



***RENEWAL OF THE ENVIRONMENTAL  
CLEARANCE FOR THE OPERATIONS OF  
NAMIB POULTRY BROILER AND ABATTOIR  
ON A PORTION OF PORTION 7 OF FARM  
KLEIN OKAPUKA NO. 51***

**March 2024**

***App – 24030700296 (4) (5) (6)***

|                             |   |
|-----------------------------|---|
| <p><b>Project Name:</b></p> | <p><b><i>RENEWAL OF THE ENVIRONMENTAL CLEARANCE<br/>FOR THE OPERATIONS OF NAMIB POULTRY<br/>BROILER AND ABATTOIR ON A PORTION OF<br/>PORTION 7 OF FARM KLEIN OKAPUKA NO. 51</i></b></p>   |
| <p><b>Proponent:</b></p>    | <p><b>Namib Poultry (Pty) Ltd</b></p>  <p><b>P O Box 20276<br/>Windhoek</b></p>   |
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| <p><b>Release Date:</b></p> | <p><b>March 2024</b></p>  |
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## **EXECUTIVE SUMMARY**

**Green Earth Environmental Consultants** have been appointed by Namib Poultry (Pty) Ltd to attend to and complete an Environmental Impact Assessment (EIA) and Environmental Management Plan (EMP) **to renew the Environmental Clearance (EC) for the existing operations of Namib Poultry Broiler and Abattoir activities located on Portion 7 of Farm Klein Okapuka No. 51, about 30km north of Windhoek** directly west of the B1 Highway to Okahandja as per the requirements of the Environmental Management Act (No. 7 of 2007) and the Environmental Impact Assessment Regulations (GN 30 in GG 4878 of 6 February 2012). It is required to renew the Environmental Clearance (EC) as the old EC which was issued on 11 June 2019 expired on 11 June 2022

The activities listed below, which forms part of the proposed operations, may not be undertaken without an Environmental Clearance Renewal:

### **WASTE MANAGEMENT, TREATMENT, HANDLING AND DISPOSAL ACTIVITIES**

*2.1 The construction of facilities for waste sites, treatment of waste and disposal of waste.*

*2.2 Any activity entailing a scheduled process referred to in the Atmospheric Pollution Prevention Ordinance, 1976.*

*2.3 The import, processing, use and recycling, temporary storage, transit or export of waste.*

### **AGRICULTURE AND AQUACULTURE ACTIVITIES**

*7.1 Construction of facilities for aquaculture production, including mariculture and algae farms where the structures are not situated within an aquaculture development zone declared in terms of the Aquaculture Act, 2002.*

*7.2 The declaration of an area as an aquaculture development zone in terms of the Aquaculture Act, 2002.*

*7.3 The genetic modification of any organism with the purpose of fundamentally changing the inherent characteristics of that organism.*

*7.4 The import, processing and transit of genetically modified organisms.*

*7.5 Pest control.*

*7.6 The release of genetically modified organisms into the environment where an environmental assessment is required by law.*

*7.7 The release of any organism outside its natural area of distribution that is to be used for biological pest control.*

*7.8 The introduction of alien species into local ecosystems.*

### **HAZARDOUS SUBSTANCE TREATMENT, HANDLING AND STORAGE**

*9.4 The storage and handling of a 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.*

The type of activities that is carried out on the site does not negatively affect the amenity of the locality and the activities does not adversely affect the environmental quality of the

area. None of the potential impacts identified are regarded as having a significant impact to the extent that the proposed project should not be allowed further. However, the operational activities further on need to be controlled and monitored by the assigned managers and the proponent. Mitigation measures was provided that can control the extent, intensity, and frequency of these named impacts in order not to have substantial negative effects or results. It is believed that the overall cumulative impact on the biophysical environment will be low and there will be a positive impact on the socio-economic environment.

The Environmental Impact Assessment Renewal which follows upon this paragraph was conducted in accordance with the guidelines and stipulations of the Environmental Management Act (No 7 of 2007) meaning that all possible impacts have been considered and the details are presented in the report.

Based upon the conclusions and recommendations of the renewed Environmental Impact Assessment Report and Environmental Management Plan, the Environmental Commissioner of the Ministry of Environment, Forestry and Tourism is herewith requested to:

1. Accept and approve the renewed Environmental Impact Assessment.
2. Accept and approve the renewed Environmental Management Plan.
3. Issue a renewed Environmental Clearance for the operations of Namib Poultry Broiler and Abattoir on a portion of Portion 7 of Farm Klein Okapuka, Windhoek, Khomas Region and for the following listed activities:

**WASTE MANAGEMENT, TREATMENT, HANDLING AND DISPOSAL ACTIVITIES**

*2.1 The construction of facilities for waste sites, treatment of waste and disposal of waste.*

*2.2 Any activity entailing a scheduled process referred to in the Atmospheric Pollution Prevention Ordinance, 1976.*

*2.3 The import, processing, use and recycling, temporary storage, transit or export of waste.*

**AGRICULTURE AND AQUACULTURE ACTIVITIES**

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## **LIST OF ABBREVIATIONS**

|       |  |
|-------|--|
| EC    | Environmental Clearance                        |
| ECO   | Environment Control Officer                    |
| EIA   | Environmental Impact Assessment                |
| EMP   | Environmental Management Plan                  |
| I&APs | Interested and Affected Parties                |
| MAWLR | Ministry of Agriculture, Water and Land Reform |
| MEFT  | Ministry of Environment, Forestry and Tourism  |
| NPI   | Namibia Poultry Industries                     |

# 1. INTRODUCTION

**Green Earth Environmental Consultants** have been appointed by Namib Poultry (Pty) Ltd to attend to and complete an Environmental Impact Assessment (EIA) and Environmental Management Plan (EMP) **to renew the Environmental Clearance (EC) for the operations of Namib Poultry Broiler and Abattoir on a portion of Portion 7 of Farm Klein Okapuka, Windhoek, Khomas Region** as per the requirements of the Environmental Management Act (No. 7 of 2007) and the Environmental Impact Assessment Regulations (GN 30 in GG 4878 of 6 February 2012). It is required to renew the Environmental Clearance (EC) as the old EC which was issued on 11 June 2019 which expired on 11 June 2022.

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## **HAZARDOUS SUBSTANCE TREATMENT, HANDLING AND STORAGE**

*9.4 The storage and handling of a 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.*

The following Environmental Impact Assessment Renewal contains information on the project and the surrounding areas and activities.

