

31 January 2020

Ministry of Environment and Tourism
Directorate Environmental Affairs
Private Bag 13346
Windhoek
Namibia

ATTENTION: Director of Environmental Affairs -Mr. Damian Nchindo

Dear Sir

PROJECT BACKGROUND: ENVIRONMENTAL PERFORMANCE REPORT AND MANAGEMENT PLAN FOR WATER ABSTRACTION BOREHOLES ON FARM FINSTERBERGEN

1. INTRODUCTION

1.1 PROJECT BACKGROUND

The Farm Finsterbergen 469 managed by Mr. Siegfried Kuhn is situated in the Otavi District in the Otjozondjupa Region (refer to figure 1 and 2 for the regional setting). The farm was previously owned by Finsterbergen Holdings as an irrigation farm, and it has since 2017 been bought over by Marabu Trading (PTY) Ltd (Marabu Trading) also for the purposes of conducting an irrigation scheme.

The Marabu Trading has removed all livestock and has halted any irrigation until the renewal of groundwater abstraction permit has been approved and therefore, over the past three years, no irrigation has been conducted. Since the new owners have bought the farm, the current water abstraction permit No. 10179 is inherited and it was allocated to permit abstraction of 100,000 m³/a. The current permit has now expired as of June 2019 and subsequently a renewal application has been submitted to the Ministry of Agriculture, Water and Forestry's (MAWF) Department of Water Affairs (DWAf). The DWAf has indicated that the current permit holder (Finsterbergen Holdings) if needed may transfer ownership to Marabu Trading. However, all permit holders' requirements still apply.

The new owner (Marabu Trading) plans to continue with similar irrigation activities on the 46 ha of seed potatoes/tubers, maize and/or oats in the already disturbed land and expand its activities further to 150 ha.

Finsterbergen Holdings has recently drilled several boreholes on the farm with electrical installations for irrigation purposes. With the previous 46 hectares irrigated, the allocated 100,000 m³/a, was sufficient. However, in the future planned phase 3 scenario a total of 150 ha is envisaged for irrigation by the year 2020, where the water demand increases to 843,480 m³/a in the worst-case scenario of no rainfall. **The DWAf has indicated that a groundwater assessment study would have to be undertaken to substantiate the proposed increase in**



SLR Environmental Consulting (Namibia) (Proprietary) Limited

Registered Address: 61 Bismarck Street, Windhoek, Namibia
Postal Address: PO Box 2184, Windhoek 1009, Namibia

Reg. No: 2009/831
VAT No: 5067.931-01-5

Directors: A Bittner, R Hounscome, N Penhall, P MacKellar

Windhoek Office: Physical Address: 8 General Murtala Muhammed Ave, Eros, Windhoek

Postal Address: PO Box 86386, Windhoek, 10009  +264 61 231 287  +264 61 231 289

groundwater abstraction and an Environmental Clearance Certificate (ECC) application through the regulating authority made. DWAF will review and use the findings of the groundwater assessment study as a deciding tool for the requested increase in the annual abstraction and only then a renewal with the amended abstraction rates can be made.

The above mentioned proposed increase in groundwater abstraction will be sourced from the recently drilled Five (5) new boreholes including WW 205370 (BH1), WW 205368 (BH2), WW 205369 (BH3), WW 205367 (BH4), and WW 205371 (BH5) (refer to **Error! Reference source not found.** for locality map to the boreholes)

The purpose of the project is to supply Namibian potatoes farmers with seed potatoes/ tubers, Namibia is a sole imported of seed potatoes. Other crops like maize will be delivered to Otavi Mills for food production; and oats to wildlife and cattle in events of droughts.

It is with the above background that Finsterbergen Holdings/ Marabu Trading has requested SLR Environmental Consulting (Namibia) (Pty) Ltd (SLR), to assist with:

- the application process required for an amendment to the current groundwater permit's (permit No. 10179) abstraction limit from 100,000 m³/a to 843,480 m³/a (sourced from the recently drilled boreholes (BH1-BH5) through the DWAF; and
- the Environmental Clearance Certificate (ECC) application from the Department of Environmental Affairs (DEA) of the Ministry of Environment and Tourism (MET).

In September 2019, SLR undertook a Groundwater Assessment Study for Farm Finsterbergen 469 to determine the possible impact of the proposed increased abstraction (100 000 m³/a to 843,480 m³/a) on the groundwater aquifer and surrounding area. The study findings including the proposed management and mitigation measures have been included in this report (refer to Sections 7, 8 and 9). The Groundwater Assessment Study is attached to this report as Appendix A. Based on the outcome of the Groundwater Assessment Study, a groundwater permit amendment application for the increased abstraction can be made to the DWAF.

