

REPUBLIC OF NAMIBIA

MINISTRY OF ENVIRONMENT, FORESTRY AND TOURISM

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Reference No: APP - 00687

21 July 2021

OFFICE OF THE ENVIRONMENTAL COMMISSIONER

Chief executive Officer
Namibia Water Corporation
Private Bag 13389
Windhoek

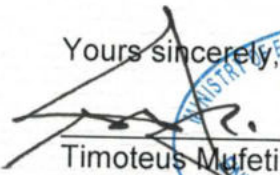
Attention: Mr. NP du Plessis
Contact: 0811279040

SUBJECT: ENVIRONMENTAL AND SOCIAL IMPACT ASSESSMENT PROCESS FOR THE PROPOSED DESALINATION PLANT AND WATER CARRIAGE SYSTEM TO SECURE WATER SUPPLY TO THE CENTRAL COASTAL AREA (CCA), WINDHOEK AND EN-ROUTE USERS

The above subject bear reference

This letter serves to acknowledge receipt of your draft Scoping report, dated June 2021. Kindly, proceed with the full Environmental Impact Assessment report and Environmental Management Plan (EMP) which will form the basis upon which the decision to issue or not to issue an environmental clearance certificate for the project will be made.

Yours sincerely,


Timoteus Mufeti
ENVIRONMENTAL COMMISSIONER



“Stop the poaching of our rhinos”

All official correspondence must be addressed to the Executive Director

REPUBLIC OF NAMIBIA ENVIRONMENTAL**MANAGEMENT ACT, 2007 (Section 32)**

APPLICATION FOR ENVIRONMENTAL CLEARANCE CERTIFICATE

Revenue stamp or revenue franking machine impression

PART A: DETAILS OF APPLICANT

APPLICATION INFORMATION:	CONSULTANT INFORMATION:
<u>1. Name: (person or business)</u> Namibia Water Corporation Limited (NamWater)	<u>1. Name: (person or business):</u> SLR Environmental Consulting (Namibia) Pty Ltd
<u>2. Business Registration / Identity No.</u> 97/459	<u>2. Business Registration / Identity No.</u> 2009/831
<u>3. Correspondence Address:</u> Private Bag 13389, Windhoek. 176, Iscor Street, Northern Industrial Area, Windhoek	<u>3. Correspondence Address:</u> Physical: 8 General Murtala Muhammed Avenue, Eros, Windhoek Postal: PO Box 86386, Windhoek
<u>4. Name of Contact Person:</u> Jolanda Kamburona	<u>4. Name of Contact Person:</u> Stephanie Strauss/Robyn Christians
<u>5. Position of Contact Person:</u> Environmental Scientist	<u>5. Position of Contact Person:</u> Consultant
<u>6. Telephone Number:</u> Tel: +264 (61) 71-2105	<u>6. Telephone No.:</u> Tel: (+264) 61 231 287
<u>7. Fax Number:</u> Fax: +264 (61) 71-2097	<u>7. Fax:</u> +264 61 231 289
<u>8. E-mail Address:</u> KamburonaJ@namwater.com.na	<u>8. E-mail Address:</u> sstrauss@slrconsulting.com rchristians@slrconsulting.com

PART B: SCOPE OF THE ENVIRONMENTAL CLEARANCE CERTIFICATE

1. THE ENVIRONMENTAL CLEARANCE CERTIFICATE IS FOR:

3. MINING AND QUARRYING ACTIVITIES
3.2 Other forms of mining or extraction of any natural resources whether regulated by law or not.
4. FORESTRY ACTIVITIES
4. The clearance of forest areas, deforestation, afforestation, timber harvesting or any other related activity that requires authorisation in term of the Forest Act, 2001 (Act No. 12 of 2001) or any other law.
7. AGRICULTURE AND AQUACULTURE ACTIVITIES
7.8 The introduction of alien species into local ecosystems.
8. WATER RESOURCE DEVELOPMENTS
8.1 The abstraction of ground or surface water for industrial or commercial purposes. 8.5 Construction of dams, reservoirs, levees and weirs. 8.6 Construction of industrial and domestic wastewater treatment plants and related pipeline systems. 8.12 The release of brine back into the ocean by desalination plants.
9. 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 or activity which requires a permit, license 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, license or authorisation or which requires a new permit, license or authorisation in terms of a law governing the generation or release of emissions, pollution, effluent or waste.
10. INFRASTRUCTURE
10.1 The construction of- (a) Oil, water, gas and petrochemical and other bulk supply pipelines; (e) any structure below the high water mark of the sea;

