

APPENDIX 4

NAMIBIAN MARINE PHOSPHATE (PTY) LTD

Sandpiper Project

Proposed recovery of phosphate enriched sediments from the Marine Mining Licence Area No.170 off Walvis Bay Namibia.

Environmental Impact Assessment Report for the Marine Component

Prepared by:

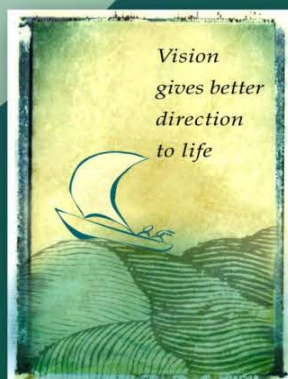
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EXTERNAL REVIEW REPORT

March 2012

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EXTERNAL REVIEW, APPENDIX 4:

Project:

The Dredging of marine phosphate enriched sediments from Mining Licence Area No. 170

Date:

March 2012

Prepared for:

Namibian Marine Phosphate (Pty) Ltd.

Prepared by:

Patrick D. Morant

MINING LICENCE AREA 170 ENVIRONMENTAL IMPACT ASSESSMENT REPORT

March 2012

EXTERNAL REVIEW

Introduction

I present a formal review of the Environmental Impact Assessment (EIA) Report for the proposed dredging of marine phosphate from MLA 170, offshore Meob Bay, Namibia.

My review is based on my experience of managing numerous marine EIAs along the west coast of Africa. In particular, since 1993 I have managed EIAs for offshore oil and gas exploration and production, and marine diamond mining in Namibian waters. I am a Registered Professional Natural Scientist (Reg. No. 401514/830).

I reviewed the components of the Environmental Impact Assessment as they were completed. In particular I focused on:

- (i) the Draft and Final Scoping Report in terms of the issues and concerns to be addressed in the EIA;
- (ii) the studies conducted by the marine specialist consultants;
- (iii) the Draft EIA report with a particular emphasis on the assessment of the potential impacts of the proposed dredging operation;
- (iv) the Draft Environmental Management Plan (EMP) Report;
- (v) the Comments and Response Trail of the reviewed Draft EIA/EMPR (Appendix 5); and
- (vi) the Final EIA and EMPR.

I attended all six stakeholder consultation meetings: three in Windhoek, one in Swakopmund and two in Walvis Bay which provided insight into the issues raised by, and the concerns of, all the stakeholders.

Scope of the Study

The EIA Report encompasses all the proposed activities associated with the dredging of marine phosphate in MLA 170 from the arrival of the dredger from the high seas, dredging of the phosphate, and transporting it to the discharge point south of Walvis Bay. It includes the operation of the support vessel, bunkering, victualling, and crew changes. A separate EIA currently is being prepared to address all the terrestrial components of the project from the discharge of the phosphate ore, processing the ore to a marketable grade, and exporting it.

Technical Completeness of the Report

The Final Scoping Report, submitted to the Ministry of Environment and Tourism on 15 December 2011 documented all aspects of the scoping phase of the Environmental Impact Assessment for the dredging of marine phosphate in MLA 170. In particular the issues and concerns raised by stakeholders were recorded and responded to. In many cases no further response was required. However, technical issues and concerns arising from the proposed project were given to the specialist scientists to address, as appropriate, in their respective studies for the EIA itself.

The Environmental Impact Assessment Report, its scope and content, is in full accord with standard practice for EIA reports describing the planned project, the stakeholder engagement (scoping) process, the affected environment, potential impacts, and mitigation measures to address these potential impacts. In addition it includes an Environmental Management Plan (EMP) to guide the implementation and monitoring of the effectiveness of the mitigation measures.

Four specialist studies were commissioned to address specific technical issues and to enable the assessment of potential impacts with an acceptable degree of confidence. All four studies were based on available information and the scientific literature and, with the exception of the macrobenthos study, no fieldwork was conducted. The four studies covered the following topics:

1. Fish and fisheries and seabirds and marine mammals;
2. Water column dynamics;
3. Macrobenthos; and
4. Jellyfish

These studies are of a high standard and fully reflect the knowledge and understanding of the environmental components concerned and their respective roles in the Benguela ecosystem. In respect of the macrobenthos study (Appendix 1c) and the Fisheries, Mammals and Seabirds study (Appendix 1a) certain data requested from the Ministry of Fisheries and Marine Resources were not provided for the completion of the EIA/EMPR. However this did not prevent a realistic assessment of the potential impacts of the project on these two environmental components.

In response to requests arising from the review of the Draft Environmental Impact Assessment, a chapter on the socio-economic aspects of the marine dredging operations has been included in this EIA. This socio-economic study of the marine dredging operations will also be integrated into the socio-economic impact study for the entire Namibian Marine Phosphate project. The comprehensive socio-economic study will be presented in the EIA for the terrestrial component of the project currently underway.

Acceptability of the Draft EIA Report and appendices

Based on my experience as environmental assessment practitioner, the EIA Report including the appendices has been produced professionally and fulfills all the requirements for a comprehensive Environmental Impact Assessment Report. The report provides a clear picture of the proposed project and the potential impacts arising from it. The potential impacts have been assessed based on the best available information and thus the findings can be accepted with

EXTERNAL REVIEWER'S REPORT

confidence. Where feasible, mitigation measures have been proposed and the implementation of these, and the monitoring of their effectiveness, are detailed in the Environmental Management Plan (EMP). The EMP also includes the framework of the environmental monitoring programme to verify the predictions made in the impact assessment and to monitor the recovery/(re-) colonisation of the mined areas.

Overall impressions

Having been involved throughout the process, my overall impression is that the Environmental Impact Assessment Report is of high quality and is a good reflection of the professional competence and abilities of the EIA process manager, the public consultation team and the specialist scientists. The level of detail in all aspects of the study provides confidence in the assessment of the potential impacts and the conclusions drawn. The EIA report provides the necessary information to permit the authorities and the I&APs to verify that matters of concern have been addressed comprehensively. I, therefore, recommend that the Environmental Impact Assessment Report be accepted as fulfilling the requirements for an Environmental Impact Assessment Report.



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*CSIR Consulting and Analytical Services: Environmental Management Services
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