



TEL.: 061 257411 ♦ FAX.: 088626368
CELL.: 081 1220082 PO Box 11073
♦ WINDHOEK ♦ NAMIBIA
E-MAIL: gpt@thenamib.com



BACKGROUND INFORMATION DOCUMENT

Environmental Scoping Assessment and Environmental Management Plan for the NamPower Firm Power Project in Walvis Bay, Erongo Region

1. Introduction

NamPower intends to upgrade their existing Anixas Power Station on Erf No. 2, (15 John Ovenstone Street) in Walvis Bay. The upgrade will entail establishment of additional technologies used for electricity generation. The technologies proposed are typical of conventional power plants and similar to the existing Anixas Power Plant. The project, to be developed and known as Anixas II Power Station, requires an Environmental Clearance Certificate (“ECC”) for the additional power plant unit. The current ECC for the Anixas Power Station is therefore proposed to be amended as per the Environmental Management Act No. 7 of 2007 (“EMA”). Prior to the amendment application, impacts which may emanate from the proposed upgrade will be assessed. Therefore a scoping environmental assessment report and an environmental management plan (“EMP”) are proposed to be submitted to the Ministry of Environment and Tourism’s Department of Environmental Affairs (“DEA”). Geo Pollution Technologies (Pty) Ltd (“GPT”) was appointed by NamPower to undertake the environmental assessment and EMP. Additional specialist investigations in terms of air quality and noise will be conducted as part of the environmental assessment.

2. The purpose of this document

With this background information document (“BID”) GPT aims to provide interested and affected parties (“IAPs”) with information about the project and interact with them regarding it. IAPs are therefore invited to register with GPT for the project in order to:

- ♦ Provide GPT with additional information which should be taken into account in the assessment of impacts;
- ♦ Share any comments, issues or concerns related to the project; and
- ♦ Review and comment on the environmental assessment and specialist reports.

3. Project Description

The Anixas Power Station currently has the potential to provide 22.5 MW of electricity to

the national electricity grid. The proposed Anixas II Power Station will add a further 50MW of generation capacity, but the environmental assessment will cover all possible future expansions up to 142MW. Technologies which are being considered for the additional generation capacity include gas turbines and internal combustion reciprocating engines (ICRE). These technologies are able to operate on several fuel types, namely; heavy fuel oil (ICRE only), light fuel oil, liquefied petroleum gas and liquefied natural gas. The environmental assessment will assist in determining which technology, or combination of technologies, should be used and which will present the best environmental performance. Depending on the technology of choice, additional infrastructure related to the project will be established or shared with the existing Anixas Power Station. Typically such infrastructure include:

Exhaust gas stacks: exhaust gas stacks fitted with exhaust gas silencers to release gas from combustion to the atmosphere. The height and number of stacks will be designed to ensure that emission standards are met. Stacks would be approximately 60 m in height.

Cooling system: a closed heat-exchange system where hot water from the engines are cooled down utilising ambient air.

Auxiliary buildings for the following uses:

- ♦ Fire Protection - extension of the current facilities,
- ♦ Fuel Storage - extension of the current facilities,
- ♦ Water Treatment - use current facilities,
- ♦ Workshop - use current facilities,
- ♦ Administration - use current facilities, and
- ♦ Stores - use current facilities.

Due to the alternatives available, various site layouts are also being considered by NamPower. Infrastructure required for the final technology chosen, may therefore be established on any of the identified sites within the NamPower property boundary. Three location options have been identified. These include the following:

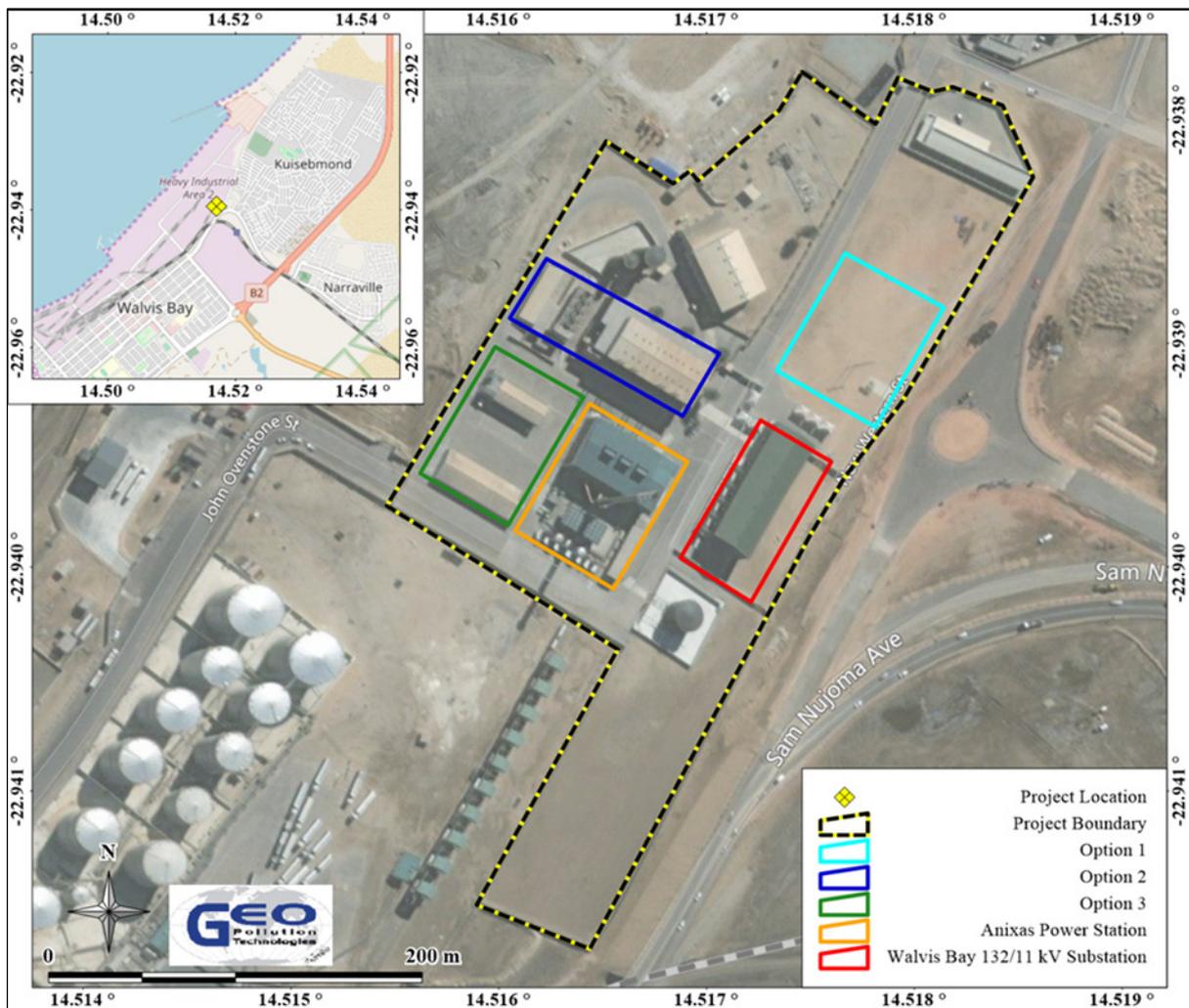


Figure 1: Locality of proposed generation sites in relation to the existing Anixas Power Plant

Option 1: Establishment of power plant technology on a vacant portion within the NamPower property boundary, next to the Walvis Bay Substation.

Option 2: Repurpose the old, defunct Paratus Power Station building and old cooling towers to accommodate the additional power plant technology.

Option 3: Demolish the existing workshop and garage within the NamPower Property and thereafter establish the proposed power plant technology on this site.

General activities which will be associated with the project and establishment of the power plant technology have been divided into the following phases: planning, construction, operational and the decommissioning phase. A brief outline of expected activities for each phase is detailed below.

3.1 Planning Phase

While planning for future operations, construction and decommissioning of the additional power plant technology, it is the

responsibility of NamPower to ensure they are and remain compliant with all legal requirements.

NamPower must ensure that all required management measures are in place prior to and during all phases, to ensure potential impacts and risks are minimised. Typical planning activities include:

- ◆ Obtain permits and approvals from local and national authorities including Ministry of Ministry of Mines and Energy,
- ◆ Ensure provisions for a fund to cater for environmental incidents risks/ pollution and ecological restoration,
- ◆ Ensure all appointed contractors and employees are entered into an agreement which includes the EMP,
- ◆ Establish and / or maintain a reporting system to report on aspects of construction activities, operations and decommissioning as outlined in the EMP, and
- ◆ Collate information generated during the planning and feasibility phase for future use and reference.

3.2 Construction Phase

Construction activities will include the development and assembly of the additional power plant technology and related infrastructure. None of the sites considered within the NamPower property are natural or pristine. All areas within and around the existing power station has been built-up or cleared of natural vegetation. Construction will not require worker housing on site, but will however require a storage area for construction materials and equipment.

3.3 Operational Phase

The purpose of the project is to increase dispatchable firm power on the Namibian grid. Operation of the additional power plant technology is foreseen to be during the weekly morning and evening peak hours only. Operation will be similar to conventional power plant activities and will include the following:

- ◆ Ensuring safe and secure fuel storage,
- ◆ Supply of fuel (road/truck or pipeline),
- ◆ Maintenance of technology and infrastructure,
- ◆ Active generation of electricity (burning of fuel source),
- ◆ Cooling of engines,
- ◆ Administrative tasks.

3.4 Decommissioning Phase

Decommissioning is not foreseen during the validity of the environmental clearance certificate. Decommissioning will however be assessed. Should decommissioning occur at any stage, rehabilitation of the area may be required. Decommissioning will entail possible removal of all infrastructure.

4. Preliminary Identified Impacts

During the environmental assessment all components of the environment will be considered, however only those components which are being impacted on significantly or are deemed to be sensitive will be assessed. These include the following:

- ◆ Health and safety risks,
- ◆ Fire and explosion risk,
- ◆ Soil and groundwater contamination (Hydrocarbon),
- ◆ Dust generation,
- ◆ Degradation of air quality,
- ◆ Noise,
- ◆ Waste generation and disposal,
- ◆ Ecosystem and biodiversity impact, and
- ◆ Socio economic contributions.

5. Getting Involved

According to your rights as an IAP in terms of the Environmental Management Act, No. 7 of 2007, Government Notice No. 30 (Environmental Impact Assessment Regulations), GPT invites all IAPs to provide in writing, any issues and suggestions regarding the project. This correspondence must include:

- ◆ Name and surname,
- ◆ Organization represented or private interest,
- ◆ Position in the organization,
- ◆ Contact details, and
- ◆ Any direct business, financial, personal or other interest which you may have in the approval or refusal of the application.

All contributions will become public knowledge and will be circulated along with the reports as per the EMA requirements.

The comments, inputs and suggestions will also be submitted to the DEA along with how any issues have been addressed in the environmental assessment. The public participation process will remain open during the environmental assessment. However, all comments and concerns should be provided to GPT to ensure incorporation into the final report.

The project team may be contacted on the contact details below.



Geo Pollution Technologies (Pty) Ltd.

Telephone: (+264-61) 257411

Fax: (+264) 88626368

e-mail: nampower@thenamib.com