2. DETAILS OF THE ACTIVITY(S) COVERED BY THE ENVIRONMENTAL CLEARANCE CERTIFICATE:

TITLE OF ACTIVITY:
Supply Scenario 1 of the Desalination Plant and Water Carriage System to Secure Water Supply to the Central Coast, Namibia
NATURE OF ACTIVITY:
The Namibia Water Corporation Limited (NamWater) is the national water utility of Namibia. NamWater has undertaken a Feasibility Study for the development of a desalination plant and a water carriage system to supply water to the Central Coast, Windhoek and en-route users (Arandis, Usakos, Karibib and Okahandja). The primary objective of the Feasibility Study was to investigate feasible and affordable water supply options and concepts that would diversify and secure supply alternatives to the target areas. One of the options considered was a climate-independent supply of water via the process of desalination. The objective of the proposed Desalination Plant and Water Carriage System is to supply potable water,

derived from seawater desalinated at the coast, through a pipeline system to various supply areas as indicated below:

- Supply Scenario SS1: Supply additional potable water for the Central Coastal Area only (CCA);
- Supply Scenario SS2: Supply additional potable water for the CCA, the area around Windhoek (CAN) and for en-route Users along the transmission pipeline;
- Supply Scenario SS3: Supply additional potable water for the CCA, the area around Windhoek (CAN) and for users along the supply pipeline as well as an additional 20 Mm³/a to Gaborone from 2029. This scenario was not considered during the execution of the Environmental Scoping Study.

Following the feasibility study NamWater has decided to proceed with the preferred water supply scenario referred to as Supply Scenario 1 (SS1), comprised of the proposed Desalination Plant and Water Carriage System to supply water to the CCA of Namibia only.

The proposed Desalination Plant and Water Carriage System project for Supply Scenario 1 will consist of the following key components (as shown in Figures 1 and 2 attached):

- The Desalination Plant and Pump Station 1 (Desalination Plant proposed area);
- The Intake works and Intake Pump Station;
- A pipeline linking the two places mentioned above;
- An approximate 4 km pipeline connecting the desalination plant to the existing 1200 mm diameter pipeline; and
- The #Gaingu PV Power Plant and power line connecting to the new Khan 33 kV substation.

The application was made to MAWLR and MEFT for the Scoping Phase (APP- 00687). Due to the crash of the MEFT online system a new application needs to be made.

The #Gaingu PV Power Pant facility will have a separate ECC application form, Environmental and Social Impact Assessment report and Environmental and Social Management Plan.

LOCATION OF ACTIVITY:

The new desalination facility is proposed at a suitable location in the vicinity of the existing Orano Desalination Plant on the central coast of Namibia. The proposed desalination plant is located within the Erongo Region Council boundary, adjacent to Wlotzkasbaken. Appendix A for locality map

SCALE AND SCOPE OF ACTIVITY:

The new desalination plant will be constructed approximately 1.4 km inland of the shoreline, near the existing Orano Desalination Plant.

The plant will likely be developed in phases, with a total capacity of 36.2 million m³ per annum (Mm³/a). The proposed phasing is as follows:

- Phase 1: 20 Mm³/a by 2024.
- Phase 2: Additional 8 Mm³/a by 2026.
- Phase 3: Additional 8 Mm³/a by 2037.

The maximum footprint of the desalination plant (140 000 m²), including intake and outfall infrastructure (15 000 m²), is approximately 155 000 m². The proposed desalination plant will consist of the following main components:

- Marine seawater intake and brine discharge system;
- Pre-treatment system;
- Reverse osmosis treatment;
- Post-treatment; and
- Various buildings and ancillary infrastructure.

The main inputs to the desalination plant are:

- Supply of up to 260 Mm³/d of seawater for Supply Scenario 1, resulting in the production of up to 36.2 Mm³/yr of treated water to the Central Coastal Area, while the remaining ~154 656 m³/d is returned to the sea as brine; and
- Power supply, totalling approximately 35.10MWp for SS1 by 2037.

The water transmission system consists of the following key components including:

- Water pipeline transmission system; and
- Pump station.

The desalinated water will be transferred from the desalination plant via the existing water transmission system to the central coastal area. A new DN900 ductile iron pipeline (approximately 4 km) will be constructed to connect the desalination plant to the existing Omdel-Swakopmund pipeline.