## 2. PROJECT DESCRIPTION/SITE INFORMATION

### 2.1. LOCALITY OF PROJECT SITE

The project site is located on Portion 7 of Farm Klein Okapuka No. 51, about 30km north of Windhoek directly west of the B1 Highway to Okahandja. The locality of the site is shown in the *Figure* below:

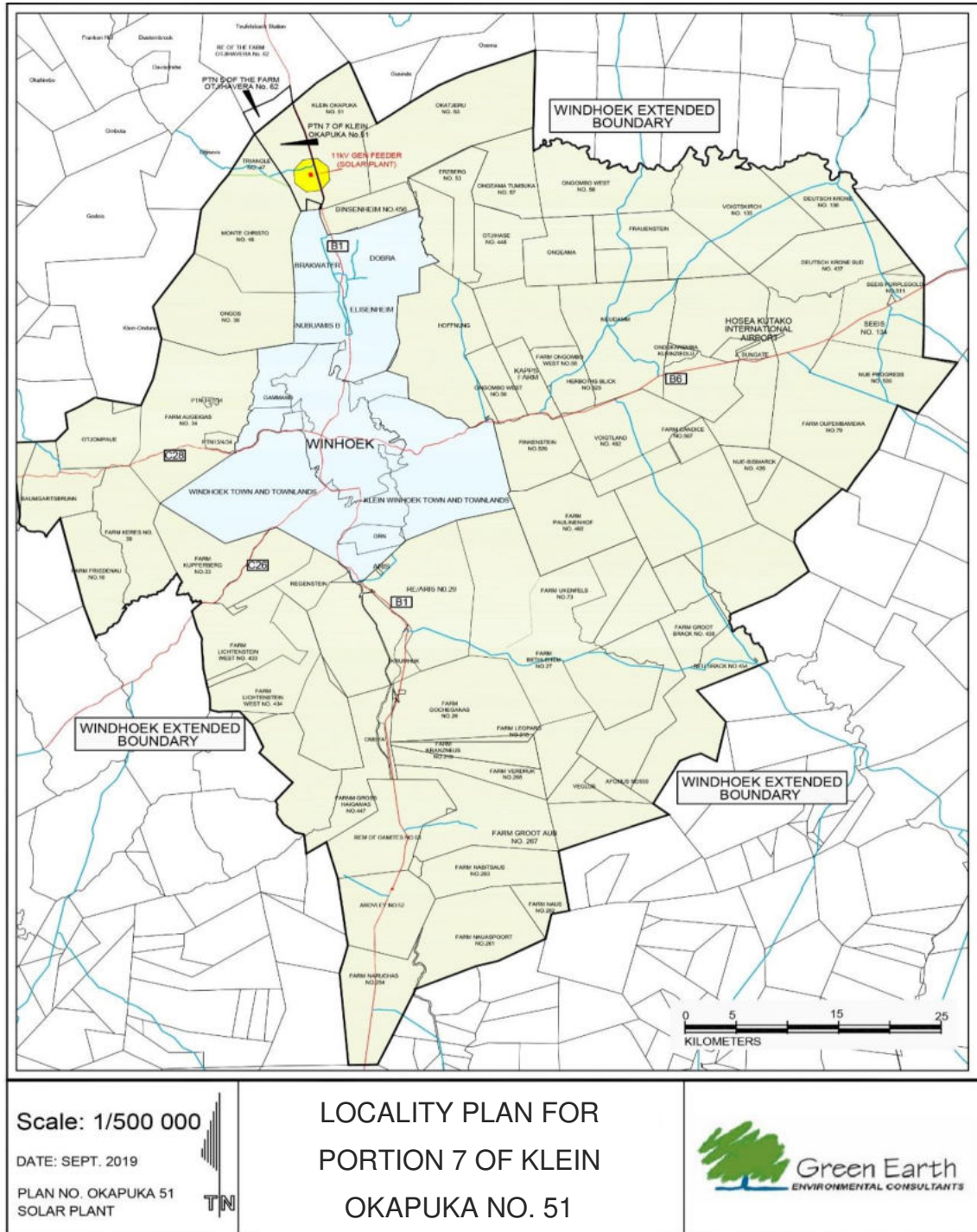


Figure 1: Location of Farm Klein Okapuka No. 51

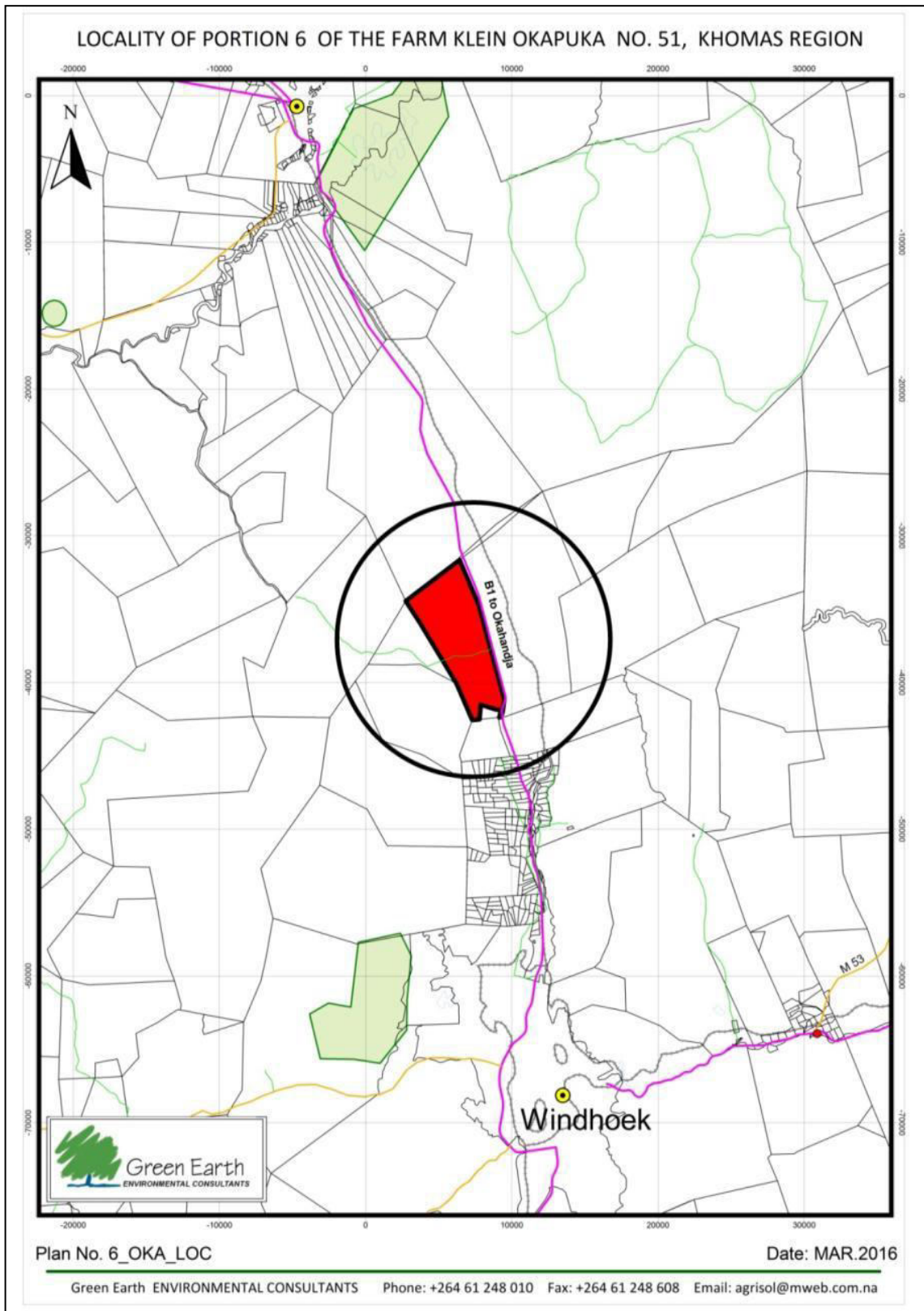


Figure 2: Locality Map of Project Site

NPI became fully operational in April 2012 when the first chickens were slaughtered. The operations of NPI include the full spectrum of broiler production such as laying, rearing, broiler houses and a slaughterhouse for slaughtering and processing of the broilers. The broilers are kept on 7 broiler sites each consisting of 6 broiler houses which houses 50 000 broilers per house. NPI is gradually expanding the operation's production by 20% and will be adding 1 broiler house per site (7 houses will be added in total) to be implemented in phases. Enough space is available at each broiler site for the construction of the additional houses.

## 2.2. PROJECT DESCRIPTION

NPI's current operations on the site is summarised in the *Table* below:

| <b>Activity</b>  | <b>Facilities</b>  |
|--|--|
| Breeding and rearing of broilers   | 7 broiler sites including 6 broiler houses per site  |
| Slaughtering and processing, packing and distribution of broilers and products | The broiler abattoir, cold rooms, receiving and dispatch areas, parking area   |
| Rendering to convert waste broiler tissue into stable, usable materials        | Rendering plant  |
| Treatment of wastewater and abattoir effluent                                  | Oxidation ponds, filtration system, trickling plant, reverse osmoses plant and storage facilities of treated water   |
| Administration and staff amenities   | Office block and staff amenities including canteen, showers, and ablution facilities   |
| Monitoring and supporting of the health of employees                           | Clinic   |
| Generation of solar energy   | 3MW PV Plant supplementing of the electricity obtained from the NamPower Grid  |
