CLEANERGY SOLUTIONS NAMIBIA

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BID:

PROPOSED CONSTRUCTION OF AN AMMONIA TERMINAL AT THE WALVIS BAY PORT AREA, ERONGO REGION, NAMIBIA

PROJECT NUMBER: ECC-145-453-BID-02-D

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ECC ENVIRONMENTAL COMPLIANCE CONSULTANCY

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ABBREVIATIONS

Abbreviation	Description
BID	background information document
DEA	Directorate of Environmental Affairs
EAP	Environmental assessment practitioner
ECC	Environmental Compliance Consultancy
EIA	environmental impact assessment
EMP	environmental management plan
ESIA	environmental and social impact assessment
I&APs	interested and affected parties
Ltd.	Limited
MEFT	Ministry of Environment, Forestry and Tourism
MME	Ministry of Mines and Energy
Pty	proprietary

1 BACKGROUND INFORMATION DOCUMENT

1.1 PURPOSE OF THIS DOCUMENT

Environmental Compliance Consultancy (ECC) has been contracted by Cleanergy Solutions Namibia (Pty) Ltd to undertake an environmental and social impacts assessment (ESIA) and an Environmental Management Plan (EMP) in terms of the Environmental Management Act No.7 2007 and its Regulations. An environmental clearance certificate application will be submitted to the Ministry of Environment, Forestry and Tourism (MEFT).

The purpose of this background information document (BID) is to provide interested and affected parties (I&APs) a background to the proposed project and to invite I&APs to register as part of the EIA process.

All those who register as an I&AP will be kept informed throughout the EIA process. Registration provides a platform for participants to submit comments, concerns, or recommendations regarding the proposed project. This BID includes the following information:

- The proposed project and location
- The necessity of the project, benefits or adverse impacts anticipated
- The alternatives within the project that will be considered and assessed
- How the EIA process works
- The public participation process and how to become involved
- Next steps and the way forward

1.2 DESCRIPTION OF THE PROPOSED PROJECT

The proposed project involves the construction of an ammonia terminal at the Walvis Bay port area, Erongo Region, Namibia. The ammonia terminal comprises the following main sections:

- An ammonia storage tank of 40 000 metric tons capacity and the export facilities associated;
- A Nitrogen Generation Unit to produce the nitrogen required for the utilities;
- An instrument Air Unit to produce air required for the Nitrogen Generation Unit;
- Fire/Service water tanks and pumps;
- An emergency diesel generator; and
- A wastewater unit.

Cleanergy Solutions Namibia (Pty) Ltd (hereafter referred to as “The Proponent”), is the official applicant for the proposed project and environmental clearance application.

In terms of Section 32 (1) of the Environmental Management Act, No. 7 of 2007, ECC has determined that the Ministry of Mines and Energy (MME) is the competent authority for the

proposed project. The proposed activity triggers the listed activities as per the Environmental Management Act Regulations. The relevant activities list provided later in the BID.

1.3 PROJECT LOCATION

The Proposed construction of the ammonia terminal will occur at the Walvis Bay port area, in the Erongo Region, Namibia as shown in Figure 1.

