Updated Environmental Management Plan (EMP)

The Operation of Otavifontein Irrigation Project on Farm Otavifontein No. 794 in the Otjozondjupa Region – <u>Application for the Renewal of an Environmental Clearance Certificate (ECC)</u>

ECC Renewal Application No.:	**APP-005874**
Current ECC No.:	**ECC APP-3456**
Current ECC Holder (Developer):	**O&L Fresh Produce (Pty) Ltd** **P. O. Box 16 Windhoek, Namibia**

June 2025

DOCUMENT INFORMATION

Title: Updated Environmental Management Plan (EMP) for the Operation of Otavifontein Irrigation Project on Farm Otavifontein No. 794 in the Otjozondjupa Region

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Date:	03 JUNE 2025.

SERJA'S STATEMENT OF INDEPENDENCE AND DISCLAIMER

As the Appointed Environmental Consultant to apply for the ECC renewal of Otavifontein Irrigation Project and update the 2022 Environmental Management Plan (EMP) compiled by LM Environmental Consulting, Serja Hydrogeo-Environmental Consultants cc (*Serja HGE Consultants*) declares that we:

- do not have, to our knowledge, any information or relationship with the Project owner (O&L Fresh Produce (Pty) Ltd), their Team nor the Ministry of Environment, Forestry and Tourism (MEFT)'s Department of Environmental Affairs and Forestry (DEAF) that may reasonably have the potential of influencing the outcome of this ECC renewal application and the new ECC applied for.
- are not replicating the 2022 EMP by LM Environment Consulting[1], but are only updating the information, where applicable (with credit given throughout this document). The update is to inform the Environmental Commissioner of the status of the project activities and if there have been any significant changes (between August 2022 and May/June 2025) that may trigger amendments or need to be reported in the ECC renewal EMP and provided for in the new ECC for the next 3 years.
- have knowledge of and experience in conducting environmental assessments, the Environmental Management Act (EMA) No. 7 of 2007, and its 2012 Environmental Impact Assessment (EIA) Regulation, as well as other relevant national and international legislation, guidelines, policies, and standards that govern the proposed project as presented herein.
- have performed work related to the ECC renewal application objectively, even if the results in views and findings, or some of these may not be favorable to the ECC holder/new ECC applicant.
- declare that we do not have and will not have any involvement or financial interest in the undertaking/implementation of the proposed project, other than remuneration (professional fees) for work performed to apply for the ECC renewal in terms of the EIA Regulations' requirement as an Environmental Assessment Practitioner (EAP).

Disclaimer: Serja HGE Consultants will not be held responsible for any omissions and inconsistencies that may result from information that was not available at the time this document was prepared and submitted for evaluation.

…….

Signature & Date:

Fredrika N. Shagama: Principal Environmental Assessment Practitioner & Hydrogeologist

[1] LM Environmental Consulting. (2022). Environmental Scoping, Impact Assessment and Management Plan for the Otavifontein Irrigation Project, Farm Otavifontein No. 794, Otjozondjupa Region, Namibia. Windhoek. Environmental Information Service Namibia.

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ABBREVIATION	MEANING
CENORED	Central North Regional Electricity Distributor
DEAF	Department of Environmental Affairs and Forestry
DWA	Department of Water Affairs
EAP	Environmental Assessment Practitioner

ABBREVIATION	MEANING
ECC	Environmental Clearance Certificate
EIA	Environmental Impact Assessment
EMA	Environmental Management Act
EMP	Environmental Management Plan
FAO	Food and Agriculture Organization
FSC	Forest Stewardship Council
HACCP	Hazard Analysis Critical Control Points
HSE	Health, Safety, and Environment
INM	Integrated Nutrient Management
IPM	Integrated Pest Management
MAFWLR	Ministry of Agriculture, Fisheries, Water and Land Reform
MEFT	Ministry of Environment, Forestry and Tourism
MHSS	Ministry of Health and Social Services
MIME	Ministry of Industries, Mines and Energy
MSDS	Material Safety Data Sheets
NHC	National Heritage Council of Namibia
NO_x	Nitrogen Oxide
O&L	Ohlthaver & List Group
PM	Particulate Matter
PMP	Pest Management Plan
PPE	Personal Protection Equipment
SHE Officer	Safety, Health & Environment Officer
SO_2	Sulphur Dioxide
SOP	Standard Operating Procedure
Spring OF	Spring Otavifontein (the natural spring north of the Farm)
VOCs	Volatile Organic Compounds
WHO	World Health Organization

1 INTRODUCTION

1.1 Background and Project Location

O&L Fresh Produce (Pty) Ltd has been operating an irrigation project and associated activities on Farm Otavifontein No. 794 (*the Farm*) near Otavi in the Otjozondjupa Region (Figure 1-1). The Farm covers an area of ~2,744 hectares (ha), of which 210ha is used for irrigation and ~100ha is earmarked for new irrigation developments. Dry land with buffalo grass and maize each takes up about 225ha (455ha altogether). Of the remaining (adjacent) portion of approximately 2100Ha, ~1,800 ha is rented out for cattle grazing (LM Environmental Consulting, 2022).

Furthermore, water for domestic use and irrigation is obtained from three boreholes and the natural spring (fountain) found on Farm Otavifontein. There are altogether four boreholes on the Farm, but only three are in use. Water is also obtained from the natural spring found on Farm Otavifontein. Seven-eight (7/8) of the water is used for irrigation by O&L Fresh Produce (Pty) Ltd; the remainder (1/8) is used by the Otavi Town Council (the water is supplied to the Town Council by the Namibia Water Corporation Limited (NamWater)).

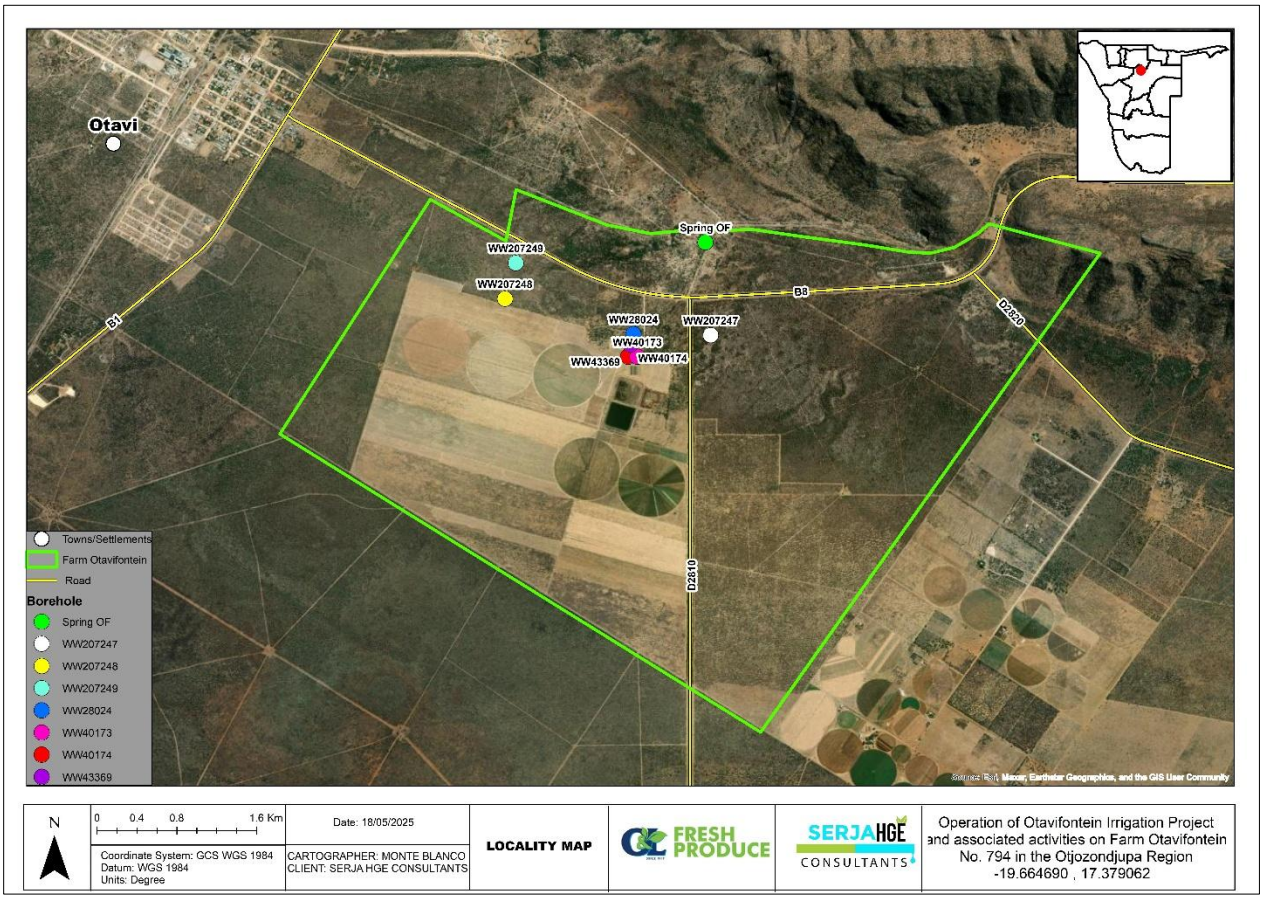


Figure 1-1: Locality map of Farm Otavifontein 794 and key activities near Otavi in the Otjozondjupa Region

1.2 Environmental Clearance Certificate and the Need for Renewal

The project and associated activities are listed in the Environmental Impact Assessment (EIA) Regulations (2012) of the Environmental Management Act (EMA) No. 7 of 2007, which may not be undertaken without an Environmental Clearance Certificate (ECC), and the ECC needs to be renewed every three years.

The associated listed activities in the EIA Regulations include:

- LISTED ACTIVITY 8: WATER RESOURCE DEVELOPMENTS
    - Listed Activity 8.1: The abstraction of ground or surface water for ~~industrial or~~ commercial purposes (***the irrigation project for commercial purposes****).*
    - Listed Activity 8.2: The abstraction of groundwater at a volume exceeding the threshold authorised in terms of a law relating to water resources
    - Listed Activity 8.5: Construction of dams, ~~reservoirs, levees, and weirs~~ (the ***presence of the two earth dams storing water on the Farm***)
    - Listed Activity 8.7: Irrigation schemes for agriculture, excluding domestic irrigation (***the irrigation project for commercial purposes****)*
    - Listed Activity 8.9: Construction and other activities within a catchment area (***the drilling and development of water supply boreholes and associated irrigation infrastructure in the Otavi GI catchment***).
- LISTED ACTIVITY 6: AGRICULTURE ~~AND AQUACULTURE~~ ACTIVITIES (***the irrigation project***)

<u>Associated listed activities with the project</u>

- *LISTED ACTIVITY 1: ENERGY GENERATION, TRANSMISSION, AND STORAGE ACTIVITIES*
    - *The ~~construction of~~ facilities for -*
    - *(a) The generation of electricity (**from the solar/PV plant**)*
    - *(b) The transmission and supply of electricity (**the CENORED grid connected to the Farm**)*
    - *(c) ~~refining of gas, oil, and petroleum products; and~~*
    - *(d) ~~nuclear reaction, including production, enrichments, processing, reprocessing, storage, or disposal of nuclear fuels, radioactive products, and waste.~~*
- LISTED ACTIVITY 2: WASTE MANAGEMENT, TREATMENT, HANDLING, AND DISPOSAL ACTIVITIES
    - *2.1 The ~~construction of facilities for waste sites, treatment of waste, and~~ disposal of waste.*
- LISTED ACTIVITY 9: HAZARDOUS SUBSTANCE TREATMENT, HANDLING, AND STORAGE

- Listed Activity 9.1: The ~~manufacturing,~~ storage, handling, ~~or processing of~~ a hazardous substance defined in the Hazardous Substances Ordinance, 1974 (***the storage and handling of diesel in the onsite tank***)
- Listed Activity 9.5: ~~Construction of filling stations or~~ any other facility for the ~~underground and~~ aboveground storage of dangerous goods, including ~~petrol,~~ diesel, ~~liquid petroleum, gas, or paraffin~~.

To fulfil this requirement, the project was issued an Environmental Clearance Certificate (ECC) on the 15th of August 2022 (Appendix A) upon approval of a 2022 Environmental Scoping, Impact Assessment, and Environmental Management Plan (EMP) by LM Environmental Consulting. The ECC will expire on the 15th of August 2025. Thus, a renewal is required to continue with the project activities.

Added to that, for the project to remain compliant with the environmental legislation and ensure sustainability, the ECC renewal should be applied for (accompanied by an updated EMP) and submitted to the Environmental Commissioner at the Ministry of Environment, Forestry and Tourism (MEFT).