PART C: DECLARATION BY APPLICANT

I hereby certify that the particulars given above are correct and true to the best of my knowledge and belief. I understand the environmental clearance certificate may be suspended, amended or cancelled if any information given above is false, misleading, wrong or incomplete.

Signature of Applicant

Full name in Block Letters

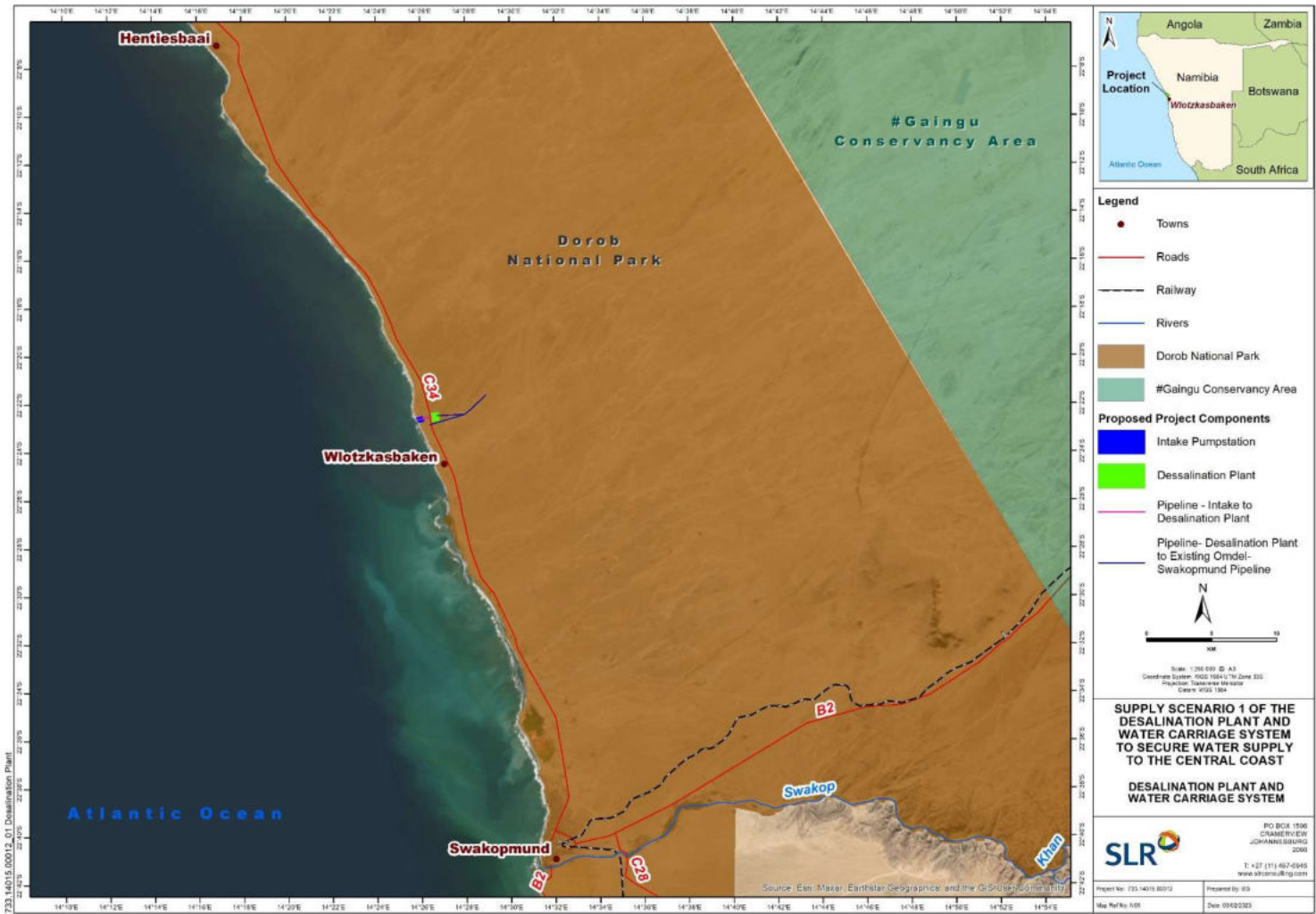
Position

On behalf of _____

Date: _____

Appendix A:

LOCALITY MAP



Appendix B:

BACKGROUND INFORMATION

**REPUBLIC OF NAMIBIA ENVIRONMENTAL
MANAGEMENT ACT, 2007 (Section 32)**

APPLICATION FOR ENVIRONMENTAL CLEARANCE CERTIFICATE



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