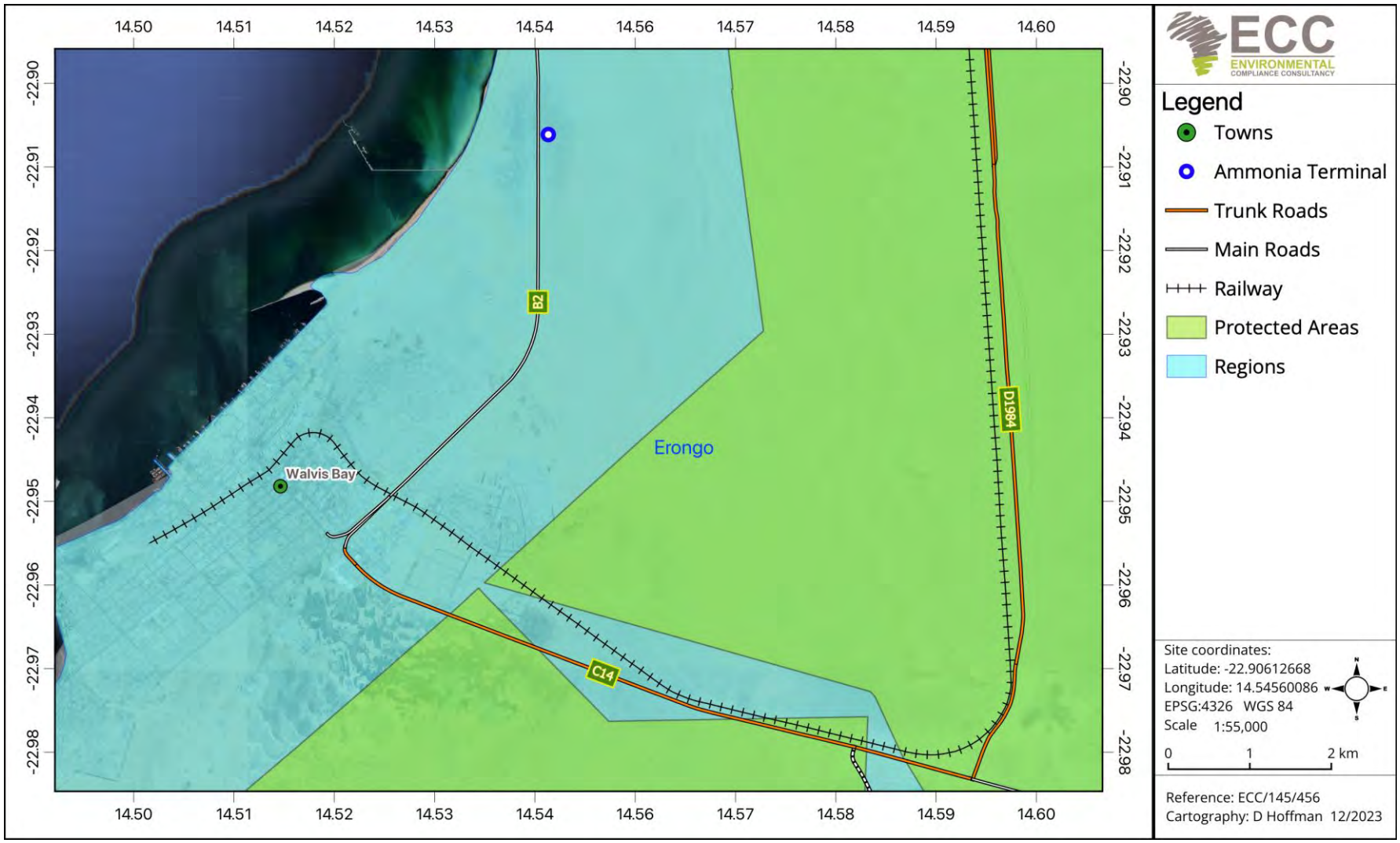

Figure 1- Locality of the proposed project

1.4 NEED FOR THE PROJECT

Cleanergy Solutions Namibia (Pty) Ltd is currently the driver of the green hydrogen economy in Namibia and a joint venture between O&L group and CMB TECH. Cleanergy Solutions Namibia has a main goal of supplying green hydrogen to various marine and industrial applications and promote sustainable energy practices in Namibia which will contribute to the global shift towards clean energy. The Proponent proposes that the liquid ammonia be transported from the existing plant via the ammonia pipeline to the terminal for storage and exporting purposes. The ammonia terminal is therefore an important component in the development of the green ammonia industry within Namibia.

1.5 CONSTRUCTION PHASE

The proposed construction phase will include low-impact and non-intrusive activities. During the construction the following sections will be incorporated in the ammonia terminal:

- The installation of a double wall full containment ammonia storage tank of 40 000 metric tons capacity and the export facilities associated;
- A Nitrogen Generation Unit to produce the nitrogen required for the utilities;
- An instrument Air Unit to produce air required for the Nitrogen Generation Unit;
- Fire/Service water tanks and pumps;
- An emergency diesel generator; and
- A wastewater unit.