Subsequently, to ensure continued compliance with the EMA and its 2012 EIA, O&L Fresh Produce appointed Serja Hydrogeo-Environmental Consultants CC, independent Environmental Consultants, to apply for the ECC renewal, accompanied by an updated EMP.

The updated EMP would include information on what may have changed between the date of ECC issuance to date, as well as the confirmation of actual implementation of the environmental management and mitigation measures recommended upon approval of the first EMP. The updated EMP is then submitted to the Environmental Commissioner at MEFT for ECC renewal consideration.

1.3 The Aim of this EMP

This document has been compiled to inform the Ministry of Environment, Forestry and Tourism (MEFT) of what has happened on the project site since the issuance of the expired ECC to date, to enable the renewal of the ECC. The aim is also to report on the progress of actual work done on site, implementation of the environmental management and mitigation measures of potential impacts identified.

For the project to remain compliant with the environmental legislation and ensure sustainability, a new ECC should be applied for by launching an application with MEFT.

The ECC renewal is aimed at ensuring that the project activities are undertaken in an environmentally friendly and sustainable manner. This is done by ensuring effective implementations of environmental management and mitigation measures recommended in the previously approved EMP to minimize the adverse identified impacts while maximizing the positive impacts. Not only by the mere implementation of these measures, but also by bi-annual monitoring of this implementation through audit and project activities' compliance exercises on site throughout the project life cycle and validity of the ECC over time.

Subsequently, to comply with the EMA and its 2012 EIA Regulations, O&L Fresh Produce appointed an independent Environmental Consultant to undertake the necessary tasks for their ECC renewal. The required tasks include assessing the site, checking the status of the implementation of the old EMP/management and mitigations, compiling an updated EMP, and submitting the ECC renewal application and EMP to the MEFT for evaluation.

The description of the current operational site activities is presented in the next chapter.

2 DESCRIPTION OF CURRENT ACTIVITIES ONSITE

According to LM Environmental Consulting (2022), O&L Fresh Produce has the authority to procure fresh produce (fruit and vegetables) from producers, manage logistics within distribution centres, and sell fresh produce to the retail market. O&L Fresh Produce operates a distribution centre in Windhoek and the Farm (Otavifontein) just outside Otavi (along the Otavi-Grootfontein road), where nine different seasonal vegetable crops, maize, and wheat are produced for the Namibian market (LM Environmental Consulting, 2022). Water from the boreholes and spring is pumped to and stored in one of the two earth dams on Farm Otavifontein; around ~400,000 cubic metres (m^3) is stored at any time. The two earth dams are each 200 x 200m in size (~10 ha) and can hold ~800,000 cubic metres (Mm^3) of water.

2.1 Farming (irrigation) activities

According to LM Environmental Consulting (2022), the Farm's irrigation activities include the following:

Crop production cycle

- Soil preparation: The process includes ploughing, disking, and application of fertilizers
- Sowing/planting: Seeds purchased from local certified and GMO-free sources are planted.
- Growing phase (crop husbandry): This includes nutrient management (using chemical fertilizers), pest management, and water management.
- Harvesting: The harvest is packed. Sold (to O&L Fresh Produce, Namibia Fresh Produce, Stampriet Farmers Market, Fresh Wise, and independent traders/hawkers) and dispatched. Bales of buffalo grass in the range of 15,000 and 20,000 units are harvested per season and sold to consumers such as Agar and Kaap Agri and or directly to farmers.
- Post-harvest: After harvesting, the ground is re-worked, and the new cycle starts

2.2 Proposed Change to Irrigation Activities

From a strategic perspective of operations, O&L going forward (as of mid-2025), O&L Fresh Produce intends to focus on growing grains only (no vegetables onsite as previously indicated in the 2022 EMP).

2.3 Services, Infrastructures, and Resources

The following supporting services and infrastructure are on-site (and the key infrastructure and services are shown on the map in Figure 2-1 and Figure 2-2):

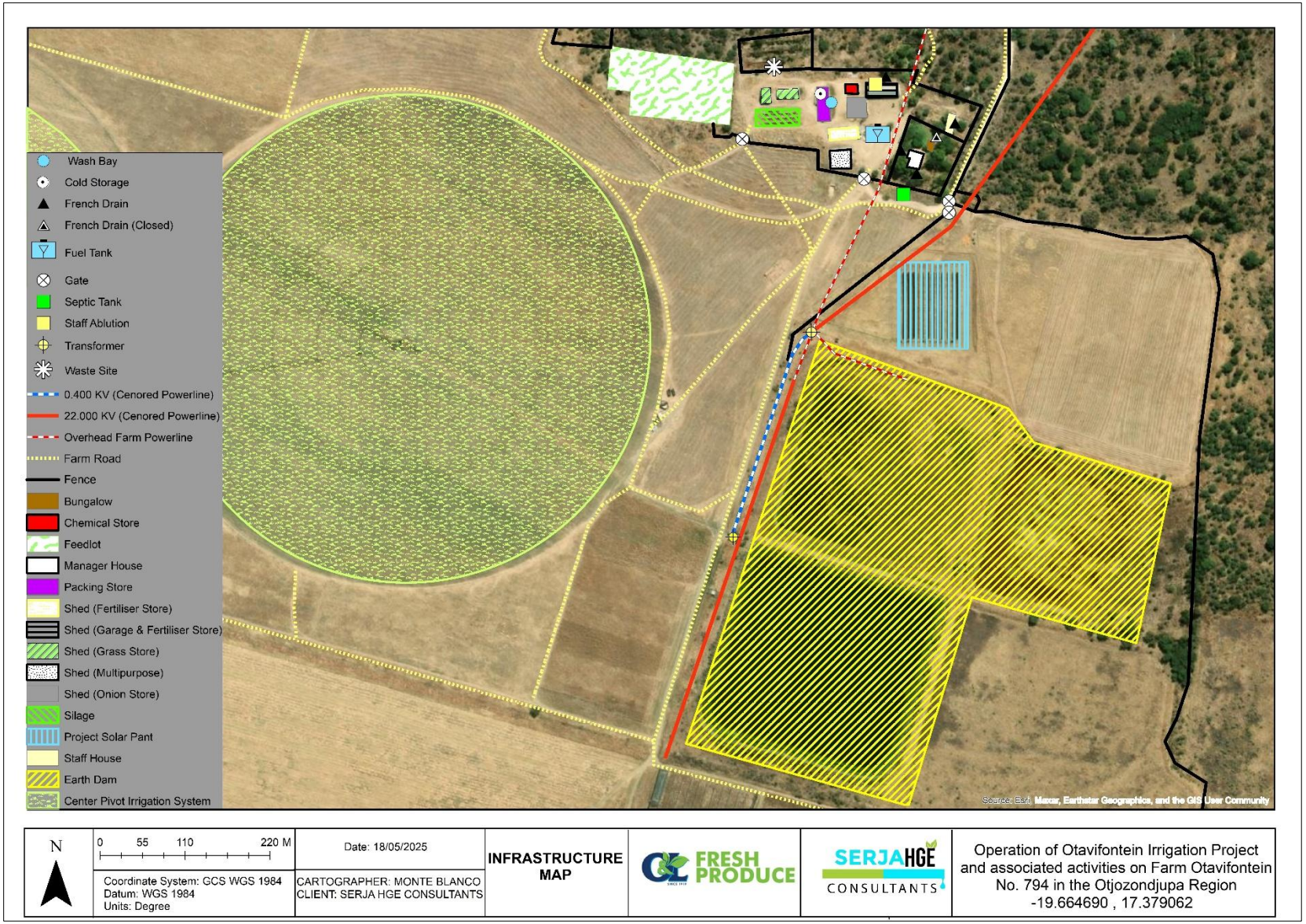


Figure 2-1: The key services and infrastructure and services on Farm Otavifontein 794 near Otavi (updated after LM Environmental consulting, 2022)

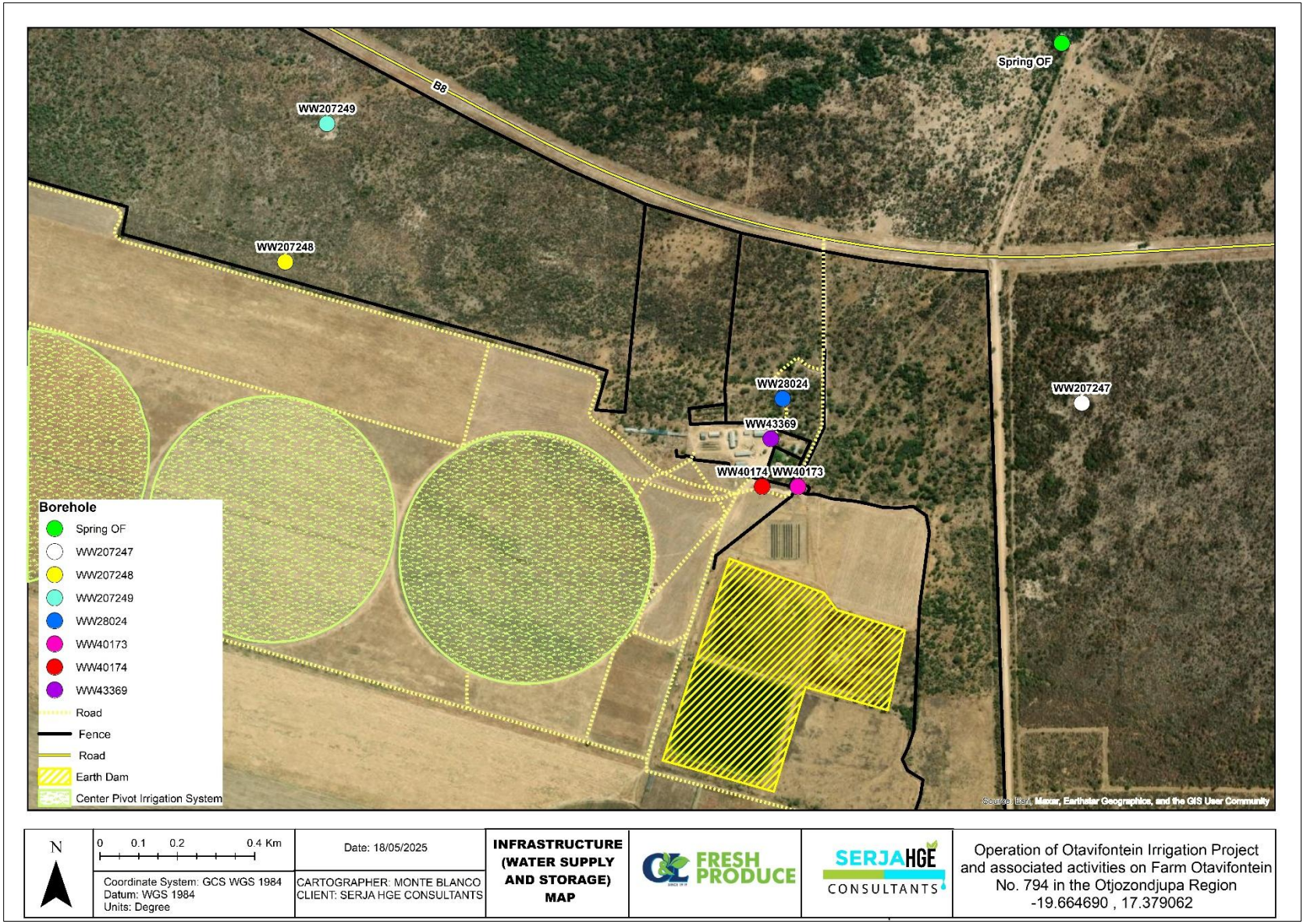


Figure 2-2: The infrastructure (water supply and storage) on Farm Otavifontein 794 (updated after LM Environmental consulting, 2022

2.3.1 Project personnel

The project employs thirty-eight (38) people (18 permanent employees and 20 seasonal workers) by April 2025.

2.3.2 Equipment, machinery, and vehicles

These include typical farming vehicles and machinery such as 4x4 pickup trucks (bakkies), tractors, centre pivot and drip irrigation systems, excavators, bulldozers, and water pumps.

2.3.3 Power supply

The Farm is connected to a 22 kilovolts (22kV) CENORED grid through a 0.400kV powerline to the pump station, and an overhead internal Farm powerline (Figure 2-3). As an additional source of power, a Farm solar plant was constructed in 2023.

Figure 2-3: The CENORED powerline on the Farm

2.3.4 Water supply

Water is supplied by a 7/8 natural spring (referred to as Spring Otavifontein (*Spring OF*) located on the northern side of the Farm and three (WW40173, WW40174, and WW43369) of the four old boreholes (WW28024, WW40173, WW40174 and WW43369) fitted with mono electrical pumps (with an additional three drilled towards the end of 2024, namely borehole WW207247, WW207248, and WW207249). The new boreholes are yet to be installed in 2025. Water is used for domestic use (drinking, cooking, and ablution) on the Farm and mainly for irrigation purposes.