| Storage and handling of diesel and light fuel oil                              | 21m <sup>3</sup> diesel storage tank – to fill up company vehicles and standby generators, 47m <sup>3</sup> LFO storage tank – use as fuel for the boilers and rendering plant |
| Onsite distribution electricity  | A transmitter/substation and powerlines  |
| Onsite distribution of water   | A 48hours water backup storage facility and onsite water reticulation system   |
| Movement of vehicles   | Onsite gravel road system linking the facilities – maintained by NPI   |



The waste produced from the activities on the site and how it is managed is summarised in the *Table* below:

| Type of waste                              | Composition   | Recyclable/non-recyclable | Management of the waste  |
|--|---|---------------------------|--|
| Household/office waste                     | Paper, glass, metal, plastic, and others  | Recyclable                | Sorted on site and stored at dedicated area. Removed by registered waste recycler.   |
| Chicken manure                             | Chicken manure  | Recyclable                | Stockpiled on site and removed daily by a subcontractor to be used as fertilizer.  |
| Abattoir wastewater and effluent           | Water, fat, blood and organic cleaning materials and brine from the reverse osmoses process | Recyclable                | Fat and solids are removed for rendering and value addition. Water and other effluent are treated via the onsite water treatment facility to potable standards and reused in the abattoir operations. The brine is collected in an oxidation pond. Due to the low quantities these ponds only need cleaning once every 10years where the brine is removed and taken to an approved landfill site for disposal. |
| Feathers                                   | Feathers  | Non-recyclable            | Burned in special containers onsite.   |
| Medical waste from the Clinic's activities | Medical waste   | Non- recyclable           | Collected by a specialist medical waste manager and disposed off at the approved COW medical waste incinerator.  |

The broiler farm is fenced in as a 'bio secure area' with controlled access to enforce biosecurity measures.

See the *Plans* of the broiler houses below:

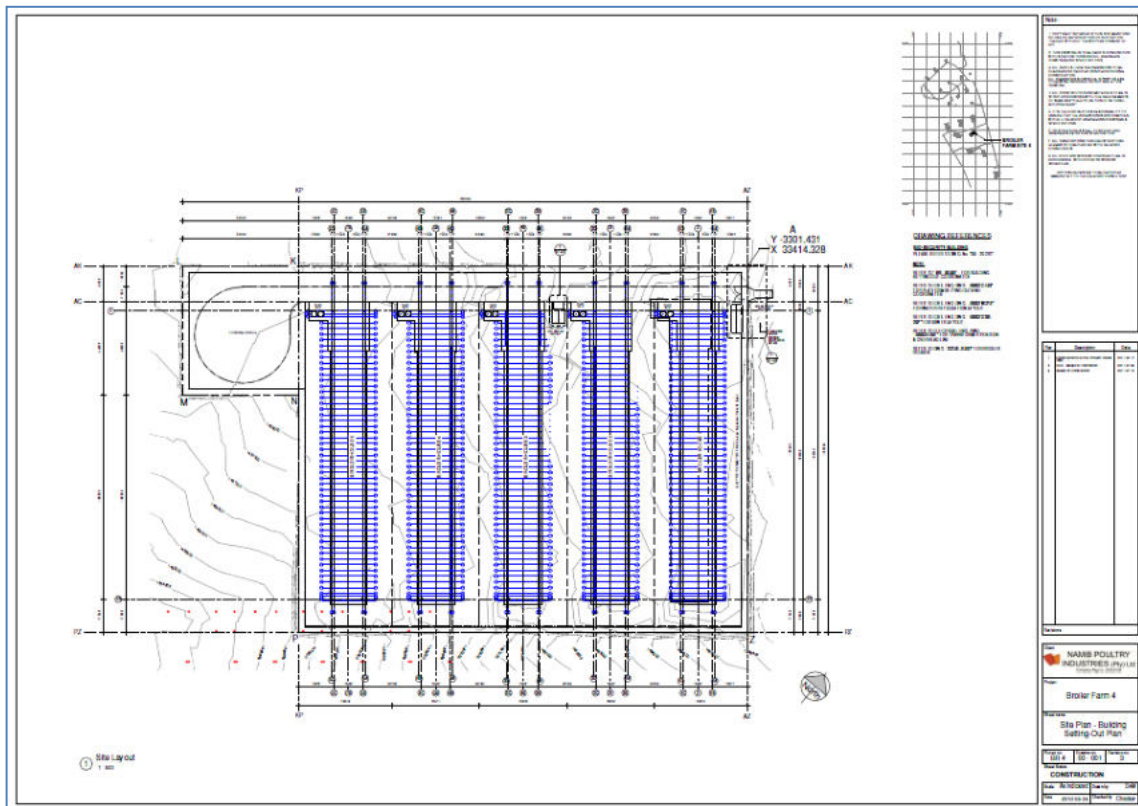


Figure 3: Proposed broiler house plans



Figure 4: Operations fenced in



*Figure 5: The processing plant*



*Figure 6: Vehicle being sprayed for biosecurity*



## 2.2.1. ONSITE STORAGE OF DIESEL AND LFO

Diesel is stored on site to be used by the vehicles of the broiler farm and abattoir. The diesel facility includes a 21m<sup>3</sup> steel tank which is provided with bund walls, a paved driveway, spillage containment structures and one dispensing point that is under roof. The site is fenced in and under 24 hour security. See below *Photos* of the diesel storage site and facilities:



Figure 7: Diesel storage facilities (1)



Figure 8: Diesel storage facilities (2)

Light Fuel Oil is stored onsite and used to fire the boilers as well as the rendering facility's heat requirements. The LFO facility includes a 47m<sup>3</sup> steel storage tank which is provided with bund walls and is linked by pipes and valves with the boilers and rendering facility. The area around the bunded area is paved with concrete floors and spill containment facilities.

### 3. APPROVALS, LICENSES AND PERMITS OBTAINED

The following approvals have been obtained to allow the continuous operations of the project:


#### 3.1. CITY OF WINDHOEK – CERTIFICATE OF FITNESS

City of Windhoek issued a Fitness Certificate for the operations of Namib Poultry Industries (Pty) Ltd. This Fitness Certificate expires on 13 May 2024 and will be renewed before that date. See copy below:

**Department of Economic Development & Community Services**

PO Box 59  
80 Independence Avenue  
WINDHOEK, NAMIBIA

Fax: [+264] 61 - 290 2331 • Tell: [+264] 61 - 290 2496 / 2603




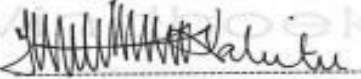
**CERTIFICATE OF FITNESS / REGISTRATION**

REF NO: 2023/001570/260645

This is to certify that the premises as described hereunder is registered in terms of the General Health Regulations (G.N. 121 of 1969 as amended), Regulations Relating to the Registration of Businesses GN 202 of 2006, the Informal Trading Regulations 200 of 2007 and The Liquor Act, 1998 (Act No. 6 of 1998) for carrying on a business as stipulated.

|                       |  |
|-----------------------|--|
| <b>TRADE NAME:</b>    | NAMIB POULTRY INDUSTRIES (PTY) LTD                                   |
| <b>ERF NO:</b>        | FARM KLEIN OKAPUKA NO 51   |
| <b>TOWNSHIP:</b>      | FARM KLEIN OKAPUKA NO 51   |
| <b>STREET NAME:</b>   | FARM KLEIN OKAPUKA NO 51 PORTION 7                                   |
| <b>OWNER/MANAGER:</b> | ALLEN, JOHANN J<br>Passport: A09916903                               |
| <b>PO BOX:</b>        | 20276 WINDHOEK   |
| <b>TELEPHONE:</b>     | 264612901700   |
| <b>CITY:</b>          | WINDHOEK   |
| <b>MEDICALS:</b>      | 680  |
| <b>NATURE:</b>        | ABATTOIR   |
| <b>RESTRICTED TO:</b> | FULLY INTEGRATED BOILER FARMING AND A<br>POULTRY PROCESSING ABATTOIR |

**THIS CERTIFICATE EXPIRES ON:** 2024-05-13


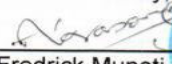


|   |   |
|---|---|
| <br>SECTION HEAD: BUSINESS<br>REGISTRATION<br>DATE: 2023-02-28 | <br>MANAGER: HEALTH AND<br>ENVIRONMENT SERVICES<br>DATE: 2023-02-28 |
|---|---|

**CITY OF WINDHOEK**  
DEPARTMENT OF ECONOMIC  
DEVELOPMENT AND COMMUNITY SERVICES  
CERTIFICATE OF FITNESS  
29 FEB 2023  
HEALTH AND ENVIRONMENT  
SERVICES DIVISION  
P.O. Box 59, Windhoek

All official correspondence must be addressed to the Chief Executive Officer

## 3.2. ENVIRONMENTAL CLEARANCE CERTIFICATE

The current Environmental Clearance Certificate was issued by the Ministry of Environment, Forestry and Tourism on 11 June 2019 which expired on 11 June 2022. See below a copy of the current Certificate:

|   |   |
|---|---|
| <br><b>REPUBLIC OF NAMIBIA</b>   |   |
| <b>MINISTRY OF ENVIRONMENT AND TOURISM</b>  |   |
| Tel: (00 26461) 284 2111<br>Fax: (00 26461) 232 057   | Cnr Robert Mugabe &<br>Dr Kenneth Kaunda Street<br>Private Bag 13306<br>Windhoek<br>Namibia |
| <b>Enquiries:</b> Mr. Josafat K Hiwana<br>E-mail: <a href="mailto:josafat.hiwana@met.gov.na">josafat.hiwana@met.gov.na</a>  | 11 June 2019  |
| <b>OFFICE OF THE ENVIRONMENTAL COMMISSIONER</b>   |   |
| The Managing Director<br>Namib Poultry (Pty) Ltd<br>P.O. Box 20276<br>Windhoek<br>Namibia   |   |
| Dear Sir/Madam  |   |
| <b>SUBJECT: ENVIRONMENTAL CLEARANCE CERTIFICATE FOR THE NAMIB POULTRY BROILER PRODUCTION AND ABATTOIR ACTIVITIES SITUATED IN PORTION 7 OF FARM KLEIN OKAPUKA NO. 51, KHOMAS REGION</b>  |   |
| The Environmental Management Plan submitted is sufficient as it made provisions of the environmental management concerning the proposed activities. From this perspective, regular environmental monitoring and evaluations on environmental performance should be conducted. Targets for improvements should be established and monitored throughout this process.   |   |
| This Ministry reserves the right to attach further legislative and regulatory conditions during the operational phase of the project.   |   |
| On the basis of the above, this letter serves as an environmental clearance certificate for the project to continue. However, this clearance letter does not in any way hold the Ministry of Environment and Tourism accountable for any misleading information, nor any adverse effects that may arise from this project's activities. Instead, full accountability rests with Namib Poultry Industries (Pty) Ltd. |   |
| This environmental clearance is valid for a period of 3 (three) years, from the date of issue unless withdrawn by this office.  |   |
| Yours sincerely,<br><br>Fredrick Mupoti Sikabongo<br><b>DEPUTY ENVIRONMENTAL COMMISSIONER</b>  |          |
| <br><b>“Stop the poaching of our rhinos”</b><br>All official correspondence must be addressed to the Permanent Secretary  |   |



The purpose of this submission is to renew the Environmental Clearance for a further 3 years to allow the Proponent to continue with the implementation of the project.

#### **4. BULK SERVICES AND INFRASTRUCTURE PROVISION**

The bulk services which are already on the project site include the electrical distribution network, gravel roads, water distribution network and sewer system that are in accordance with Municipal Standards. The project site and operations of the abattoir did not change over the last 3 years since the previous Environmental Clearance was obtained. The site has the following bulk services:

##### **4.1. ACCESS AND INTERNAL ROADS**

The project site is located on Portion 7 of Farm Klein Okapuka No. 51, about 30km north of Windhoek directly west of the B1 Highway to Okahandja. The project site access is to the western side of the B1 Highway. The access road is a tared road leading onto the site and connecting all the operations and activities of Namib Poultry. The gravel road is maintained by Namib Poultry. The existing roads are sufficient for the purpose of the operations and no new roads have to be created on site.



*Figure 9: Entrance to site*

## 4.2. WATER SUPPLY

Water requirements of NPI are supplied from 2 sources:

- By **NamWater** via a pipeline from the main water line which supplies water from the Von Bach Dam to Windhoek. The initial agreement between Namib Poultry (Pty) Ltd and NamWater made provision for and allocation of 45 000m<sup>3</sup>/month or 540 000m<sup>3</sup>/year. Currently NPI's average monthly water consumption amounts to 28 500m<sup>3</sup>/month.
- About 120m<sup>3</sup>/day is extracted from **boreholes**.

The savings between the NamWater allocation and current usage are achieved through the onsite treatment of water and the reuse thereof. The water is stored in reservoirs onsite and treated by Namib Poultry to the standards required to ensure that it is suitable for the optimal health and growth of the broilers. Currently 80% of the water used in the processing plant is reused.



Figure 10: Water tanks on site

## 4.3. ELECTRICITY RETICULATION

Electricity is obtained from NamPower with backup generators that are used during power failures. A 3 MW PV Plant is used to supplement the NamPower supply. The Proponent also intends to construct and operate a biodigester to generate biogas from the chicken manure generated from the chicken rearing operations which will supplement their electrical requirements.



*Figure 11: Electricity to site*



*Figure 12: PV Plant on site*

#### **4.4. SEWAGE TREATMENT AND DISPOSAL**

For the treatment of effluent originating from poultry abattoir processes, NPI use an advanced biological treatment plant that includes a pond system (anaerobic and aerobic) followed by a new generation trickling filter plant with clarification and disinfection to produce a final effluent conforming to the General Standard. This is followed by sand and carbon filtration to achieve a final effluent conforming to the Special Standard. The latter effluent is then reclaimed to potable water standard using a reverse osmosis system. The system is designed to treat effluent for a 24-hour period for 7 days per week. No water is spilled into surface or underground drainage systems.





*Figure 13: Treatment of effluent*

The final, reclaimed and treated water to the standard (Potable Water) is reused in the abattoir. Approximately 80% of effluent is reused.

The reverse osmosis produces a waste stream (brine), which is evaporated in properly lined ponds. The salt and sediment that builds up after evaporation in the ponds will be removed once every 10 years and will be finally discarded to a suitably classified landfill site.

#### **4.5. SOLID WASTE DISPOSAL/REFUSE REMOVAL**

The waste generated on the site includes normal household waste, dead chickens, unusable intestines, fat, returns from suppliers and chicken manure. The normal household waste is sorted and stored on site into the different recyclables and then collected on site by an approved private waste management company from where it is taken to their recycling facility for processing and disposed of at the approved waste disposal/landfill site. Dead chicken (the mortality rate is  $\pm 5\%$ ) are collected in plastic bags, temporally stored in a refrigerated container rooms (see photo below) on site and collected to be cleaned and processed. The dead chicken, unusable intestines, fat, blood and returns from suppliers are proceeded to usable products in the rendering facility. Chicken manure is collected by a contractor and moved off site and used as fertilizer and for manufacturing compost. Feathers are burned in special containers on site.





Figure 14: Room where dead chickens are stored before it is disposed off

## 4.6. STORMWATER MANAGEMENT

Namib Poultry obtained a flood risk assessment report of the site to ensure that the existing and new structures are constructed above the 1:50 year flood risk line and that the placement of structures does not alter the natural flow of surface water.

The natural flow of storm water and drainage is minimally disturbed, and the natural flow accommodated where possible. Provision is made for the accommodation of surface water/stormwater management to prevent flood damage to infrastructure.

## 4.7. FIRE PROTECTION

The Proponent has put in the necessary fire protection infrastructure / extinguishers as per requirements. A specialist Fire Protection Specialist is contracted to ensure that a proper fire protection plan with the required infrastructure is in place and to oversee the annual auditing and maintenance of the infrastructure.