1.1 ENVIRO-LEGAL CONTEXT

In terms of the Environmental Management Act, 2007 (Act No. 7 of 2007) and associated Environmental Impact Assessment Regulations, water abstraction for commercial purposes and irrigation schemes are listed activities which are regulated by the Ministry of Environment and Tourism (MET). The activity requires an Environmental Impact Assessment (EIA) process and an application for an Environmental Clearance Certificate (ECC). The listed activities refer to:

WATER RESOURCE DEVELOPMENTS

- *Activity 8.1: The abstraction of ground and surface water for the industrial or commercial purposes;*
- *Activity 8.2: The abstraction of groundwater at a volume exceeding the threshold authorized in terms of law relating to water resources;*
- *Activity 8.7: Irrigation schemes for agriculture excluding domestic irrigation.*

The MET were consulted on the possibility of making application for an exemption from for the need for an Environmental Clearance Certificate (ECC) for the increased groundwater abstraction activity on Farm Finsterbergen. **The MET rejected the ECC exemption application and requested that an assessment for the proposed increase in abstraction, supported by an Environmental Management Plan (EMP), should be submitted for review and decision on an ECC.**

It is with this background that SLR has compiled an EMP giving the following;

- a description of current infrastructure and activities at Farm Finsterbergen boreholes (BH1- BH5) observed during a site visit on the 18th of April 2019;
- details of the existing borehole monitoring programme;
- consideration of current environmental performance and risks;
- and mitigation measures associated with:
 - the proposed increase in ground water abstraction level (100 000 m³/a to 843,480 m³/a) as detailed in the Groundwater Assessment Study (Appendix A);
 - the ground water abstraction activities including, monitoring and the maintenance of infrastructure thereof.;
 - The existing irrigation and associated activities on the further extent of the land (49 ha to 150 ha);

The above mentioned EMP has been submitted to your office as of 31 January 2020.

Yours faithfully



Marvin Sanzila

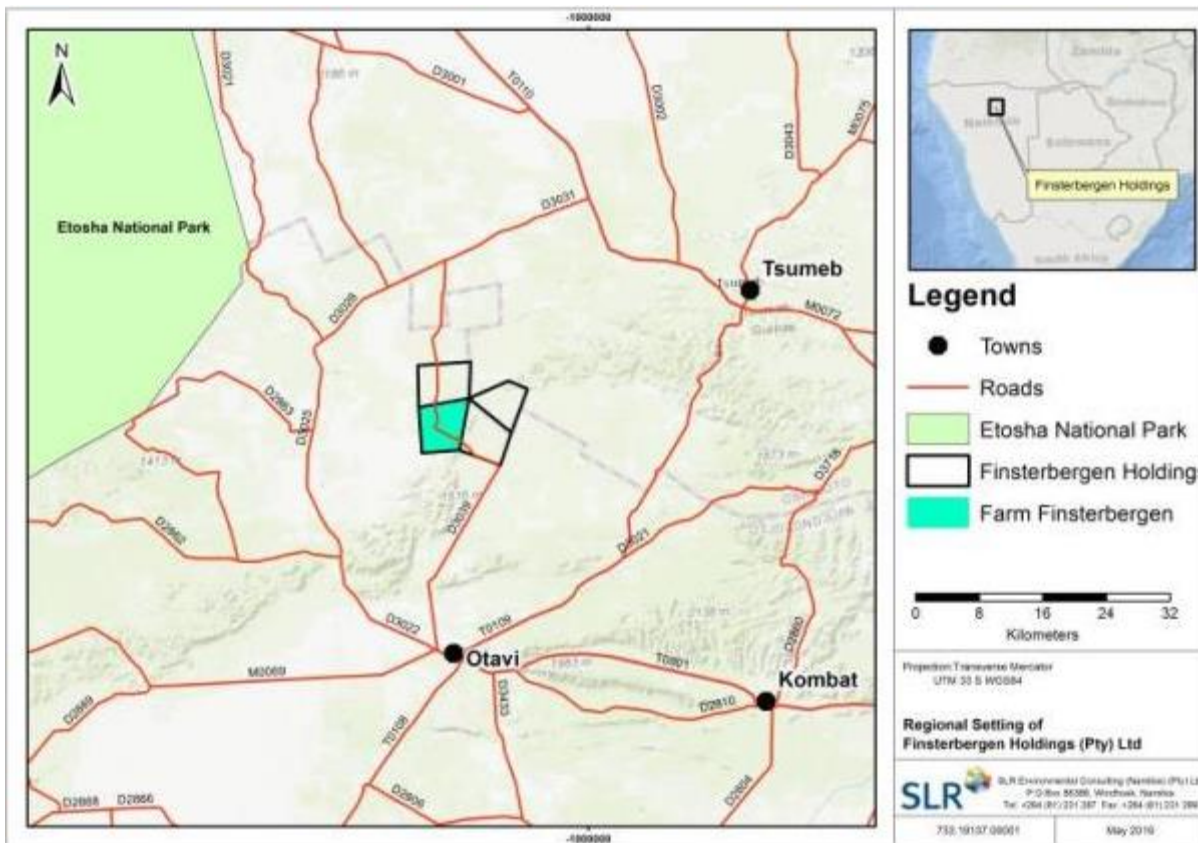


FIGURE 1: REGIONAL SETTING OF FINSTERBERGEN HOLDINGS (PTY) LTD



SLR Environmental Consulting (Namibia) (Proprietary) Limited

Registered Address: 61 Bismarck Street, Windhoek, Namibia
Postal Address: PO Box 2184, Windhoek 1009, Namibia