The project has a valid 2-year water permit that was issued in January 2025 (with an allocation of 1,600,000m^3/year) and amended to 2,075,000m^3/year on the 04th of June 2025 (Appendix B). To achieve the full planting target on the Farm, the annual water volumes will be revised and considered for an increase from 2,075,000m^3 to 2,500,000m^3. This will be done by updating the groundwater model (to assess the long-term viability of the intended water volumes from a local and regional groundwater use perspective) and submitting an amendment to the Department of Water Affairs.

Water from the boreholes and 7/8 Spring is pumped into one of the two Farm earth dams that also serve as surface water sources on the Farm. After the water is pumped into the dams, it is then pumped via electrical pump stations and pipes to the field and into the pivot and dripper irrigation systems (LM Environmental Consulting, 2022). Photos of the 7/8 Spring OF, some borehole sites, and the earth dams are shown in Figure 2-4.

Figure 2-4: Some photos of the 7/8 Spring OF, supply boreholes site, and the earth water dam

One of the water management measures implemented by O&L Fresh Produce is the timing of irrigation, which is done between 4:00 p.m. and 10:00 a.m. the next morning. This not only reduces potential evaporation, but also supports better plant growth and allows for operations to be executed within irrigation, having an influence on where staff can work.

2.3.5 Fuel Supply for machinery and equipment

Diesel (fuel) is supplied by Northern Fuel Distributors (4,000 litres monthly) and it is stored in a 14m^3 (14,000 litres) bunded tank to supply fuel for machinery and equipment - Figure 2-5. The onsite fuel tank ensures an uninterrupted fuel supply to the operations. The fuel tank is certified by the Ministry of Industries, Mines & Energy (MIME) when a consumer installation permit was issued on 30 October 2023 (Appendix C).

Figure 2-5: The 14,000-litre diesel tank onsite

2.3.6 Waste Management

Different waste onsite is handled and managed as follows:

- Sanitation (sewage): The Farm has flushing toilets that are connected to a septic tank, and the sewage is treated via two French drain systems (two sealed concrete structures, each approximately 3m x 3m x 3m in size (LM Environmental Consulting, 2022). The tank is periodically emptied by the Otavi Town Council, and the sewage is transported to a designated sewage management facility for the Town.
- Solid waste: This waste is managed onsite using a 900kg (three bins of 300kg each) of e.g., cabbages, carrot leaves, etc., which are dumped in an old, fenced silage trench (50m depth x 5m width x 4m depth). There are two trenches on the Farm, but only one has been in use. Once a year, the waste is then burnt together with the buffalo grass waste (LM Environmental Consulting, 2022). The solid waste is stored in designated bins or bags and bins (Figure 2-6), and transported to the Town's dumpsite for disposal, as burning the waste may constitute a hazard to the environment (air pollution). If the burning of waste is to continue, a permit to burn waste needs to be obtained from the Ministry of Health and Social Services.

Figure 2-6: Solid waste collection bins on the Farm

- Hazardous waste: This waste is kept separate in designated containers for transportation to Windhoek's facility, which is approved to manage hazardous waste. No onsite disposal of hazardous waste.

2.3.7 Site security and accessibility

The Farm is fenced, and access is gained through a controlled gate by Rubicon Security Services. The project site is accessible via a 500m gravel road (D2807) turning off 3km from the Otavi service on the B8 road (T0801) between Otavi and Grootfontein.

2.3.8 Workers and accommodation

There is a Farm Manager's house, a bungalow, and staff housing on site.

2.3.9 Associated/supporting infrastructure

The Farm has three sheds: multipurpose, fertilizer, and onion store. There is a garage/fertilizer store, a chemical store where herbicides and pesticides are stored, in addition to bags and packaging materials (Figure 2-7). Further infrastructure includes a packing store (which includes a cold room (inside) and wash bay (outside), grass stores, feedlot, and silage (LM Environmental Consulting, 2022).

Figure 2-7: One of the equipment and materials storage sheds on the Farm

2.3.10 Occupational health and safety

All project workers are equipped with appropriate and adequate personal protective equipment (PPE). For minor occupational injuries, there are two fully equipped first aid kits onsite (see Figure 2-8), and major injuries are referred for further and comprehensive treatment to the nearest established health facilities in Otavi, Otjiwarongo, and Tsumeb.

Figure 2-8: First Aid Kits on the Farm

O&L Fresh Produce is committed to continuous health and safety training, as proven by the safety and health talks (training) registers kept on site (Figure 2-9).

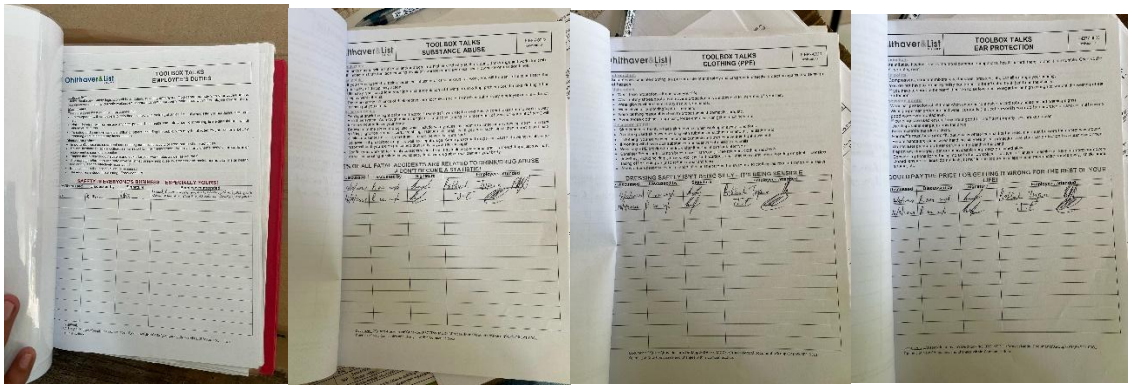


Figure 2-9: Registers for safety and health talk; employee duties, substance abuse, PPE, and ear protection

2.3.11 Accidental fire management

The site has well-serviced fire extinguishers (the next service is due on 06 June 2025). Photos of the fire extinguishers on the Farm are shown in Figure 2-10A. There is also a fire control room on site (Figure 2-10B).

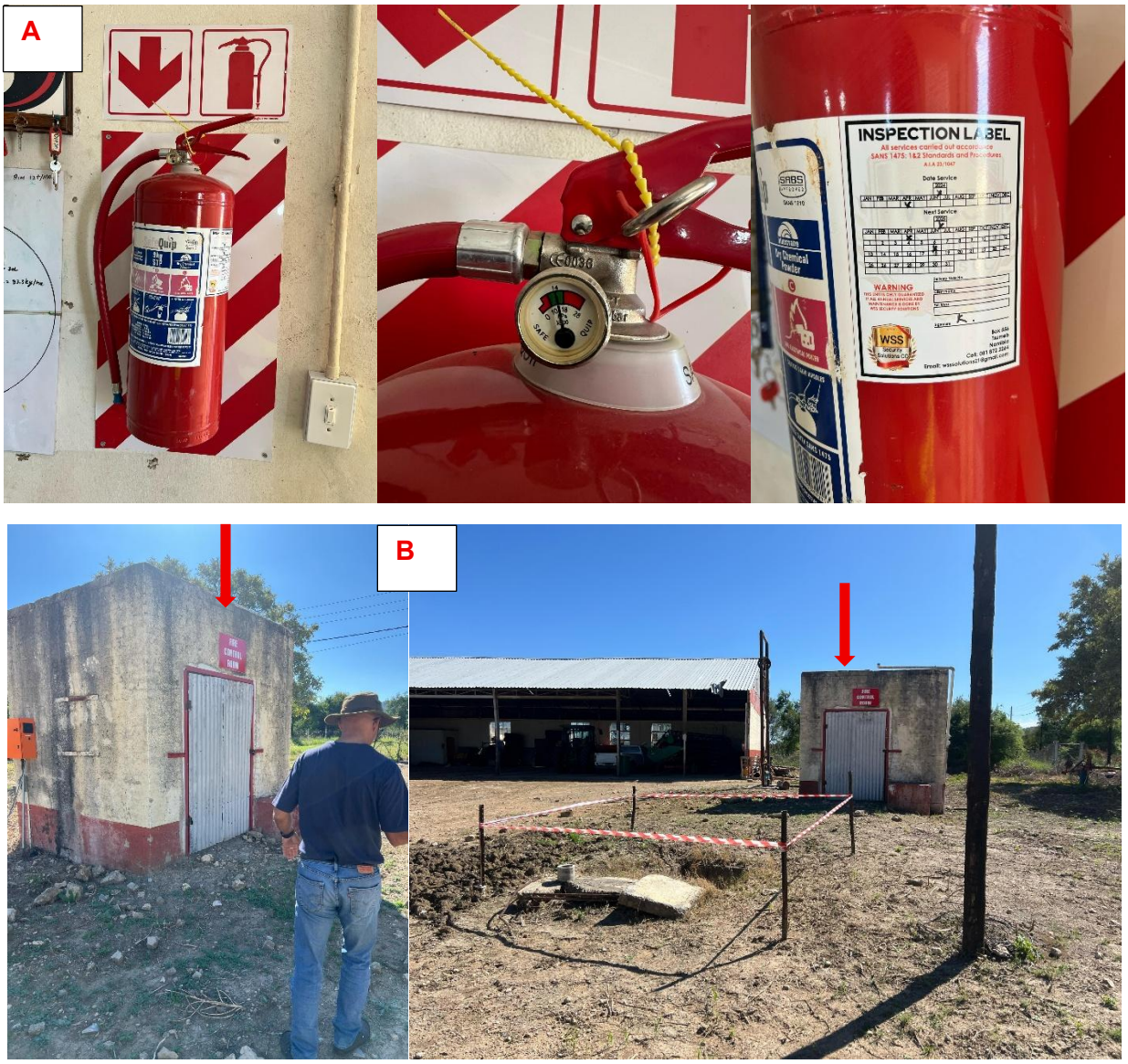


Figure 2-10: Some of the fire extinguishers and the Fire Control Room on-site (on the Farm)

Warning and Hazard signage: There are warning or cautionary signage onsite, particularly at the fuel tank as seen in Figure 2-11. These signs include ‘’no smoking near fuel products’’, no open fire/flames, and no cellphone allowed’’, etc.

Figure 2-11: The warning and command signs near the diesel tank and in the site buildings

3 LEGAL FRAMEWORK: OPERATIONAL PERMITTING AND LICENSES

The project's activities are undertaken in a biophysical and social environment. These activities or some of them may even at minimum impact some of these environmental components. It is therefore necessary to consider the legislations and legal requirements governing the project and its associated activities.

The main legal framework presented herein is that of Namibia for the relevant project component under the scope of this document, and this is regarding the authorizations and permitting for project activities as presented in Table 3-1. Regardless, the list of regulatory frameworks provided in the 2022 EMP is still valid for the project activities and should be adhered to.

Table 3-1: List of applicable legislation where required, permits or licenses for the project activities

Legislation/Policy/ Guideline	Relevant Provisions	Implications for this project
Environmental Management Act EMA (No 7 of 2007): Regulated under the Ministry of Environment, Forestry, and Tourism (MEFT)	Requires that projects with significant environmental impacts are subject to an environmental assessment process (Section 27). The details principles that are to guide all EAs.	The EMA and its regulations should inform and guide this EA process. **ECC Renewal:** An ECC should be renewed every 3 years before its expiry date (at least one month before expiry date). An application for the transfer of the ECC to another person or company should be made with the Office of the Environmental Commissioner at DEAF. The contact details at DEAF are as follows: Contact: Mr. Timoteus Mufeti: Environmental Commissioner Tel.: +264 61 284 2701
Environmental Impact Assessment (EIA) Regulations GN 28-30 (GG 4878): Regulated under the MEFT	Details requirements for public consultation within a given environmental assessment process (GN No 30 S21). The details of the requirements for what should be included in an Environmental Scoping Report (GN No 30 S8) and an EIA report (GN No 30 S15) were already incorporated in the initial reports submitted for the current ECC in 2022.	The project is already in its operational phase. However, if necessary and required, constant consultations and engagements with the interested and affected parties (stakeholders) should be continued. In case of grievances raised by the neighbouring land users to the Farm (project), this should be addressed and resolved amicably.