1.6 OPERATIONAL PHASE

During the operational phase, liquid ammonia will be transported from the ammonia plant to the ammonia terminal for storage. Ammonia will be loaded on a vessel for export.

1.7 CONSIDERATION OF ALTERNATIVES

Best practice environmental assessment methodology calls for consideration and assessment of alternatives to a proposed project. In a project such as this, it is difficult to identify alternatives to satisfy the need of the proposed project; the activities will be specific to the site. During the assessment, alternatives will take the form of consideration of optimisation and efficiency to reduce potential effects, e.g., different types of technology or operations and construction methods.

2 THE ENVIRONMENTAL AND SOCIAL IMPACT ASSESSMENT PROCESS

The EIA for the proposed project is being conducted by ECC and will be undertaken in terms of the Environmental Management Act, 2007 and its regulations. The process followed for this EIA is set out in the flowchart in Figure 2.

ECC has been contracted by Cleanergy Solutions Namibia (Pty) Ltd, as the independent environmental assessment practitioner (EAP) to facilitate the whole EIA process. Prior to the start of the proposed project, an environmental clearance certificate is required in terms of the Environmental Management Act, 7 of 2007 and the associated EIA Regulations.

A final decision relating to the above-mentioned application will be made by Ministry of Environment, Forestry and Tourism (MEFT): Department of Environmental Affairs (DEA).

The related environmental process will include:

1. Screening phase (completed)
2. Scoping phase which includes baseline studies and the development of the Terms of Reference (ToR) for the EIA (initiated)
3. Assessment Phase which includes impact prediction and evaluation of alternatives, assigning mitigation measures and developing monitoring and conceptual rehabilitation plans. This phase culminates in the drafting of the EIA report and draft Environmental Management Plan (EMP) and submission to the appropriate competent authorities

The main objectives of the EIA are to:

a) Provide information describing the proposed construction of the ammonia terminal at the Walvis Bay port area.
b) Provide an independent environmental and social assessment of the activities associated with the proposed project.
c) Develop management and mitigation measures associated with any identified potential impacts where necessary.