Figure 15: Precautionary measures on site

## 5. ASSUMPTIONS AND LIMITATIONS

It is assumed that the information provided by the proponent (Namib Poultry (Pty) Ltd) and other relevant parties are accurate. Alternative sites were not evaluated as the proposed site is the site owned by the proponent. The site was visited several times and any happenings after this are not mentioned in this report. (The assessment was based on the prevailing environmental conditions and not on future happenings on the site.) However, it is assumed that there will be no significant changes to the proposed project, and the environment will not adversely be affected between the compilation of the assessment and the implementation of the proposed activities.

## 6. AFFECTED NATURAL AND SOCIAL ENVIRONMENT

### 6.1. BIODIVERSITY AND VEGETATION

The project site is located in the Tree and Scrub Savanna and Nama Karoo Biome. The Windhoek (including Farm Okapuka) area in general contains a large diversity of annual and perennial grass, it is estimated that there is up to 101 grass species. Four of these species are endemic namely *Eragrostis omahekensis*, *Eragrostis scopelophila*, *Pennisetum foermeranum* and *Setaria finite* (Mannheimer & Curtis, 2009). However, these species are not present on the specific site as it has been mostly cleared from vegetation. The natural characteristics of the site namely the vegetation clearance and the destruction of habitats is expected to further on have a low impact on the environment. See Map below:

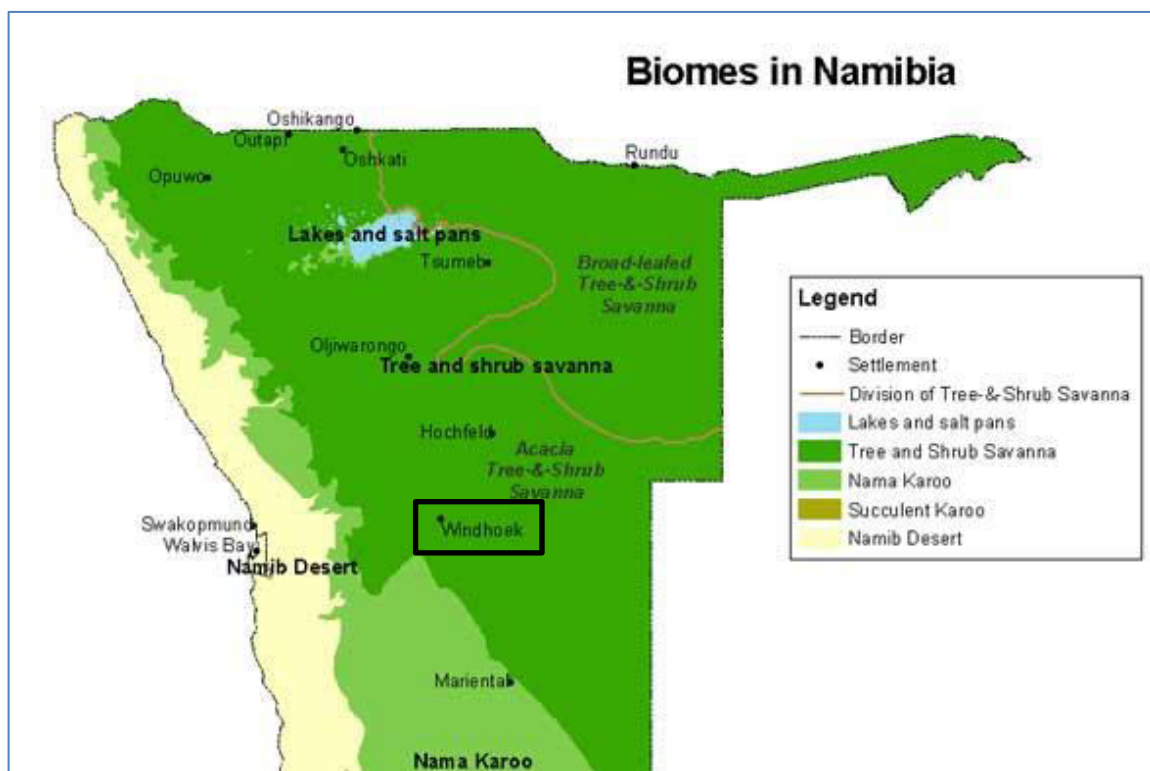


Figure 16: Biomes in Namibia (Atlas of Namibia, 2002)

## CONCLUSION AND IMPACT

The development had a low impact on vegetation, shrubs and trees.

## 6.2. SENSE OF PLACE

The proposed development did not have a large/negative impact on the sense of place in the area. An untidy or badly managed site can detract from the ecological well-being and individuality of the area. Unnecessary disturbance to the surroundings could be caused by poorly planned or poorly managed operational activities. The project site should be kept neat and clean where possible. Vegetation should not be removed or harmed if not necessary since it covers topsoil which prevents erosion. Noise and dust should be limited because of the neighbouring activities.

## CONCLUSION AND IMPACT

The impact on the sense of place is low.

## 7. IMPACT ASSESSMENT AND EVALUATION

The Environmental Impact Assessment Renewal sets out potential positive and negative environmental impacts associated with the project site. The following assessment methodology will be used to examine each impact identified, see *Table* below:

*Table 1: Impact Evaluation Criterion (DEAT 2006)*

| Criteria                            | Rating (Severity) |                             |
|-------------------------------------|-------------------|-----------------------------|
| Impact Type                         | +                 | Positive                    |
|                                     | O                 | No Impact                   |
|                                     | -                 | Negative                    |
| Significance of impact being either | L                 | Low (Little or no impact)   |
|                                     | M                 | Medium (Manageable impacts) |
|                                     | H                 | High (Adverse impact)       |

|                         |                                |
|-------------------------|--------------------------------|
| <b>Probability:</b>     | <b>Duration:</b>               |
| 5 – Definite/don't know | 5 - Permanent                  |
| 4 – Highly probable     | 4 – Long-term (impact ceases)  |
| 3 – Medium probability  | 3 – Medium term (5 – 15 years) |
| 2 – Low probability     | 2 – Short-term (0 – 5 years)   |
| 1 – Improbable          | 1 - Immediate                  |
| 0 - None                |                                |
| <b>Scale:</b>           | <b>Magnitude:</b>              |
| 5 – International       | 10 – Very high/don't know      |
| 4 – National            | 8 - High                       |
| 3 – Regional            | 6 - Moderate                   |
| 2 – Local               | 4 - Low                        |
| 1 – Site only           | 2 - Minor                      |
|                         | 0 - None                       |

The impacts on the receiving environment are discussed in the paragraphs below:

## 7.1. IMPACTS DURING THE OPERATIONAL PHASE

### 7.1.1. ECOLOGICAL IMPACTS

Staff and visitors should only make use of walkways and existing roads to minimise the impact on vegetation. Minimise the area of disturbance by restricting movement to the designated working areas during maintenance and drives.