Legislation/Policy/ Guideline	Relevant Provisions	Implications for this project
Water Resources Management Act (No 11 of 2013) and its 2023 Water Regulations: Regulated under the Ministry of Agriculture, Fisheries, Water, and Land Reform (MAFWLR)	The Act provides for the management, protection, development, use, and conservation of water resources; provides for the regulation and monitoring of water services, and provides for incidental matters. The objects of this Act are to: Ensure that the water resources of Namibia are managed, developed, used, conserved, and protected in a manner consistent with, or conducive to, the fundamental principles set out in Section 66 - protection of aquifers, Subsection 1 (d) (iii) provide for preventing the contamination of the aquifer and water pollution control (Section 68).	The protection (both quality and quantity/abstraction) of water resources should be a priority. Relevant permits and or agreements to abstract and use water should be applied for and obtained. Contact: Mr Franciskus Witbooi: Deputy Director, Water Affairs (Water Law Administration & Policy) Tel: +264 61 208 7226
	For any project wastewater planned for discharge into the environment, a discharge permit should be applied for and obtained	MAFWLR, DWA's Water Environment Division Contact: Ms. Elise Mbandeka Tel: +264 61 208 7167
Soil Conservation Act (No 76 of 1969): Regulated under the MAFWLR	The Act makes provision for the prevention and control of soil erosion and the protection, improvement, and conservation of soil, vegetation, and water supply sources and resources, through directives declared by the Minister.	Duty of care must be applied to soil conservation and management measures must be included in the EMP. This is mainly aimed at soil disturbance through unnecessary creation of new tracks and pollution from project-related activities.
Fertilizers, Farm Feeds and Agricultural Remedies Act No. 36 of 1947: Regulated under the MAFWLR	O&L Fresh Produce should ensure compliance with the Regulations of this Act. If required, the necessary permits should be obtained from the relevant Directorate of the Ministry of Agriculture, Water and Land Reform.	The permits should be obtained from the Agricultural Production, Extension and Engineering Services (DAPEES) of MAFWLR Contact: Mr. Leevi Nekwaya, Acting Deputy Director: North Central Division Tel: +264 65 233 820
Plant Quarantine Act 7 of 2008: Regulated under the MAFWLR	Relevant sections on preventing, monitoring, controlling, and eradication of plant pests as well as facilitating the movement of plants, plant products.	Importing Plant and Plant Products: Seeds Contact: Ms. Elize Hasholo or Mr. Selma Katshenye; Tel. +264 61 208 7527

Legislation/Policy/ Guideline	Relevant Provisions	Implications for this project
Petroleum Products and Energy Act (No. 13 of 1990) Regulations (2001) Regulated under the Ministry of Industries, Mines, and Energy (MIME)	Regulation 3(2)(b) states that "No person shall possess or store any fuel except under authority of a licence or a certificate, excluding a person who possesses or stores such fuel in a quantity of 600 litres or less in any container kept at a place outside a local authority area"	O&L Fresh Produce has an above-ground 10,000-litre fuel (diesel) tank onsite. A Permit (consumer installation certificate) should be obtained from the Petroleum Affairs at the MME. Care must be exercised when handling hydrocarbon products onsite. Contact: Mr. Carlo McLeod: Acting Director of Petroleum Affairs & Deputy Director: Compliance, Regulations and Economics Tel: +264 61 284 8291
Forestry Act (Act No. 12 of 2001	Section 22. (1) provides: "Unless otherwise authorized by this Act, or by a license issued under subsection (3), no person shall on any land which is not part of a surveyed erven of a local authority area as defined in section 1 of the Local Authorities Act, 1992 (Act No. 23 of 1992) cut, destroy or remove - (a) vegetation which is on a dune or drifting sand or a gully unless the cutting, destruction or removal is done to stabilize the sand or gully; or (b) any living tree, bush or shrub growing within 100m of a river, stream or watercourse."	If there is a need to remove protected species such as camelthorn trees, a permit should be applied for from the nearest Forestry Directorate (in Otjiwarongo) Otjiwarongo Directorate of Forestry Office Tel: +264 67 303 307 OR Contact: Mr. Johnson Ndokosho (Forestry Director in Windhoek) Tel: +264 61 208 7666
Road Traffic and Transport Act, No. 22 of 1999: Regulated by the Ministry of Works and Transport (MWT)	Mitigation measures should be provided for if the roads and traffic impact cannot be avoided. The Act regulates activities involving road transportation or formalization of access onto existing roads, or crossing of powerlines over public roads.	The relevant permits (access road and consent to cross powerlines over public roads) can be applied for from the Roads Authority. Contact: Mr Eugene de Paauw (Specialist Road Legislation) Tel.: +264 61 284 7027

Legislation/Policy/ Guideline	Relevant Provisions	Implications for this project
Pollution Control and Waste Management Bill: Regulated under the MEFT	The bill aims to "prevent and regulate the discharge of pollutants to the air, water and land" Of particular reference to the Project is: Section 21 "(1) Subject to sub-section (4) and section 22, no person shall cause or permit the discharge of pollutants or waste into any water or watercourse." Section 55 "(1) No person may produce, collect, transport, sort, recover, treat, store, dispose of or otherwise manage waste in a manner that results in or creates a significant risk of harm to human health or the environment."	O&L Fresh Produce and its workers should continue with the good waste management work (directly or indirectly) to ensure that the waste does not cause an environmental threat or risk. No permit or license required.
Public Health Act (No. 36 of 1919): Regulated under the Ministry of Health and Social Services (MHSS)	Section 119 states that "no person shall cause a nuisance or shall suffer to exist on any land or premises owned or occupied by him or of which he is in charge any nuisance or other condition liable to be injurious or dangerous to health."	O&L Fresh Produce and all its employees should ensure compliance with the provisions of these legal instruments. A permit is required for the burn waste exemption on-site. Contact: Mr. Penda Ithindi, Executive Director (ED) of the MHSS Tel: +264 61-203 2019 /20
Health and Safety Regulations GN 156/1997 (GG 1617)	Details various requirements regarding the health and safety of labourers.	
Public and Environmental Health Act No. 1 of 2015: Regulated under the MHSS	To provide a framework for a structured, uniform public and environmental health system in Namibia, and to provide for incidental matters.	

Legislation/Policy/ Guideline	Relevant Provisions	Implications for this project
National Heritage Act No. 76 of 1969: Regulated under the Ministry of Education, Innovation, Youth, Sports, Arts, and Culture (MEIYSAC)	Call for the protection and conservation of heritage resources and artefacts. Should any archaeological material, such as bones, unknown graves, old weapons/equipment, etc., be found within the site boundary, work should stop immediately, and the National Heritage Council of Namibia must be informed as soon as possible. The Heritage Council will then decide to clear the area, or decide to conserve the site or material	The contact details at the National Heritage Council (NHC) of Namibia Contact: Mrs. Erica Ndalikokule – NHC Director Tel: +264 61 301 903
Labour Act (No. 6 of 1992): Regulated under the Ministry of Justice and Labour Relations (MJLR)	The Ministry of Labour, Industrial Relations and Employment Creation is aimed at ensuring harmonious labour relations through promoting social justice, occupational health and safety, and enhanced labour market services for the benefit of all Namibians. This ministry ensures effective implementation of the Labour Act No. 6 of 1992, specifically its Regulations, No. 156 Labour Act, 1992: Regulations relating to the health and safety of employees at work	O&L Fresh Produce should ensure that the site operations and maintenance works do not compromise the safety and welfare of workers. Permission is needed to run 12-hour shifts (should it be required) Contact: Ms. Kyliki Sihlala: Labour Commissioner Tel. +264 61 206 6111

4 ENVIRONMENTAL IMPACT AND MANAGEMENT ACTION PLANS

This chapter presents the potential impacts that were identified at the time the environmental clearance was issued, the environmental management measures recommended, and the implementation checklist (status of EMP implementation). It is under this chapter that the Environmental Consultant indicates whether the O&L Fresh Produce has been maintaining the implementation of management and mitigation action plans on site to manage and mitigate the significance of the adverse potential impacts stemming from the current project phase and associated activities.

4.1 Key Potential Impacts

The main potential (positive and negative) impacts associated with the project activities are as follows:

Positive	Negative (Adverse)
-Local socio-economic development through employment creation (primary, secondary, and tertiary)	-Potential impact on groundwater resources owing to over-abstraction, resulting in decreasing groundwater levels (if not managed properly).
-Food production leading to enhanced food security for the Namibian market	-Potential pollution of water resources (surface water and groundwater) and soils from fuels, fertilizers, pesticides, herbicides, solid waste, and possible wastewater from septic tanks (due to accidental spills, leakage, and poor mishandling of these substances). However, clear Standard Operating Procedures (SOPs) are in place to minimize the potential risk.
-Procurement of local goods and services for the project by different businesses (goods and service providers) to generate income for improved livelihoods of their workers/employees	-Potential accidental fire hazards (accidental fire outbreaks such as veld fires and associated with mishandling of hydrocarbons at the fuel tank. The necessary firefighting training, officials, and emergency equipment are in place to minimize the risk.
-Boosting of the local economic growth and regional economic development, and ultimately national level (direct/indirect/induced/government revenue).	-Potential occupational health and safety risks associated with project operations.
	-Poor waste management and impact on air quality, which is actively managed through the Waste Management SOP.

4.2 EMP Implementation Roles and Responsibilities

This section is presentation of the roles of different parties involved in the project cycle (for its operations and maintenance) and their respective responsibilities towards the implementation of the EMP.

This EMP informs all relevant parties listed below and everyone employed at the site as to their duties in the fulfillment of the legal requirements for the irrigation activities. This is done to prevent and mitigate the potential negative environmental impacts. All parties should note that obligations imposed by the EMP are legally binding in terms of the Environmental Clearance granted by MEFT to:

- Ensure compliance with regulatory authority stipulations and guidelines, which may be local, provincial, national, and/or international.
- Verify environmental performance through information on impacts as they occur.
- Provide feedback for continual improvement in environmental performance.
- Identify a range of mitigation measures that could reduce and mitigate the potential impacts to minimal or insignificant levels.
- Detail specific actions deemed necessary to assist in mitigating the environmental impact of the project.
- Create management structures that address the concerns and complaints that may be raised by interested and affected parties (I&APs) about the project; and
- Establish a method of monitoring and auditing environmental management practices during the project.

The roles and responsibilities of all parties involved in the effective implementation of the EMP are provided in Table 4-1.

Table 4-1: The persons and institutions responsible for the Implementation of the EMP

Responsible person or institution	Responsibility
O&L Fresh Produce	-Managing the implementation of the EMP and updating and maintaining it when necessary. -Management and monitoring of individuals and/or equipment on-site in terms of compliance with the EMP. -The implementation of and compliance with the environmental management measures proposed in this document. -Ensuring compliance with relevant environmental and related authorisations and license conditions. -Avail sufficient management sponsorship and human and financial resources for the implementation of the EMP.

Responsible person or institution	Responsibility
Site/Farm Manager	-Ensure that relevant commitments contained in the EMP are adhered to. -Ensure relevant staff are trained in procedures entailed in their duties. -Maintain records of all relevant environmental documentation for the project. -Reviewing the EMP annually and amending the document when necessary. -Issuing fines to individuals who may be in breach of the EMP provision and, if necessary, removing such individuals from the site. -Cooperate with all relevant interested and affected parties/stakeholders. -Management and facilitation of communication between O&L Fresh Produce and Stakeholders/Interested and Affected Parties (I&APs), where required. -Development and management of schedules for daily activities
Safety, Health & Environmental (SHE) Officer (this role can also be performed by the Site Manager)	-Make sure that the provisions of the EMP as well as the environmental authorization are complied with onsite. The SHE Officer must be fully conversant with the Environmental Impact Assessment, Environmental Management Plan and environmental legislations, specifically the Environmental Management Act No. 7 of 2007 and its 2012 EIA Regulations. -Issue instructions to O&L Fresh Produce management where environmental considerations call for action to be taken. -Submit regular written reports, ensuring that activities on site comply with all relevant environmental legislation, monitoring and verifying that adverse environmental impacts are kept to a minimum. -Conducting monthly site inspections with reporting for the activities undertaken on all site areas concerning the implementation of the EMP (monitor and audit the implementation of the EMP). -Advising the O&L Fresh Produce on the removal of person(s) and/or equipment not complying with the provisions of the EMP. -Making recommendations to the O&L Fresh Produce concerning the issuing of fines for contraventions of the EMP. -Undertaking an annual review of the EMP and recommending additions and/or changes to the document.

Responsible person or institution	Responsibility
	-Maintain records of all relevant environmental documentation.
Project workers/employees and contractors	Project employees have a personal responsibility to aid in the implementation of the EMP while present and working on site. Therefore, they will be required to adhere to the relevant management and mitigation measures to collectively protect the environment and promote environmental sustainability as well as occupational safety and health.