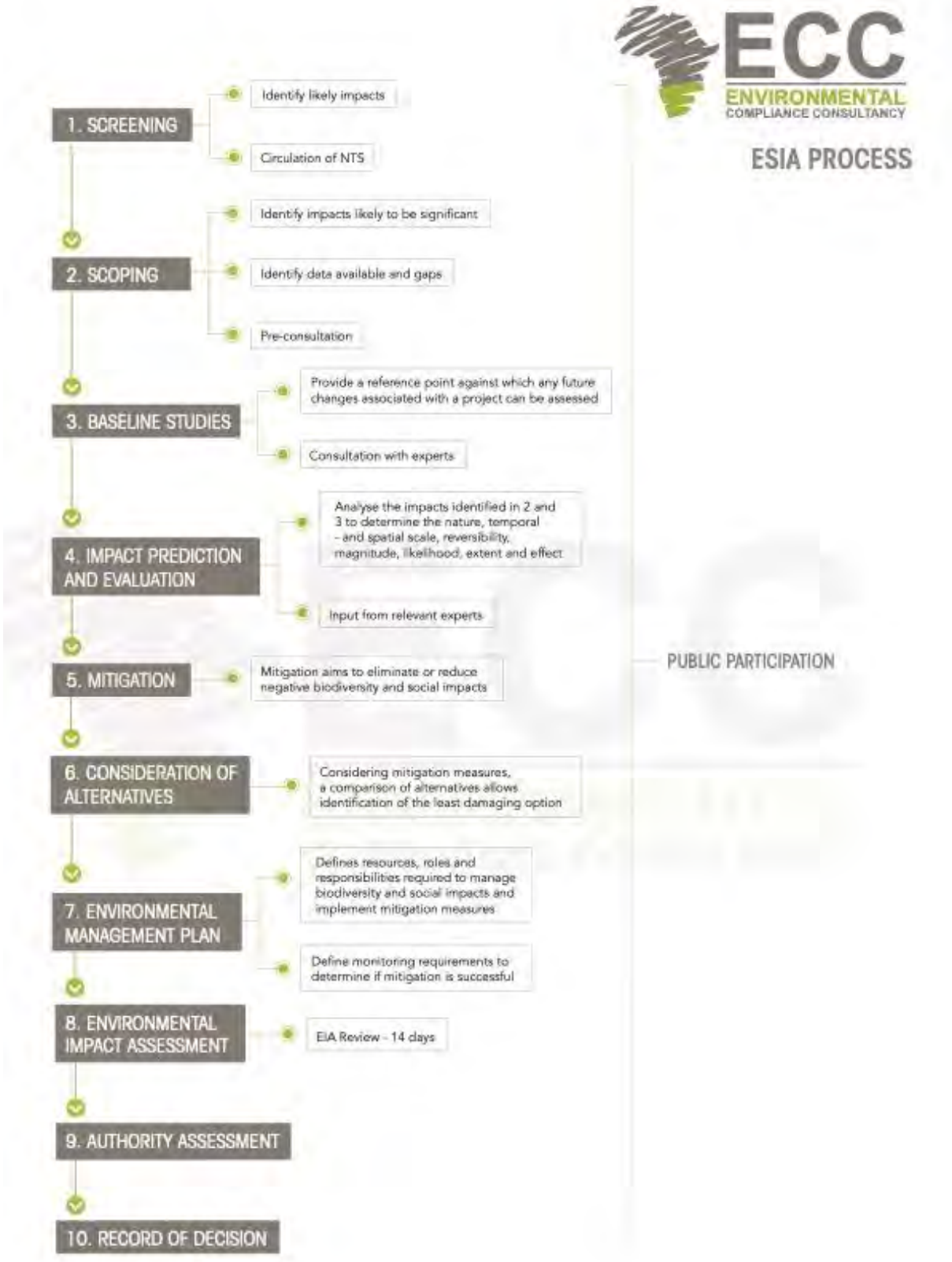

Figure 2 – Flowchart of the environmental and social assessment process

2.1 SCREENING

A review of the planned project was undertaken and the screening findings against the listed activities was conducted; the findings of which are summarised in Table 1.

Table 1- Listed activities triggered by the proposed project

LISTED ACTIVITY	EIA SCREENING FINDING
ENERGY GENERATION, TRANSMISSION AND STORAGE ACTIVITIES (1.a) The construction of facilities for the generation of electricity; (1.b) The construction of facilities for the transmission and supply of electricity.	- An emergency diesel generator is included in the Project.
WATER RESOURCE DEVELOPMENTS (8.6) Construction of industrial and domestic wastewater treatment plants and related pipeline systems.	- All the effluents generated by the ammonia terminal facilities are handled by the wastewater system/unit. - Wastewater permit will be obtained.
HAZARDOUS SUBSTANCE TREATMENT, HANDLING AND STORAGE 9.1) The manufacturing, storage handling, or processing of a hazardous substance defined in the Hazardous Substances Ordinance, 1974. (9.2) Any process of activity which requires a permit, licence or other form of authorisation, or the modification of or changes to existing facilities for any process or activity which requires an amendment of an existing permit, licence or authorisation or which requires a new permit, licence or authorisation in terms of a law governing the generation or release of emissions, pollution, effluent or waste. (9.4) The storage and handling of dangerous goods, including petrol, diesel, liquid petroleum gas or paraffin, in containers with a combined capacity of more than 30 cubic meters at any one location.	- Liquid ammonia will be stored in an ammonia storage tank with a size of 40 000 tons of capacity.

2.2 SCOPING

The scoping phase is directed towards defining the range and nature of anticipated potential impacts that may have significance to the biophysical and social environments at the scale of the proposed operations. The appropriate available data and the literature are identified forming the starting point for assessment of the required baseline and specialist studies that may be required for assessment of the project impacts.