#### Impact Evaluation

| Aspect          | Impact Type | Scale | Duration | Magnitude | Probability | Significance |           |
|-----------------|-------------|-------|----------|-----------|-------------|--------------|-----------|
|                 |             |       |          |           |             | Unmitigated  | Mitigated |
| Ecology Impacts | -           | 1     | 2        | 4         | 2           | M            | L         |

### 7.1.2. DUST POLLUTION AND AIR QUALITY

Vehicles transporting goods and staff will contribute to the release of hydrocarbon vapours, carbon monoxide and sulphur oxides into the air. Possible release of sewer odour, due to sewer system failure of maintenance might also occur. All maintenance of

bulk services and infrastructure at the project site has to be designed to enable environmental protection.

#### Impact Evaluation

| Aspect             | Impact Type | Scale | Duration | Magnitude | Probability | Significance |           |
|--------------------|-------------|-------|----------|-----------|-------------|--------------|-----------|
|                    |             |       |          |           |             | Unmitigated  | Mitigated |
| Dust & Air Quality | -           | 2     | 2        | 4         | 4           | M            | L         |

### 7.1.3. CONTAMINATION OF GROUNDWATER

Spillages might also occur during maintenance of the sewer system. This could have impacts on groundwater especially in cases of large sewer spills. Proper containment should be used in cases of sewerage system maintenance to avoid any possible leakages. Oil and chemical spillages may have a health impact on groundwater users. Potential impact on the natural environment from possible polluted groundwater also exists.

#### Impact Evaluation

| Aspect                    | Impact Type | Scale | Duration | Magnitude | Probability | Significance |           |
|---------------------------|-------------|-------|----------|-----------|-------------|--------------|-----------|
|                           |             |       |          |           |             | Unmitigated  | Mitigated |
| Groundwater contamination | -           | 2     | 2        | 4         | 2           | M            | L         |

### 7.1.4. GENERATION OF WASTE

Household waste from the activities at the site and from the staff working at the site is generated. This waste is collected, sorted to be recycled and stored in on site for transportation and disposal at an approved landfill site.

#### Impact Evaluation

| Aspect           | Impact Type | Scale | Duration | Magnitude | Probability | Significance |           |
|------------------|-------------|-------|----------|-----------|-------------|--------------|-----------|
|                  |             |       |          |           |             | Unmitigated  | Mitigated |
| Waste Generation | -           | 1     | 2        | 2         | 2           | M            | L         |

### 7.1.5. FAILURE IN RETICULATION PIPELINES

There may be a potential release of sewage, stormwater or water into the environment due to pipeline/system failure. As a result, the spillage could be released into the environment and could potentially be health hazard to surface and groundwater. Proper reticulation pipelines and drainage systems should be installed. Regular bulk services infrastructure and system inspection should be conducted.

## Impact Evaluation

| Aspect                           | Impact Type | Scale | Duration | Magnitude | Probability | Significance |           |
|----------------------------------|-------------|-------|----------|-----------|-------------|--------------|-----------|
|                                  |             |       |          |           |             | Unmitigated  | Mitigated |
| Failure of Reticulation Pipeline | -           | 1     | 1        | 4         | 2           | M            | L         |

### 7.1.6. FIRES AND EXPLOSIONS

There should be sufficient water available for firefighting purposes. Ensure that all firefighting devices are in good working order and are serviced. All personnel have to be trained about responsible fire protection measures and good housekeeping such as the removal of flammable materials on site. Regular inspections should be carried out to inspect and test firefighting equipment by the contractor.

## Impact Evaluation

| Aspect               | Impact Type | Scale | Duration | Magnitude | Probability | Significance |           |
|----------------------|-------------|-------|----------|-----------|-------------|--------------|-----------|
|                      |             |       |          |           |             | Unmitigated  | Mitigated |
| Fires and Explosions | -           | 2     | 1        | 4         | 2           | M            | L         |

### 7.1.7. HEALTH, SAFETY AND SECURITY

The safety, security and health of the labour force, employees and neighbours are of great importance, workers should be orientated with the maintenance of safety and health procedures and they should be provided with PPE (Personal Protective Equipment). Workers should be warned not to approach or chase any wild animals occurring on the site. No open flames, smoking or any potential sources of ignition should be allowed at the project location. Signs such as 'NO SMOKING' must be prominently displayed in parts where inflammable materials are stored on the premises.

## Impact Evaluation

| Aspect            | Impact Type | Scale | Duration | Magnitude | Probability | Significance |           |
|-------------------|-------------|-------|----------|-----------|-------------|--------------|-----------|
|                   |             |       |          |           |             | Unmitigated  | Mitigated |
| Safety & Security | -           | 1     | 2        | 4         | 2           | M            | L         |

### 7.2. CUMULATIVE IMPACTS

These are impacts on the environment, which results from the incremental impacts of the construction and operation of the development when added to other past, present, and reasonably foreseeable future actions regardless of which person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time. In relation to an activity, it means the impact of an activity that in it may not become significant when added to the existing and potential impacts resulting from similar or diverse activities or undertakings in the area.



Possible cumulative impacts associated with the proposed construction include: sewer damages/maintenance, uncontrolled traffic and destruction of the vegetation or the environment. These impacts could become significant especially if it is not properly supervised and controlled. This could collectively impact on the environmental conditions in the area. Cumulative impacts could occur in both the operational and the construction phase.

#### Impact Evaluation

| Aspect             | Impact Type | Scale | Duration | Magnitude | Probability | Significance |           |
|--------------------|-------------|-------|----------|-----------|-------------|--------------|-----------|
|                    |             |       |          |           |             | Unmitigated  | Mitigated |
| Cumulative Impacts | -           | 2     | 3        | 4         | 2           | M            | L         |

## 8. CONCLUSION

In line with the Environmental Management Act (No 7 of 2007), *Green Earth Environmental Consultants* have been appointed to conduct an Environmental Impact Assessment Renewal for the operations of Namib Poultry Broiler and Abattoir on a portion of Portion 7 of Farm Klein Okapuka, Windhoek, Khomas Region.