4.3 Updated Environmental Management and Mitigation Measures

The 2022 EMP section prepared by LM Environmental Consulting has been reviewed and revised based on the period between August 2022 (when the ECC was issued) and May/June 2025 (current conditions onsite and the time of applying for an ECC renewal). This has been done to confirm the implementation of the management and mitigation measures between August 2022 to when the ECC renewal application is done (May/June 2025). Where further recommendations or action plans (measures) are required to improve environmental sustainability and ensure compliance with legal requirements, this is indicated in Table 4-2. The measures provided herein focus on managing and mitigating adverse (negative) impacts associated with or potentially arising from different project activities. The aim is to reduce the significance of these impacts (as assessed by LM Environmental Consulting in 2022) while maximizing the benefits (positive impacts) of the overall project.

It should be noted that O&L Fresh Produce has been consistent with submitting bi-annual environmental monitoring reports to the MEFT, and these are well-documented in their files. Please refer to the proof of submission of the bi-annual environmental monitoring reports attached hereto as Appendix D.

Table 4-2: Project Operations and Maintenance – Current and Updated Management and Mitigation Measures (updated after LM Environmental Consulting, 2022)

Aspect	Activity/Impact	Current EMP Implementation Measures	Additional recommended mitigation measures
Social and Environmental Performance			
Management and Monitoring	Lack of EMP implementation and adherence to the ECC conditions	-Adhere to all Namibian Legislation, including Best Practice Guidelines. -Ensure that all aspects related to the Environmental Management Plan (EMP) are implemented.	None. However, continued improvement should be made when and where necessary.
Environmental clearance	Renewal of the ECC and submission of bi-annual monitoring reports, as well as amendments to the ECC and EMP	-None	-The ECC should be renewed every 3 years (preparing to commence at least 2 months before expiry (if necessary) and submission of the ECC renewal application to reach the MEFT office at minimum 1 month before expiry date of the current ECC. -Amendments to the EMP should be communicated to the Office of the Environmental Commissioner. -Plans to transfer the ECC to a different person or company should be communicated to the Environmental Commissioner by applying for the ECC Transfer and submitting the updated EMP.
Consultation and Disclosure	Information sharing throughout the project cycle	-Maintain open and direct lines of communication with the Authorities and Interested and Affected Parties (I&APs) (e.g., representatives from the Otavi Town Council, MAFWLR, MEFT, CENORED, etc.) with regards to environmental matters. -Consult with I&APs throughout the project process and adequately incorporate I&APs' concerns.	None. However, continued improvement should be made when and where necessary.

Aspect	Activity/Impact	Current EMP Implementation Measures	Additional recommended mitigation measures
Grievance Mechanism	Lack of a grievance mechanism plan	-Implement a grievance mechanism for receiving and resolving any concerns and grievances related to the project's social and environmental performance throughout the project life cycle. -Inform all I&APs about the mechanism. -Address concerns promptly and transparently and in a culturally appropriate manner. -Keep a register of all concerns/issues received from I&APs, as well as the measures taken to address these.	None. However, continued improvement should be made when and where necessary.
Training, including awareness and inductions	Lack of safety, health, and environmental training for workers, as well as inductions for site visitors	-Train employees in matters related to the project's social and environmental performance and Namibia's regulatory requirements. -Ensure adequate environmental awareness training for all personnel. Give environmental induction presentations to all personnel.	None. However, continued improvement should be made when and where necessary.
Employment and procurement opportunities	Conflicts stemming from unfair labour/recruitment processes and procurement systems of favour outsiders at the expense of locals	-Source contracting companies/service providers/workers based on merit and expertise, giving preference to local contractors/service providers/workers (from the local area, then the Region, and then the rest of Namibia) on condition that the local contractors/service providers/workers have the required experience and expertise. -Ensure that contractors/service providers adhere to the Namibian Labour, Social Security, Health and Safety, and Affirmative Action laws.	None. However, continued improvement should be made when and where necessary.

Aspect	Activity/Impact	Current EMP Implementation Measures	Additional recommended mitigation measures
		-Source maximally from local resources to ensure maximum economic beneficiation of local businesses in terms of new business sales.	
Labour and Working Conditions	Poor labourers and working conditions on-site	-Establish, maintain, and improve the worker-management relationship. The employment relationship should be based on equal opportunity and fair treatment, and discrimination is not allowed. -Comply with Namibia's labour and employment laws. Promote safe and healthy working conditions and the protection and promotion of worker health. -Document and communicate the Working Conditions and Terms of Employment. -Respect Collective Agreements and the right of workers to organise and bargain collectively. Implement a Grievance Mechanism.	None. However, continued improvement should be made when and where necessary.
Occupational and Community Health and Safety and Security	Potential injuries and health risks associated with a lack of proper mitigation measures	-Adhere to all Namibia's Health and Safety Regulations (Labour Act, 1992: Regulations Relating to the Health and Safety of Employees at Work). -Ensure that an HIV/AIDS Policy and Programme and Health and Safety Plan are in place. -A SHE (Safety, Health, Environment) Representative to be appointed once the staff complement reaches 20. -Occupational Health and Safety Training to be provided to all employees. Ensure that qualified first aid can be provided at all times. -Comply with all safety regulations regarding electricity supply.	None. However, continued improvement should be made when and where necessary.

Aspect	Activity/Impact	Current EMP Implementation Measures	Additional recommended mitigation measures
		-Ensure that employees are trained in the use of appropriate firefighting equipment and ensure that such equipment is on hand at all times. -Provide and ensure the active use of Personal Protective Equipment (PPE). -Make suitable arrangements, as far as practicable, for the maintenance of health, the prevention and overcoming of outbreaks of disease (e.g. Tuberculosis (TB)) and of adequate first aid services. -Prevent communicable disease (e.g. Sexually Transmitted Infections (STIs) such as HIV transmission): provide surveillance and active screening and treatment of employees; prevent illness among employees (through health awareness and education initiatives); ensure ready access to medical treatment, confidentiality and appropriate care, particularly concerning migrant workers; and promote immunization. -Ensure that security arrangements are in place.	
Sowing/Planting: Annual Crop Production and Related Activities)			
Seeds for Sowing	Loss of genetic resources and variability	-Use certified, non-Genetically Modified Organism (GMO) crop seeds (seeds to not contain seeds from invasive alien species; seeds to comply with the information on the packaging regarding seed diameter and species). -Obtain a permit from the MAFWLR for any seeds to be imported.	None. However, continued improvement should be made when and where necessary.
Soil Management	Soil degradation and/or erosion	Practice Integrated Nutrient Management (INM) (to avoid nutrient depletion/accumulation). Use vegetative barriers (crop residues or remains) to prevent wind and water erosion. -Use appropriate machinery to avoid soil compaction.	None. However, continued improvement should be made when and where necessary.

Aspect	Activity/Impact	Current EMP Implementation Measures	Additional recommended mitigation measures
		-Use plant cover or intercrops and shelterbelts to reduce erosion from wind and heavy rain. -Increase the organic matter content in the soil to protect the soil from sun/rain/wind and to feed the biota in the soil (crop residues, compost, and/or manure can be used, but consider the potential for the spreading of pests). -Consider adding lime to the soil (this will compensate for acidification (due to acid deposition and fertilizers) and maintain stable pH levels). -Assess the potential impacts of waste materials (e.g., manure and sludge) on soils and water resources before use for soil enhancement (the waste materials may contain harmful contaminants, e.g., heavy metals, nitrogen, phosphorus, and disease-causing agents).	
Nutrient Management / Application of Fertilizers	Pollution of the biophysical environment (surface and groundwater)	-Balance nutrient application according to INM recommendations. -Use crop rotation methods (to enable cultivation of leguminous plants with nitrogen fixation capabilities). -Use plants to cover the soil, especially during a fallow period. -Instead of burning, incorporate organic waste materials into soils. -Conduct regular soil testing (to establish nutrient needs) to determine fertilizer application rates/correct doses. -Assess soil acidity (so that maximum uptake of phosphates can be achieved). Obtain a permit from the MAFWLR for any fertilizer to be imported. -Spills during transfer, mixing, and storage should be handled as per Hazardous Materials Management.	None. However, continued improvement should be made when and where necessary.

Aspect	Activity/Impact	Current EMP Implementation Measures	Additional recommended mitigation measures
		-Store fertilizers in their original packaging in a dedicated, locked area, with proper signage, and with access limited only to authorised personnel. -Prepare a management plan covering the measures for containment, storage, and ultimate destruction of obsolete fertilizers following the Food and Agriculture Organization (FAO) guidelines (and consistent with country commitments under the Stockholm, Rotterdam, and Basel Conventions). - Standard Operating Procedure developed and in place.	
Use of Manure	Odours/atmospheric emissions and Community health and safety	-Store manure as far away from dwellings/homesteads as possible. -Cover the manure (if feasible) to reduce odours and atmospheric emissions. -Do not apply manure to the fields if the wind direction is toward nearby dwellings/homesteads - Standard Operating Procedure (SOP) in developed and in place.	None. However, continued improvement should be made when and where necessary.
Growing phase - Pest management (Annual Crop Production and Related Activities)			
Annual Crop Production – Attraction of e.g., Baboon, Warthog, and Avifauna – Electric Infrastructure	Human-wildlife conflict	-Implement a suitable and appropriate refuse removal policy (littering could result in certain animals (e.g., baboon, black-backed jackal, crows, warthog, etc.) becoming accustomed to humans and the associated activity, and result in typical human-wildlife conflict issues.	None. However, continued improvement should be made when and where necessary.

Aspect	Activity/Impact	Current EMP Implementation Measures	Additional recommended mitigation measures
		-If electric fences are installed around the agricultural fields (including at the solar PV plant site) to prevent warthog access, these should not be placed lower than 30 centimetres (cm) from the ground as it could result in mortalities of other important species such as reptiles (e.g., chameleons, monitor lizards, snakes, tortoises). -Install electrostatic animal and/or squirrel guards on the bushings at substations, and on-pole- mounted switching gear, to prevent some mammals (e.g. small-spotted genet and mongoose that may be attracted to these structures) from causing problems.	
Pest Management/Application of Pesticides	Pollution of the biophysical environment (surface and groundwater) and Occupational and community health and safety	-Follow an Integrated Pest Management (IPM) strategy and prepare a Pest Management Plan (PMP). -Consider the following alternatives to using pesticides: rotate crops; use pest-resistant crop varieties; use mechanical weed control and/or thermal weeding; use beneficial organisms to perform the biological control of pests (e.g. insects, birds, mites, microbial agents); protect natural enemies of pests (i.e. provide favourable habitats to house pest predators); use animals to graze areas and manage plant coverage; or use mechanical controls (i.e. traps, barriers, light and sound to kill/relocate/repel pests). -Obtain a permit from the MAFWLR for any Pest Control Product (Conventional and Biological) to be imported. -Maintain a pesticide logbook: e.g., field observations, weather data, time and dosage of treatment, effectiveness, and apply pesticides based on these criteria. Ensure that only the minimum effective dose is applied.	None. However, continued improvement should be made when and where necessary.

Aspect	Activity/Impact	Current EMP Implementation Measures	Additional recommended mitigation measures
		-Avoid the use of pesticides that fall under the World Health Organization (WHO) Recommended Classification of Pesticides by Hazard Classes 1a and b, and by Hazard Class II. Pesticides that are listed in Annexes A and B of the Stockholm Convention (except under the conditions noted in the convention). Avoid using any pesticide on the FSC (Forest Stewardship Council) Lists of highly hazardous pesticides (2019). -Only use pesticides that are manufactured under license, registered and approved by the appropriate authority, and follow the FAO's International Code of Conduct on the Distribution and Use of Pesticides. Only use pesticides that are labeled per international standards and norms. -Select application technologies and practices designed to reduce unintentional drift or runoff (as per IPM program) and under controlled conditions. -Pesticide application equipment should be maintained and calibrated following the manufacturer's recommendations. -Store pesticides in their original packaging in a dedicated, dry, cool, frost-free, well-aerated, locked area, with proper signage, and with access limited only to authorised personnel. Ensure that spill containment measures are in place. -Ensure that the personnel applying pesticides are properly trained; mixing and transfer of pesticides should be done in ventilated and well-lit areas using containers designed/dedicated for the task. Contaminated containers should be handled and treated as hazardous waste (see Hazardous Materials Management). -Personnel who apply pesticides should use the correct PPE. Purchase and store only the required amounts of pesticides.	