Reg. No: 2009/831
VAT No: 5067.931-01-5

Directors: A Bittner, R Hounscome, N Penhall, P MacKellar

Windhoek Office: Physical Address: 8 General Murtala Muhammed Ave, Eros, Windhoek

Postal Address: PO Box 86386, Windhoek, 10009 +264 61 231 287 +264 61 231 289

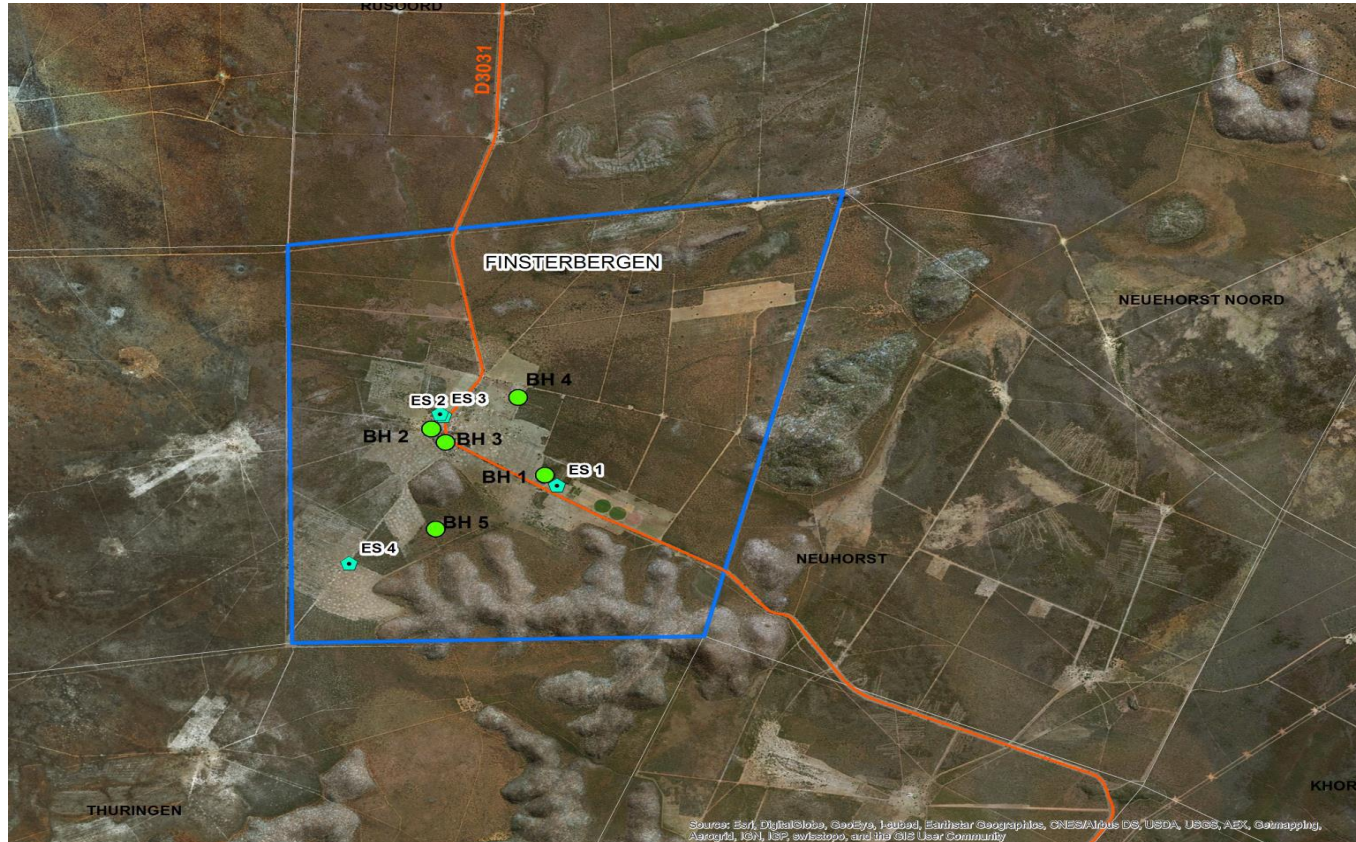


FIGURE 2: LOCALITY MAP TO FARM FINSTERBERGEN'S RECENTLY DRILLED BOREHOLES(BH1-BH5)



SLR Environmental Consulting (Namibia) (Proprietary) Limited

Registered Address: 61 Bismarck Street, Windhoek, Namibia
Postal Address: PO Box 2184, Windhoek 1009, Namibia

Reg. No: 2009/831
VAT No: 5067.931-01-5

Directors: A Bittner, R Hounscome, N Penhall, P MacKellar

Windhoek Office: Physical Address: 8 General Murtala Muhammed Ave, Eros, Windhoek

Postal Address: PO Box 86386, Windhoek, 10009  +264 61 231 287  +264 61 231 289