Negative impacts that can be associated with the development are most likely to include: production of solid waste, dust emissions, atmospheric emissions, noise pollution, movement of soils, increased wastewater generation, the disruption of groundwater from the foundation or other structures, can result in an increase in traffic on the nearby roads and there can be an impact on the occupational health and safety of workers. However, this project is believed to be an asset to this area. Facilities and employment were made available for which there is a need.

After assessing all information available on this project, *Green Earth Environmental Consultants* believe that the development was required.

## 9. RECOMMENDATION

It is therefore recommended that the Ministry of Environment, Forestry and Tourism through the Environmental Commissioner support and approve the Environmental Clearance Renewal for the operations of Namib Poultry Broiler and Abattoir on a portion of Portion 7 of Farm Klein Okapuka, Windhoek, Khomas Region and for the following listed activities:

### **WASTE MANAGEMENT, TREATMENT, HANDLING AND DISPOSAL ACTIVITIES**

2.1 *The construction of facilities for waste sites, treatment of waste and disposal of waste.*

2.2 *Any activity entailing a scheduled process referred to in the Atmospheric Pollution Prevention Ordinance, 1976.*

2.3 *The import, processing, use and recycling, temporary storage, transit or export of waste.*

### **AGRICULTURE AND AQUACULTURE ACTIVITIES**

7.1 *Construction of facilities for aquaculture production, including mariculture and algae farms where the structures are not situated within an aquaculture development zone declared in terms of the Aquaculture Act, 2002.*

7.2 *The declaration of an area as an aquaculture development zone in terms of the Aquaculture Act, 2002.*

7.3 *The genetic modification of any organism with the purpose of fundamentally changing the inherent characteristics of that organism.*

7.4 *The import, processing and transit of genetically modified organisms.*

7.5 *Pest control.*

7.6 *The release of genetically modified organisms into the environment where an environmental assessment is required by law.*

7.7 *The release of any organism outside its natural area of distribution that is to be used for biological pest control.*

7.8 *The introduction of alien species into local ecosystems.*

### **HAZARDOUS SUBSTANCE TREATMENT, HANDLING AND STORAGE**

9.4 *The storage and handling of a 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.*



## LIST OF REFERENCES

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## APPENDIX A: CURRICULUM VITAE OF CHARLIE DU TOIT

1. **Position:** Environmental Practitioner
2. **Name/Surname:** Charl du Toit
3. **Date of Birth:** 29 October 1960
4. **Nationality:** Namibian
  
5. **Education:**

|                      |  |  |  |
|----------------------|--|--|--|
| Name of Institution  | University of Stellenbosch, South Africa                 |  |  |
| Degree/Qualification | Hons B (B + A) in Business Administration and Management |  |  |
| Date Obtained        | 1985-1987  |  |  |
| Name of Institution  | University of Stellenbosch, South Africa                 |  |  |
| Degree/Qualification | BSc Agric Hons (Chemistry, Agronomy and Soil Science)    |  |  |
| Date Obtained        | 1979-1982  |  |  |
| Name of Institution  | Boland Agricultural High School, Paarl, South Africa     |  |  |
| Degree/Qualification | Grade 12   |  |  |
| Date Obtained        | 1974-1978  |  |  |
  
6. **Membership of Professional Association:** EAPAN Member (Membership Number: 112)
  
7. **Languages:**

|           | <u>Speaking</u> | <u>Reading</u> | <u>Writing</u> |
|-----------|-----------------|----------------|----------------|
| English   | Good            | Good           | Good           |
| Afrikaans | Good            | Good           | Good           |
  
8. **Employment Record:**

| <u>From</u> | <u>To</u> | <u>Employer</u>                           | <u>Position(s) held</u>       |
|-------------|-----------|---|-------------------------------|
| 2009        | Present   | Green Earth Environmental Consultants     | Environmental Practitioner    |
| 2005        | 2008      | Elmarie Du Toit Town Planning Consultants | Manager                       |
| 2003        | 2005      | Pupkewitz Megabuild                       | General Manager               |
| 1995        | 2003      | Agra Cooperative Limited                  | Manager Trade                 |
| 1989        | 1995      |   | Chief Agricultural Consultant |

|      |      |             |              |
|------|------|-------------|--------------|
|      |      | Namibia     |              |
|      |      | Development | Agricultural |
| 1985 | 1988 | Corporation | Researcher   |
|      |      | Ministry of |              |
|      |      | Agriculture |              |

**Certification:**

I, the undersigned, certify that to the best of my knowledge and belief, this CV correctly describes myself, my qualifications, and my experience. I understand that any wilful misstatement described herein may lead to my disqualification or dismissal, if engaged.



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**Charl du Toit**

## APPENDIX B: CURRICULUM VITAE OF CARIEN VAN DER WALT

1. **Position:** Environmental Consultant
2. **Name/Surname:** Carien van der Walt
3. **Date of Birth:** 6 August 1990
4. **Nationality:** Namibian

5. **Education:**

| Institution                | Degree/Diploma                            | Years        |
|----------------------------|---|--------------|
| University of Stellenbosch | B.A. (Degree) Environment and Development | 2009 to 2011 |
| University of South Africa | B.A. (Honours) Environmental Management   | 2012 to 2013 |

6. **Membership of Professional Associations:**

EAPAN Member (Membership Number: 113)

7. **Languages:**

| Language  | Speaking | Reading | Writing |
|-----------|----------|---------|---------|
| English   | Good     | Good    | Good    |
| Afrikaans | Good     | Good    | Good    |

8. **Employment Record:**

| From    | To      | Employer                              | Positions Held           |
|---------|---------|---------------------------------------|--------------------------|
| 07/2013 | Present | Green Earth Environmental Consultants | Environmental Consultant |
| 06/2012 | 03/2013 | Enviro Management Consultants Namibia | Environmental Consultant |
| 12/2011 | 05/2012 | Green Earth Environmental Consultants | Environmental Consultant |

9. **Detailed Tasks Assigned:**

Conducting the Environmental Impact Assessment, Environmental Management Plan, Public Participation, Environmental Compliance and Environmental Control Officer

**Certification:**

I, the undersigned, certify that to the best of my knowledge and belief, this CV correctly describes myself, my qualifications, and my experience. I understand that any wilful misstatement described herein may lead to my disqualification or dismissal, if engage.

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Carien van der Walt

## **APPENDIX C: ENVIRONMENTAL MANAGEMENT PLAN**