Aspect	Activity/Impact	Current EMP Implementation Measures	Additional recommended mitigation measures
Growing phase - Water Management			
Abstraction of Groundwater for Irrigation / Annual Crop Production and Related Activities	Decreasing groundwater levels / Pollution of groundwater, / Decline in water quality	-Maximise the use of available precipitation (rainwater). Implement the proposed Water Monitoring Plan (see Gustavo, 2022; Annexure C and Shagama, 2025). Educate the staff, both permanent and temporary, regarding the prevention of pollution. -Site and drill four monitoring boreholes (upstream and downstream of the irrigation scheme, and at the consumer fuel installation and waste disposal site) (see Gustavo, 2022; Figure 7-1). -Install a flow meter at the natural spring and measure the flow volume that is discharged monthly. -Measure the abstraction volumes from the abstraction/production boreholes (WW28024, WW40173, and WW40174 as well as the newly drilled boreholes WW207247, WW207248, and WW207249) at Farm Otavifontein every month. -Measure groundwater levels of the monitoring boreholes (MB1, MB2, MB3, MB4 – to be sited and drilled) every month. -Collect water samples from all production and monitoring boreholes (and the natural spring) biannually and have the water quality analysed. Analyse the data for trends, and implement additional mitigation measures as and when required. -Review and update (incorporating the data from the groundwater monitoring and future rainfall data) the groundwater flow model every four years (or with every renewal or amendment of the abstraction permit).	-The drilling of monitoring boreholes as per the 2022 EMP should be implemented. -The measuring of abstraction volumes should include the newly drilled (and soon to be installed) production boreholes. -Continued improvement should be made when and where necessary.
Annual Crop Production and Related Activities	Pollution of Surface Water / Surface water runoff (and erosion)	Educate the staff, both permanent and temporary, on the prevention of pollution. Conduct rainwater harvesting in earth dams to prevent heavy run-off on cleared land. -Implement stormwater control measures, such as trenches	None. However, continued improvement should be made when and where necessary.

Aspect	Activity/Impact	Current EMP Implementation Measures	Additional recommended mitigation measures
		surrounding the fields with pods collecting surface water run-off. -Consider creating terraces when clearing the land for irrigation (to prevent soil erosion).	
Irrigation Rate Management	Reduced pumping, fertilizer and pesticide use and the subsequent (potential) contamination of groundwater, and costs	-Implement irrigation water conservation measures (as applicable): Avoid midday irrigation (to reduce evaporation). Monitor soil moisture. -Maintain a water management logbook (and record precipitation, rainfall, evaporation, time, and amounts of water applied) (to understand the long-term trends in water use).	None. However, continued improvement should be made when and where necessary
Harvest			
Organic Dust and Inorganic Material (Threshing, Handling, Storage of Grain)	Occupational health and safety	-Use local air extraction devices at dust-generating equipment (e.g. tipping pits, elevators, open conveyors, hoppers, silos, dryers, and scales). -Threshing machines to be equipped with a cab and ventilator. Only store dry grain (to reduce microorganism growth).	None. However, continued improvement should be made when and where necessary
Food Safety	Community health and safety	-Food handling/processing to be performed as per internationally recognized food safety standards consistent with the principles and practices of e.g., Hazard Analysis Critical Control Points (HACCP) (ISO, 2005), and Codex Alimentarius (FAO and WHO, 1962-2005). -Food safety principles include: i) strictly maintain cold chains and other preservation processes; and ii) full institutionalisation of HACCP prerequisites as well as Standard Operational Procedures, including: sanitation; Good Manufacturing Practice (GMP); pest control; chemical control; allergen control; staff hygiene and education; customer complaints mechanism; and traceability and reuse.	None. However, continued improvement should be made when and where necessary

Aspect	Activity/Impact	Current EMP Implementation Measures	Additional recommended mitigation measures
Post-Harvest			
Burning of Waste	Air quality (dust or Particulate Matter (PM) pollution) and Occupational and community health and safety	-Avoid burning organic material in the field.	None. However, continued improvement should be made when and where necessary
Soil Preparation Activities	Soil erosion	-Maintain organic matter (to prevent wind erosion of the soil).	None. However, continued improvement should be made when and where necessary
Crop Residues	Waste Management	-Reuse crop residues (as thermal energy fuel in bioenergy facilities or as feedstock in biorefineries). -Recycle crop residues (and other organic materials) (by ploughing, composting, or leaving them in the field), but consider the potential for the spreading of pests.	None. However, continued improvement should be made when and where necessary
Unplanted Fields or Termination of Production	Extreme bush encroachment (Sicklebush)	Avoid/favour areas with no/few Sicklebush (where feasible). Aftercare plan (e.g., hand application of arboricides, mechanical removal, stem burning, fire, intensive browsing by goats/antelope when regrowing plants are still small, etc.) to avoid the areas from becoming unsuitable for farming afterwards.	None. However, continued improvement should be made when and where necessary
Annual Crop Production and Related Activities: General			
Soil Preparation Activities	Air quality (dust or Particulate Matter (PM) pollution)	-Avoid burning organic material in the field. -Avoid the handling of erodible materials under high wind conditions or when a visible dust plume is present.	None. However, continued improvement should be made when and where necessary
	Soil erosion	-Maintain organic matter (to prevent wind erosion of the soil).	None. However, continued improvement should be made when and where necessary

Aspect	Activity/Impact	Current EMP Implementation Measures	Additional recommended mitigation measures
Increased Traffic / Presence and Movement of Machinery (Exhaust from Diesel Engines) / Traffic on the Farm Road(s)	Air quality (including dust or Particulate Matter (PM) pollution) and Occupational and community health and safety	-Maintain the road surface to preserve surface characteristics (e.g., texture and roughness). -Use dust control/suppression methods, such as applying (semi-purified) water to minimise dust (oil and oil by-products is not a recommended measure to control road dust). -Fleet owners/operators to implement manufacturer-recommended engine maintenance programs (to control vehicle emissions: Carbon Monoxide (CO), Carbon Dioxide (CO_2), Nitrogen Oxide (NOx), Sulphur Dioxide (SO2), Particulate Matter (PM), and Volatile Organic Compounds (VOCs)). -Adopt best transport safety practices by implementing the following measures: emphasize safety aspects among drivers; improve driving skills and require licensing of drivers; adopt limits for trip duration; avoid dangerous routes and times of day; and use speed control devices. -Regularly maintain vehicles and use manufacturer-approved parts. -Use locally sourced materials (where possible) to minimise transport distances. -Employ safe traffic control measures, including the use of traffic and safety warning signs and flag persons to warn of dangerous conditions.	None. However, continued improvement should be made when and where necessary
Vehicular Traffic Use and Safety	The site is located off the B8, and operations may potentially have some impact on the movement of traffic to the site.	None	-The project vehicles should only make use of the existing access road to the site. -All project-related motor vehicle drivers have the required licenses to operate these vehicles. -The vehicles should be driven at a speed of 40km/hr when on the access road and on-site.

Aspect	Activity/Impact	Current EMP Implementation Measures	Additional recommended mitigation measures
			-No person shall drive or use any vehicle on site whilst under the influence of alcohol or any other narcotic substance or in such a way that is dangerous to human life or that may cause damage to any property or the environment. -Traffic signs should be added on-site. This includes speed limits (40km/hr onsite).
Annual Crop Production and Related Activities: Resource Use			
Energy Management	Resource use (e.g., coal) / depletion of natural resources	-Promote the sustainable use of energy (that will result in the reduction of use and cost reductions) (e.g. energy energy-efficient light sources). -Raise awareness amongst the residents, staff (and contractors) (to save energy).	None. However, continued improvement should be made when and where necessary.
Water Management	Resource use/depletion of natural resources	-Implement a water conservation program, promoting the continuous reduction in water consumption. -Raise awareness amongst the staff (and contractors) about the importance of saving water. -Water storage tanks should be insect and animal-proof and covered to reduce evaporation.	
Annual Crop Production and Related Activities: Hazardous Materials Management			
Hazardous Materials Management	Pollution owing to fuels and other hydrocarbons used or stored onsite	-Establish hazardous materials management priorities (based on hazard analysis of risky operations). -Avoid or minimise the use of hazardous materials. -Prevent uncontrolled releases of hazardous materials to the environment or uncontrolled reactions that may result in fire or explosion.	None. However, continued improvement should be made when and where necessary.

Aspect	Activity/Impact	Current EMP Implementation Measures	Additional recommended mitigation measures
		-Implement management controls (procedures, inspections and training, communication, and drills) to address residual risks.	
Hazardous Materials Management	Pollution of the biophysical environment (soil and water) from site fuels and oils	-Implement prevention and control measures for the use, handling, and storage of hazardous materials: -Materials transfer: regularly inspect, maintain, and repair fittings/pipes/hoses; make use of drip trays/other drip containment measures at connection/possible overflow points; -Overfill protection: use trained filling operators; install gauges on tanks to measure the volume inside; make use of dripless hose connections (vehicle tanks) and fixed connections (storage tanks); use a catch basin/drip tray around the fill pipe to collect spills; -Reaction, fire, and explosion prevention: hazardous materials should be stored in marked containers and separate (from non-hazardous materials); incompatible hazardous materials (acids, bases, flammables, oxidizers, reactive chemicals) to be stored in separate areas and with containment facilities separating material storage; smoking or working with open flames not to be permitted in the presence of these substances; limit access to hazardous waste storage areas and clearly label and demarcate the area; conduct regular inspections of the areas and document the findings; prepare and implement spill response and emergency plans; train employees in the use of appropriate firefighting equipment and ensure that such equipment is on hand at all times. -Train workers on the correct transfer and handling of fuels and chemicals and the response to spills.	-All wastewater and hydrocarbon substances and other potential pollutants associated should be contained in designated containers onsite and later disposed of at a nearby approved waste site (in Windhoek). -In cases of accidental fuel or oil spills on the soils from site vehicles, machinery, and equipment, the polluted soil should be removed immediately and put in a designated waste-type container for later disposal at an approved suitable waste site. -The servicing and washing of hydrocarbon contaminated vehicles and equipment should be done at a dedicated area, where contaminants are prevented from contaminating soil or water resources.

Aspect	Activity/Impact	Current EMP Implementation Measures	Additional recommended mitigation measures
		-Immediately report and clean up any accidental hydrocarbon spill: Sunsorb, Drizit, Peatsorb can be used to clean up small spills; in case of larger spills, the spill together with the polluted soil should be removed and disposed of at e.g., a biological remediation site.	
Hazardous Materials Management	Occupational health and safety	-Implement hazard communication and training programmes (including information on Material Safety Data Sheets (MSDS)) to make employees aware of workplace chemical hazards and how to respond to these. -Provide and ensure the active use of PPE. - Standard Operating Procedure (SOP) developed and in place.	None. However, continued improvement should be made when and where necessary.
Consumer Fuel Installation	Pollution of the biophysical environment	-Remove the polluted soil around the diesel tank and dispose of the soil at a biological remediation site, or a recognised hazardous waste disposal site (e.g., Kupferberg outside Windhoek).	-The Consumer Installation Certificate should be applied at the MIME. -As recommended in 2022, a borehole should be drilled downstream of the fuel dispenser, in the direction of the groundwater flow, and monitoring of the groundwater to be carried out.
Annual Crop Production and Related Activities: Waste Management			
Waste Management: Non-hazardous and Hazardous	Pollution of the biophysical environment	-Clean up the existing waste disposal sites; the waste streams should not be mixed (at the same waste disposal site) (e.g., organic waste that can be composted vs household waste vs construction waste vs hazardous waste should be kept separate). -Obtain a burning exemption permit from the Ministry of Health and Social Services (MHSS) to burn waste (if applicable). -Approach the Otavi Town Council to discuss the possibility of disposing of site waste on the Town's dumpsite (after consultation with the Town Council).	None. However, continued improvement should be made when and where necessary.

Aspect	Activity/Impact	Current EMP Implementation Measures	Additional recommended mitigation measures
		-Prepare an Integrated Waste Management Plan. The generation of waste should be avoided as far as practicable; where it cannot be avoided, waste should be reduced, re-used and recovered (including recycling and composting - e.g. the vegetable and buffalo grass waste); where waste cannot be reduced, re-used and/or recovered, it should be disposed of in an environmentally sound manner. Raise awareness amongst staff and contractors (to reduce, recycle, and re-use waste). Stamp down on any form of littering. -Non-hazardous and hazardous waste should be collected and stored separately. -Hazardous waste: recycle petroleum (fuels and lubricants) waste products, and collect and recycle batteries and print cartridges. The remainder (e.g., empty pesticide packaging and containers and unwanted pesticides) should be transported by an approved contractor to a recognised hazardous waste disposal site (e.g., Kupferberg outside Windhoek).	
Waste Management: Sanitary	Pollution of the biophysical environment	-Sanitary wastewater to be released into a French drain system; use biodegradable detergents on site. Apply for and obtain an effluent discharge permit from the DWA, MAFWLR. -Ensure that the discharge of sanitary wastewater to land conforms to the regulatory requirements (MAWLR's Water Quality Standards for Effluent, 2008). -Assess and correct the current situation; "no boreholes shall be allowed within 500m of the nearest septic tank" (see DWAF (Department of Water Affairs and Forestry, now the DWA), 2008).	None. However, continued improvement should be made when and where necessary.