2.3 BASELINE STUDIES

For the proposed project, baseline information will be obtained through the existing studies.

The EIA will focus on the environmental receptors that could be affected by the proposed project. ECC will also engage with stakeholders, I&APs and the proponents to seek input into the assessment. The baseline studies chapter is broken into three sections, the baseline context, environmental (physical and biological), and social (includes economic).

Desktop studies as well as all available field surveys from the project area will be used to help define the baseline. These studies also give a further indication of whether there are any local or regional future developments that could impact the project or vice versa.

Lastly, the socio-economic section of the baseline studies helps to gain information on the governance, demographic profile, social stratification (employment, education, crime, infectious disease), occupation and livelihood (economic activities, occupations in study area, employment rates).

2.4 STAKEHOLDER ENGAGEMENT

The public and key stakeholders receive invitations to register as I&APs. After the presentation of the proposed project and EIA process through the defined public consultation process, a period of time for input will be granted for the environmental assessment practitioner (EAP) to receive any additional concerns or comments from registered I&AP's. All feedback from the initial public consultation process will be incorporated into the scoping report.

2.5 SCOPING REPORT

The scoping report will be drafted and made available to the registered I&APs for comment before being submitted to the competent authority and MEFT. The scoping report will contain a description of the project and the bio-physical and socio-economic environments, the specialist baseline studies, the stakeholder engagement report and the terms of reference for the EIA.

2.6 ENVIRONMENTAL AND SOCIAL IMPACT ASSESSMENT PHASE

2.6.1 POTENTIAL IMPACTS

The potential social and economic impacts should be considered with due regard to the nature and scale of the proposed operations its location within the ecological, commercial and social environments. The potential environmental and social impacts that have been anticipated may include the following:

- Noise impact due to the installation of the storage tanks and other units during construction
- Visual impact due to the construction and operation of the ammonia terminal
- Traffic impact off-site
- Economic and Socio-economic impacts, e.g., employment opportunities, contribute to green fuel economy and reduction of greenhouse gas emissions

2.6.2 DRAFT ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN

An EMP shall be developed for the proposed project setting out auditable management actions for the project to ensure careful and sustainable management measures are implemented for their activities in respect of the surrounding environment and community. The EMP becomes the legally binding commitments upon approval of the EMP and issuing of the environmental clearance certificate. Environmental clearance certificates are issued for a period of 3 years and renewal is subject to compliance with the provisions and conditions of the environmental clearance certificate.

3 THE WAY FORWARD – PUBLIC PARTICIPATION

Public participation is an important part of the EIA process. It allows you, the public and stakeholders to raise concerns or provide valuable local environmental knowledge that can benefit the assessment process as well as aid the planning process for the scoping phase of the defined assessment process. At this phase ECC will perform the following:

- Prepare and submit the application for the environmental clearance certificate in the prescribed manner
- Identify relevant key stakeholders, authorities, municipalities, environmental groups and interested or affected members of the public, hereafter referred to as I&APs
- Carry out a public consultation process in accordance with Regulation 21 of the EMA 2007 including:
    - Distribute the BID for the proposed construction of the Cleanergy Solutions Namibia ammonia terminal project (this document)
    - Advertise the environmental application and call for registration of I&AP's in two national newspapers
    - Open a I&AP register and record all comments of I&APs and present such comments, as well as responses provided by ECC, in the comments and responses report, which will be included in the scoping report that shall submitted with the application
- Prepare a scoping report and provide same to registered I&APs for comment
- Submit the scoping report and the I&AP comments to the competent authority and Environmental Commissioner for a record of decision

Your request for registration as an I&AP as well as any comments on the BID or Project must be submitted in writing and can be emailed using the details in the contact us section below. Registration as an I&AP for the project can be completed online on ECCs website on the projects page, or by using this link: https://eccenvironmental.com/projects/

Registration as an I&AP should be submitted on or before 31 January 2024.

We welcome any enquiries regarding this document and its content. Please contact:
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