

**Date:** 2 April 2007

**LETTER OF RECOMMENDATION (WITH CONDITIONS) FOR EXEMPTION OF A FULL PHASE 1 ARCHAEOLOGICAL HERITAGE IMPACT ASSESSMENT**

**Status of the property**

The proposed areas for development was visited on 26 March 2007. Both areas under discussion were previously exposed to Phase 1 and a Phase 2 Archaeological Impact Assessments (Binneman and Webley1997; Binneman 1999). Since then the areas were exposed to intensive development. A large part of the container terminal site, is seaward of the high water mark and is largely constructed from material dredged from the sea and deposited on this site (see attached photographs). The admin craft basin site is inside the recently constructed port breakwater in an area near the mouth of the Coega River that has undergone significant modification during the construction of the port. It is highly unlikely that any archaeological heritage remains of any value will be found *in situ* or of any contextual value in any of these two areas.

**Conditions**

Although it is unlikely that any archaeological heritage remains of any value will be found *in situ* or of

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any contextual value, there is always a possibility that human remains and/or other archaeological and historical material may be uncovered during the development. Such material must be reported to the nearest museum, archaeologist or to the South African Heritage Resources Agency if exposed (see general remarks and conditions below).

### **Letter of recommendation**

It is recommended that the proposed extensions of the container berth and construction of an administration craft basin at the port of Ngqura (Coega), Eastern Cape, is exempted from a full Phase 1 archaeological heritage impact assessment. The proposed area for development is of very low cultural sensitivity and it is believed that it is unlikely that any archaeological heritage remains will be found on the property.

### **References**

Binneman, J. & Webley, L. 1997. Coega industrial development zone: cultural sensitivity report. Unpublished report prepared for Portnet.

Binneman, J. 1999. Coega Industrial Development Zone: cultural sensitivity Phase 2 report. Unpublished report prepared for Portnet.

**Note:** This letter of recommendation **only** exempt the proposed development from a full Phase 1 archaeological heritage impact assessment, but **not** for other heritage impact assessments.

It must also be clear that this letter of recommendation for exemption of a full Phase 1 archaeological heritage impact assessment will be assessed by the relevant heritage resources authority. The final decision rests with the heritage resources authority, which should give a permit or a formal letter of permission for the destruction of any cultural sites.

**The National Heritage Resources Act (Act No. 25 of 1999, section 35) requires a full Heritage Impact Assessment (HIA) in order that all heritage resources, that is, all places or objects of aesthetics, architectural, historic, scientific, social, spiritual linguistic or technological value or significance are protected. Thus any assessment should make provision for the protection of all these heritage components, including archaeology, shipwrecks, battlefields, graves, and structures older than 60 years, living heritage, historical settlements, landscapes, geological sites, palaeontological sites and objects**

### **GENERAL REMARKS AND CONDITIONS**

It must be emphasised that this letter of recommendation for exemption of a full Phase 1 archaeological heritage impact assessment is based on the visibility of archaeological sites/material and may not therefore, reflect the true state of affairs. Sites and material may be covered by soil and vegetation and will only be located once this has been removed. In the unlikely event of such finds being uncovered, (during any phase of construction work), archaeologists must be informed immediately so that they can investigate the importance of the sites and excavate or collect material before it is destroyed (see attached list of possible archaeological sites and material). The *onus* is on the developer to ensure that this agreement is honoured in accordance with the National Heritage Act No. 25 of 1999.



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11<sup>th</sup> April 2007

Mr Paul Lochner  
C.S.I.R.  
P.O. Box 320  
Stellenbosch 7599  
South Africa

**Palaeontological heritage assessment at two proposed localities - Port of Ngqura**  
**a. the administration craft basin area and**  
**b. additional container berths area.**

Dear Paul

On 3<sup>rd</sup> April 2007 I spent the morning at the Port of Ngqura assessing the (potential) palaeontological heritage of the two areas under consideration. Mr Andries Auret and Ms Renée de Klerk (Environmental Manager) kindly conducted me to the sites and provided me with the necessary background and information.

**Geology – general outline**

This part of the Eastern Cape coastal strip is underlain by rocks of lower Cretaceous (c.135Ma) fluvial and estuarine sediments and much younger upper Miocene and younger marine related sediments of the Algoa Group (< 12 Ma). The latter sediments reflecting repeated marine transgressions and regressions which effectively deposited a variety of marine related sediments along the coast - sediments like aeolian dune systems and high energy beach deposits.

**Cretaceous Uitenhage Group (c. 135 Ma)**

The Ngqura Port site is underlain by sediments belonging to the Uitenhage Group in the Algoa Basin. The Uitenhage Group is subdivided into the Enon, Kirkwood and Sunday River Formations. The Enon and Kirkwood formations represent continental river-deposited sediments while the Sundays River Formation had a distinct marine component and was most probably contemporaneously deposited in estuarine and shallow marine environments. The best and most complete exposures of all three formations occur in the Algoa Basin and it is in this basin that most of the dinosaur and plant fossil discoveries have been made. Good exposures of fossil bearing Kirkwood sediments are found mainly along the northern boundary of the basin, where sporadic outcrops of Kirkwood rocks occur over an east-west distance of c.120km, not much wider than 5km. Other (smaller) outcrops occur in the vicinity of Uitenhage, Dispatch and on the flanks of the Coega River valley.

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Locally, the Ngqura Port site is underlain by terrestrial fluvial sediments of the upper Kirkwood Formation. The contact with the overlying (contemporaneous) Sundays River Formation occurs close by to the east, in the Coega River valley. This is evidenced by the extremely good outcrops of these estuarine and shallow marine sediments that are exposed in the Coega Brick quarry north of the N2 main road. Here a number fossils of different invertebrate marine species and numerous trace fossil have been recorded. No Kirkwood Formation fossils have been recovered from the Ngqura Port area and its surrounds in the past.

**Algoa Group (c. 55 Ma to present)**

Since early Eocene times (c.55 Ma), there have been a number of marine transgressions and regressions along the southern Cape coastal belt and these episodes have effectively deposited marine related sediments along the coastal strip. Sediments include shallow marine shelly limestones, beach washed sands and gravels and aeolian sand-dune deposits. The Algoa Group sediments have effectively been deposited on top of the older Uitenhage Group as a thin veneer of marine sediments as the sea retreated to its present shoreline position. Consequently, Kirkwood rocks are best exposed in incised river valleys, like the Sundays, Bushman's and Coega River valleys.

**Assessment of fossil potential at:**

- 1. Administration Craft Basin** – Here some of the original beach and coastline is still intact and no obvious bedrock is exposed. These modern coastal marine sediments are related to the Schelmoek Formation of the Algoa Group. No obvious fossil bearing sediments were observed in this area and it is concluded that the potential of recovering any significant fossils is remote.
- 2. Additional container berth area** – Here the surface sediment has been highly disturbed during the recent construction of the port. The Kirkwood Formation bedrock occurs between 14 and 20 metres below surface. It is therefore highly unlikely that any significant fossils would be recovered from this area.

I trust that the information in my report is what was required.

Yours sincerely,



Dr Billy de Klerk  
Curator: Earth Sciences

b.deklerk@ru.ac.za