Aspect	Activity/Impact	Current EMP Implementation Measures	Additional recommended mitigation measures
		Supply portable chemical toilets (1 toilet per 30 employees; preferred 1:15) for use by the staff during periods of harvesting. The contents should be collected by an approved contractor and disposed of at an approved sewage site (with prior permission from the Otavi Town Council).	
Wastewater Management	Pollution of the biophysical environment	-Ensure that the discharge of process wastewater and/or sanitary wastewater and/or wastewater from utility operations and/or stormwater conform to the regulatory requirements (MAFWLR's Water Quality Standards for Effluent, 2008). -Runoff from areas where surface water might have become contaminated should be captured and treated to sewage effluent standards; uncontaminated runoff should be diverted around areas where such water might become contaminated.	None. However, continued improvement should be made when and where necessary.
Wastewater Management - Stormwater Management	Soil erosion	-Regular inspection and maintenance of permanent erosion and runoff control features.	None. However, continued improvement should be made when and where necessary.
Termination of Production			
Termination of Production	Extreme bush encroachment (Sicklebush)	-Aftercare plan (e.g., hand application of arboricides, mechanical removal, stem burning, fire, intensive browsing by goats/antelope when regrowing plants are still small, etc.) should be done to avoid the area from becoming unsuitable for farming afterwards.	None. However, continued improvement should be made when and where necessary.
Solar PV Plant	Pollution of the biophysical environment	-Remove all the components and recycle/dispose of as per Canadian Solar's requirements (Canadian Solar, 2020).	None. However, continued improvement should be made when and where necessary.

Aspect	Activity/Impact	Current EMP Implementation Measures	Additional recommended mitigation measures
Accidental Fires	Outbreak of an uncontrolled fire due to the fire sparks caused by the operating machinery or the presence of open fires created or poor housekeeping on-site.	None	-All personnel must be sensitised about responsible fire protection measures and good housekeeping, such as the removal of flammable materials, including rubbish, dry vegetation, and hydrocarbon-soaked soil from the vicinity of the site. Regular inspections should be carried out to check for these materials at the site, particularly around the fuel tank and materials sheds. -Workers should be trained on basic firefighting skills (use fire extinguishers onsite) in case of accidental fire outbreaks. -Safety talks and job hazard analysis should be continued during refresher training.
Noise	Noise impact on site workers, surrounding communities (farm residents)		-Heavy vehicles and machinery should not be left idling when not in use. -Avoid excessive and undue noise on and around the site. -Operations where excessive noise is expected should be carried out between 7 am and 5 pm.

5 ENVIRONMENTAL MONITORING, COMPLIANCE, AND AUDITING

To ensure compliance with the legal requirements, minimize potential adverse impacts, and improve environmental sustainability, some monitoring activities are recommended for the site. These recommended monitoring exercises will continue to be implemented as follows:

5.1 Monitoring of EMP Implementation and ECC Renewal

Environmental (during the validity period of the ECC): Bi-Annual Compliance Monitoring of the EMP implementation should be continued throughout the project cycle, i.e., twice a year (every 6 months) throughout the operations. Should the ECC be renewed, environmental monitoring reports will be compiled and submitted to the DEAF for archiving through provision made on the ECC Portal (as currently done for the ECC APP-3456). This practice will make the ECC renewal easier when it is about to expire in the future. Therefore, the EMP implementation should be effectively monitored, and monitoring reports submitted to the DEAF at the MEFT. The submission is not only done for record-keeping purposes, but also in compliance with the environmental legislation and conditions of the new ECC.

The environmental monitoring requirements for the project activities are provided in Table 5-1.

Table 5-1: Environmental Monitoring parameters and requirements for the irrigation project on Farm Otavofontein 794 (after LM Environmental Consulting, 2022)

Impact	Type of Monitoring/Parameter	Purpose	Frequency	Included in the Bi-annual Environmental Monitoring Report (*Monitoring report*)
Climate change	Rainfall	-To help track the rainfall intensity and determine if sufficient rain falls for irrigation activities to be reduced or delayed. This also helps in assessing long-term rainfall and water availability for the project.	Ad hoc (rainy season); record daily and report to the Department of Water Affairs (DWA), MAFWLR (MAWLR) quarterly	-Rainfall records attached to bi-annual environmental monitoring reports
Groundwater abstraction (boreholes; WW40173, WW40174, and WW43369, WW207247, WW207248, & WW207249)[2]	-Water levels -Water flow/volumes -Water quality (standard parameters; pesticides and fungicides originating pollutants; organic pollutants, such as Escherichia coli (E. coli) bacteria; metals and major ions, etc.	-To monitor the impact of the project's water abstraction on the regional aquifer (ensuring no significant lowering of aquifer levels) -To ensure long-term availability for agriculture, ecosystems, and communities.	-Monthly, as per the DWA, MAFWLR's conditions for the groundwater abstraction permit (including water from the natural spring/Spring OF)	-Graphical representation of water levels, volumes recorded, as well as water quality analysis
Groundwater abstraction (Natural Spring OF)	Water flow/volumes	-To monitor the impact of the project's water abstraction on the regional aquifer	-Monthly, as per the DWA, MAFWLR's conditions for the groundwater abstraction permit (including water from the natural spring/Spring OF)	-Graphical representation of volumes and water quality analysis

[2] Review and update (incorporating the data from the groundwater monitoring and future rainfall data) the groundwater flow model, every four years (or with every renewal or amendment of the abstraction permit)

Impact	Type of Monitoring/Parameter	Purpose	Frequency	Included in the Bi-annual Environmental Monitoring Report (*Monitoring report*)
		-To ensure long-term availability for agriculture, ecosystems, and communities.		
Monitoring boreholes: at least two newly drilled dedicated groundwater level monitoring boreholes within the site boundaries, within the same hydrogeological unit as the existing production boreholes. An additional two monitoring boreholes (MB) (altogether four MB1, MB2, MB3, MB4 – to be sited and drilled)	-Groundwater levels -Water quality (standard parameters; pesticides and fungicides originating pollutants; organic pollutants, such as Escherichia coli (E. coli) bacteria; metals and major ions, etc.)	-To monitor the impact of the project's water abstraction on the regional aquifer, focusing on the site boreholes' behaviour during pumping.	-Monthly, as per the DWA, MAFWLR's conditions for the groundwater abstraction permit (including water from the natural spring/Spring OF)	-Graphical representation of volumes and water quality analysis
Discharge of effluent	pH, Electrical Conductivity (EC) / Total Dissolved Solids (TDS), 3. Biochemical Oxygen Demand (BOD), Chemical Oxygen Demand (COD), Pathogens (e.g., E. coli, Total Coliforms), Nutrients (Nitrogen and	To ensure that the effluent does not contaminate soil, groundwater, or nearby surface water bodies.	As per the DWA, MAWLR's conditions for the effluent discharge permit	Effluent quality analysis and the permit appended to the monitoring reports

Impact	Type of Monitoring/Parameter	Purpose	Frequency	Included in the Bi-annual Environmental Monitoring Report (*Monitoring report*)
	Phosphorus)/Nitrate (NO_3^-), Nitrite (NO_2^-), Ammonia (NH_3), Phosphate (PO_4^{3-}) -Fuels, oil, and Grease, heavy Metals (e.g., Lead, Cadmium, Arsenic) -Suspended Solids / Turbidity, Pesticide Residues, and Agrochemicals			
Stormwater and soil erosion	Soil erosion rates	To ensure that stormwater is properly managed to avoid damaging infrastructure, fields, and downstream areas, as well as carrying away pollutants to water bodies.	Ad hoc (rainy season)	Action recorded in the monitoring reports
Alien invasive plant species	Identification and removal of any alien invasive species	To protect native biodiversity, preserve agricultural productivity, and conserve water resources, as native species outcompete native species for resources	Three-monthly monitoring	Action recorded and findings in the monitoring reports
Consumer Fuel Installation	Fuel products storage and handling on-site	To prevent leakage and spillage of fuel. Resulting in catastrophic soil and water pollution.	As per the MIME's conditions of the Consumer Installation Certificate	Action recorded and findings in the monitoring reports

Impact	Type of Monitoring/Parameter	Purpose	Frequency	Included in the Bi-annual Environmental Monitoring Report (*Monitoring report*)
				-The Consumer Installation certificate is appended to monitoring reports annually
Hazardous materials management	Hydrocarbon spills of more than 200 litres	-To ensure environmental safety (prevent and or reduce fire risks), protect crop quality, and prevent contamination of soil and water	Ad hoc; inform the Minister, MIME by completing form PP/11 (Petroleum Products Regulations 2000)	Action recorded and findings in the monitoring reports
Bird collisions (with transmission lines and/or solar PV plant's modules)	As per Shaw (2010) and/or making use of the NamPower/Namibia Nature Foundation (NNF) Strategic Partnership Forms	-To monitor avifauna (birds) collisions, which helps to protect wildlife, meet environmental regulations, and guide mitigation to reduce ecological harm on site.	Monthly, and then three-monthly	Action recorded and findings in the monitoring reports
Environmental Management Plan (EMP)	Overall environmental performance / corrective measures to be taken as required	-To monitor the effectiveness of recommended management and mitigation measures. -To ensure that the unforeseen environmental impacts that may arise during the operations are identified on time and measures are developed and implemented accordingly.	Bi-Annual Environmental Reports to be submitted to the Directorate of Environmental Affairs (DEA), MEFT	The overall bi-annual environmental monitoring report

5.2 Environmental Awareness

O&L Fresh Produce should ensure that the employees and any third party who carries out all or part of their obligations are adequately trained regarding the implementation of the EMP, as well as regarding environmental legal requirements and obligations. Training may be conducted by the SHE Officer, where necessary.

Environment and health awareness training programmes should be targeted at three distinct levels of employment, i.e., the executive, middle management, and labour. Environmental awareness training programmes shall contain the following information:

- The names, positions, and responsibilities of personnel to be trained.
- The framework for appropriate training plans.
- The summarized content and schedule for the presentation of the training courses.
- The SHE Officer shall ensure that records of all training interventions are kept by record-keeping and documentation control requirements as set out in this EMP. The training records shall verify each of the targeted personnel's training experience.

The recommendations and conclusions made for this document are in the next chapter.

6 RECOMMENDATIONS AND CONCLUSIONS

6.1 Recommendations

The project and associated activities are well limited within the Farm boundaries, and O&L Fresh Produce has been compliant with the EMP requirements as recommended, as well as submitting bi-annual environmental monitoring reports to the MEFT between August 2022 and May/June 2025. Although there is a need for improvement in a few aspects onsite in terms of EMP implementation, O&L Fresh Produce has been committed to environmental management and ensuring sustainability.

Therefore, Serja Consultants are confident that the potential negative impacts associated with the project activities onsite can continue to be mitigated by effectively implementing the recommended management action measures. Furthermore, with more effort and commitment put into continuous improvement on EMP implementation, the protection of the environment and management of negative impacts can be achieved. It is therefore recommended that the project and its associated activities be granted a new ECC, and provided that:

- All the management measures (mitigations) recommended herein continue to be implemented effectively, with compliance emphasis pointed out in Table 4-2 and where required, improvement should be effectively put in place.
- All required permits, licenses, approvals, and document renewals for the project activities now and in the future are obtained as required and renewed accordingly.
- O&L Fresh Produce and its project workers, contractors, and or specialists comply with the legal requirements governing their project and its associated activities.
- All the necessary environmental and social (occupational health and safety) precautions are adhered to.
- To ensure timely renewal of the next ECC, the ECC renewal application should be submitted at least one month before the expiry date of the valid ECC (as stated in the current ECC). This is to allow time for the evaluation of the ECC application and updated EMP by the DEAF and approval by the Environmental Commissioner.
- The EMP Compliance check (Bi-Annual Monitoring) should be continued, and bi-annual environmental monitoring reports submitted to the MEFT as usual, and reports uploaded on the ECC Portal. This would make the next ECC renewal easier because of an in-between track record of monitoring before the expiry date of the ECC.

6.2 Conclusions

The Environmental Consultant recommends that the 2022 ECC be renewed so that O&L Fresh Produce can continue with the project activities and continue to positively contribute to the local, regional, and national development through this economic opportunity (particularly the employment, food security, and revenue).

The site is generally well-kept and equipped with the necessary and required services infrastructure, well-maintained and adheres to the site and activity-specific environmental management requirements. Therefore, the Environmental Consultant trusts that O&L Fresh Produce will continue to maintain the same commitment towards environmental sustainability and ensure timely renewal of all their ECCs in future.

In conclusion, O&L Fresh Produce, its management, workers, contractors, and or specialists should continue with the effective implementation of the recommended management measures to protect both the biophysical and social environment and promote sustainable development.

APPENDIX A: COPY OF THE EXPIRED ENVIRONMENTAL CLEARANCE CERTIFICATE (ECC) - ECC00707

ECC – APP3456

REPUBLIC OF NAMIBIA

MINISTRY OF ENVIRONMENT, FORESTRY AND TOURISM

OFFICE OF THE ENVIRONMENTAL COMMISSIONER

ENVIRONMENTAL CLEARANCE CERTIFICATE

ISSUED

In accordance with Section 37(2) of the Environmental Management Act (Act No. 7 of 2007)

TO

O&L Fresh Produce (Pty) Ltd
P. O. Box 16, Windhoek

TO UNDERTAKE THE FOLLOWING LISTED ACTIVITY

Proposed Operation of Otavifontein Irrigation Project, Farm Otavifontein No. 794, Otjozondjupa Region, Namibia.

MINISTRY OF ENVIRONMENT, FORESTRY AND TOURISM
Private Bag 13306
WINDHOEK NAMIBIA
09 SEP 2022
ENVIRONMENTAL COMMISSIONER
REPUBLIC OF NAMIBIA

ENVIRONMENTAL COMMISSIONER

Issued on the date: **2022-08-15**

Expires on this date: **2025-08-15**

(See conditions printed over leaf)

Reduce
Reuse
Recycle

NAMIBIA IS NOT A TRASH BIN
DO THE RIGHT THING

This certificate is printed without erasures or alterations

ECC –

CONDITIONS OF APPROVAL

1. This environmental clearance is valid for a period of 3 (three) years, from the date of issue unless withdrawn by this office
2. This certificate does not in any way hold the Ministry of Environment, Forestry and Tourism accountable for misleading information, nor any adverse effects that may arise from these activities. Instead, full accountability rests with the proponent and its consultants
3. This Ministry reserves the right to attach further legislative and regulatory conditions during the operational phase of the project
4. -
5. All applicable and required permits are obtained and mitigation measures stipulated in the EMP are applied particularly with respect to management of ecological impacts.
6. Strict compliance with national heritage guidelines and regulations is expected throughout the life-span of the proposed activity, therefore any new archaeological finds must be reported to the National Heritage Council for appropriate handling of such.

APPENDIX B: GROUNDWATER ABSTRACTION PERMIT ISSUED IN MAY 2025

REPUBLIC OF NAMIBIA

MINISTRY OF AGRICULTURE, FISHERIES, WATER AND LAND REFORM

Tel.: (061) 2087224
Fax: (061) 2087697
Enquiries: Ms. R. Boois
Email address: revival.boois@mawlr.gov.na
Reference: PB794

Government Office Park
Private Bag 13184
WINDHOEK

Mr. Henry Feris
Ohlthaver & List Group (Pty) Ltd
P O Box 16
Grootfontein

Dear Mr. Feris

ADDENDUM TO EXISTING LICENSE NO. 10275 FOR THE ABSTRACTION AND USE OF GROUNDWATER FOR IRRIGATION PURPOSES ON THE FARM OTAVIFONTEIN NO. 794, GROOTFONTEIN DISTRICT, OHLTHAVER & LIST GROUP (PTY) LTD.

1. Your application dated 14 February 2025 requesting an increase to your current license to abstract and use groundwater for irrigation purposes, refers.

2. Approval for the increase abstraction of water from the Spring (Otavifontein) and the boreholes WW43369, WW40173, WW40174, WW207247, WW207248 WW207249 from 1,6000,000Mm/³a to 2,075,000Mm/³a has been granted subject to the existing license conditions and the following conditions;

   a) This increase is intended to provide you with sufficient water for irrigation while you finalize the groundwater model to assess the feasibility of the requested 2,500, 000Mm/³a per year
   b) During the two-year validity period, you must ensure the collection of crucial data for the groundwater model to achieve a reliable level of confidence.
   c) You should be aware that the long-term quota for the property will be determined by the model. Therefore, this Ministry reserves the right to adjust the quota as needed.

3. This letter now forms part of the license no 10275 and must be filed and read therewith.

Yours Sincerely,

EXECUTIVE DIRECTOR ACCOUNTING OFFICER
04 JUN 2025
Republic of Namibia
Ministry of Agriculture, Fisheries, Water and Land Reform

Ndiyakupi Nghituwamata (Ms)
EXECUTIVE DIRECTOR AND ACCOUNTING OFFICER

All official correspondence must be addressed to the Executive Director

APPENDIX C: COPY OF THE CONSUMER INSTALLATION CERTIFICATE (CIC) FOR THE OTAVIFONTEIN IRRIGATION PROJECT'S FUEL TANK (ISSUED BY THE FORMER MINISTRY OF MINES & ENERGY (MME), NOW THE MINISTRY OF INDUSTRIES, MINES & ENERGY (MIME))

MINISTRY OF MINES AND ENERGY

PETROLEUM PRODUCTS AND ENERGY ACT, 1990
PETROLEUM PRODUCTS REGULATIONS (2000)

CONSUMER INSTALLATION CERTICATE

[Regulation 19 (5)]

CONSUMER INSTALLATION CERTIFICATE	PERMANENT*	PETROL*	Certificate No.
	X		CI/2865/2023
	TEMPORARY*	DIESEL*	
		X	

Name of certificate-holder	O&L Fresh (Pty) Ltd

Address of certificate-holder	Physical Address	Postal Address
	5 Von Braun Street, Southern Industrial Area Namibia	P.O Box 16 Windhoek Namibia

Nature of activity to which certificate relates*	Commercial / Industrial Undertaking	Farming Operation	Mining Operation
		X	

If Storage tank is to be permanently installed, location of site	Farm Otavifontein, No 794 Otjozondjupa Region Namibia

Conditions applicable to Certificate
See overleaf for general and special conditions applicable to license

Date of Issue of certificate	26 October 2023
In the case of temporary license, period of validity	N/A

Issued by the Minister of Mines and Energy in terms of regulations 18(5),

on 26 October 2023 **at** Windhoek

MINISTRY OF MINES AND ENERGY OFFICE OF THE MINISTER
30 OCT 2023
PRIVATE BAG 13297, WINDHOEK
OFFICIAL

.....
Minister: Mines & Energy

***Mark the appropriate item**

Namprint: 061-220095

CONDITIONS APPLICABLE TO CERTIFICATE

General conditions

1. *The certificate-holder must at all times comply with the Petroleum Products and Energy Act, and Petroleum Products Regulations (2000) and all other applicable laws, including laws relating to labour, safety, hazardous substances, security, health and environment.*
2. *Any fuel purchased pursuant to the certificate may only be used by the certificate holder for own personal use with regard to own or hired petrol or diesel consuming equipment or own or hired vehicles and may not be resold.*
3. *No other fuel may be bought pursuant to the certificate other than the type of fuel specified in the certificate.*
4. *The certificate-holder must inform the Minister as soon as practicable of any dangerous situation arising from the conduct of activities authorized under the consumer installation certificate including the steps taken or proposed to be taken by the certificate-holder to rectify such situation or to eliminate or minimize the danger arising from such situation.*
5. *The certificate-holder may not permit any other person to use the certificate to purchase fuel for a person other than the certificate-holder.*
6. *The certificate-holder must keep such records and submit such information to the Minister as are required under the Petroleum Products Regulations (2000).*
7. *The certificate-holder must comply with all provisions of the Petroleum Products Regulations (2000) relating to petroleum products spills.*
8. *The certificate-holder may not abandon a site otherwise than in accordance with the Petroleum Products Regulations (2000).*
9. *Any pump or dispenser operated under the certificate must have a model and serial number.*

(Note that condition 2 does not apply in respect of the use or purchase of diesel by one contractor from another contractor who has a diesel consumer installation certificate where such diesel is used in connection with construction works in which both contractors are involved.)

Special Conditions

APPENDIX D: PROOFS OF SUBMISSIONS OF BI-ANNUAL ENVIRONMENTAL MONITORING REPORTS SUBMITTED TO THE MEFT BY O&L FRESH PRODUCE

Bi-Annual Report Information

Operation of Otavifontein Irrigation Project, Farm Otavifontein N0. 794, Otjozondjupa Region, Namibia	
APPLICATION NR	APP3456
ECC EXPIRATION DATE	15 August 2025
REPORTING PERIOD	March 2023 – October 2023
REVIEW DATE	October 2023
DOCUMENT AUTHOR	Gloudi de Beer (Group Manager: Environmental Management)
RESPONSIBLE PERSON	Henry Ferris

Source Document Information

Environmental Scoping, Impact Assessment and Management Plan for the Otavifontein Irrigation Project	
DATE	May 2022
PREPARED FOR	O&L Fresh Produce (Pty) Ltd P.O. Box 16 Windhoek Namibia
PREPARED BY	LM Environmental Consulting P.O. Box 1284 Windhoek Namibia
AUTHOR OF EMP	Dr Lima Maartens

Reports submitted to date

Previous Bi-annual Reports Submitted	
Review 1	**Review:** February 2023
Review 2	**Review:** October 2023
Review 3	
Review 4	
Review 5	
Review 6	

Bi-Annual Report Information

Operation of Otavifontein Irrigation Project, Farm Otavifontein N0. 794, Otjozondjupa Region, Namibia	
APPLICATION NR	APP3456
ECC EXPIRATION DATE	15 August 2025
REPORTING PERIOD	Aug 2022 – February 2023
AUDIT DATE	February / March 2023
DOCUMENT AUTHOR	Gloudi de Beer (Group Manager: Environmental Management)
RESPONSIBLE PERSON	Henry Feris

Source Document Information

Environmental Scoping, Impact Assessment and Management Plan for the Otavifontein Irrigation Project	
DATE	May 2022
PREPARED FOR	O&L Fresh Produce (Pty) Ltd P.O. Box 16 Windhoek Namibia
PREPARED BY	LM Environmental Consulting P.O. Box 1284 Windhoek Namibia
AUTHOR OF EMP	Dr Lima Maartens

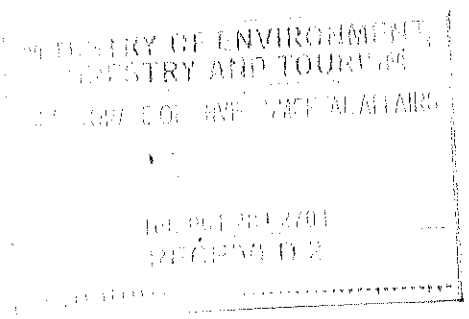
Department of Environmental Affairs – Bi-Annual Report Otavifontein Irrigation Project

PART A: DETAILS OF SUBMISSION

1. NAME	Otavifontein Irrigation Project Henry Feris
2. CORRESPONDENCE ADDRESS:	O&L Fresh Produce (PTY) LTD P.O. Box 16 Windhoek Namibia
3. SUBMITTED BY	Gloudi de Beer Group Environmental Manager : O&L 081 127 2583
4. ENVIRONMENTAL ASSESSMENT PRACTITIONER	Dr Lima Maartens LM Environmental Consulting PO Box 1284 Windhoek Namibia
5. APPLICATION NUMBER	APP - 3456

Type of documents submitted
Bi-Annual Report June 2024 - November 2024 – (Report nr 4)

Received by: **Date: 29 Jan 2025**



Bi-Annual Report Information

Operation of Otavifontein Irrigation Project, Farm Otavifontein N0. 794, Otjozondjupa Region, Namibia	
APPLICATION NR	APP3456
ECC EXPIRATION DATE	15 August 2025
REPORTING PERIOD	November 2023 – June 2024
REVIEW DATE	June 2024
DOCUMENT AUTHOR	Gloudi de Beer (Group Manager: Environmental Management)
RESPONSIBLE PERSON	Henry Ferris

Source Document Information

Environmental Scoping, Impact Assessment and Management Plan for the Otavifontein Irrigation Project	
DATE	May 2022
PREPARED FOR	O&L Fresh Produce (Pty) Ltd P.O. Box 16 Windhoek Namibia
PREPARED BY	LM Environmental Consulting P.O. Box 1284 Windhoek Namibia
AUTHOR OF EMP	Dr Lima Maartens

O&L FRESH PRODUCE

Reports submitted to date

Previous Bi-annual Reports Submitted	
Review 1	**Review:** February 2023
Review 2	**Review:** October 2023
Review 3	**Review:** June 2024
Review 4	
Review 5	
Review 6	

Department of Environmental Affairs – Bi-Annual Report Otavifontein Irrigation Project

PART A: DETAILS OF SUBMISSION

1. NAME	Otavifontein Irrigation Project Henry Feris
2. CORRESPONDENCE ADDRESS:	O&L Fresh Produce (PTY) LTD P.O. Box 16 Windhoek Namibia
3. SUBMITTED BY	Gloudi de Beer Group Environmental Manager : O&L 081 127 2583
4. ENVIRONMENTAL ASSESSMENT PRACTITIONER	Dr Lima Maartens LM Environmental Consulting PO Box 1284 Windhoek Namibia
5. APPLICATION NUMBER	APP - 3456

Type of documents submitted
Bi-Annual Report November 2024 – February 2025 – (Report nr 5)

Received by: **Date:**