

OPERATIONAL ENVIRONMENTAL MANAGEMENT PROGRAMME

Remainder of Farm 225 Grootvlei, Caledon

November 2025



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Please note: A copy of the EAPs CV can be provided on request.

KEY TERMS AND ABBREVIATIONS

Applicant/Operator - Bapchix (Pty) Ltd. The applicant/operator has the overall environmental responsibility to ensure that the implementation of the construction and operational requirements complies with the relevant legislation and the conditions of the approved EMPr.

Auditing - A systematic and objective assessment of an organization's activities and services conducted and documented on a periodic basis to a predetermined standard.

Council – the local authority, Theewaterskloof Local Municipality, its successors in title or assigns.

Department of Environmental Affairs and Development Planning (DEA&DP) – the provincial authority for sustainable environmental management and integrated development planning.

Environmental Assessment Practitioner (EAP) – a suitably qualified environmental consultant to be appointed by the applicant to develop the EMPr and/or conduct external auditing as required.

Environmental Management Programme (EMPr) an environmental management tool used to ensure that undue or reasonably avoidable adverse impacts of the construction, operation, and decommissioning of a project are managed, and that positive benefit of the projects are enhanced.

Environmental Control Officer (ECO) – a suitably qualified individual who understands the onsite operations to be trained or appointed by the applicant to oversee the implementation of the EMPr.

Landowner - Zonderend Valley Farm (Pty) Ltd.

National Environmental Management Act (Act 107 of 1998, as amended) (NEMA)– national legislation that provides principles for decision-making on matters that affect the environment.

National Water Act (NWA) – national legislation that provides principles for decision making on matters that relate to watercourse/water use/water bodies.

Site - Area where the proposed development will take place

Site Manager / Control Officer – A suitably qualified individual to fulfill a combined function of managing the day-to-day operation of the poultry facility and overseeing the implementation of the EMPr.

Workdays – the days of the week excluding Sundays and public holidays.

SECTION 1: CONTEXTUAL INFORMATION

1.1. Project Background

This report aims to supply an Operational Environmental Management Programme (OEMPr) for the management of poultry rearing facilities located on the Remainder (RE) of Farm 225 Grootvlei, Caledon. The farm is located approximately 15 kilometres northeast of Caledon and approximately 3 kilometres north of the N2 with access via a dirt road (Figure 1). The property is a working farm and is approximately 317 ha in size. The development of the existing poultry rearing facility (Figure 2) took place onsite prior to the applicant obtaining the necessary Environmental Authorisation (EA). The applicant, Bapchix Pty (Ltd), applied for a retrospective EA to legalise the existing chicken pens by means of a Section 24G application process. The applicant further intends to develop an additional poultry rearing facility on the property (refer Figure 2) which is currently being applied for in the form of a Basic Assessment Process. Both the existing and the proposed poultry rearing facilities will be located on the same property and run by the same company.

This OEMPr describes management and mitigation measures in detail, and is prescriptive, identifying specific individuals or organisations responsible for undertaking specific tasks to ensure that impacts on the environment are minimized during the operation of the existing development. This OEMPr is an open-ended document and information gained during on-going monitoring of procedures on site could lead to changes in the recommendations and specifications of this document.

This document is intended to guide and manage the operational phase of the proposed poultry rearing facility on RE/225 Grootvlei, Caledon. Along with the contract, this document forms an agreement between the council and the applicant that the environmentally sensitive features on the site will be suitably protected during the operational phase of the development.

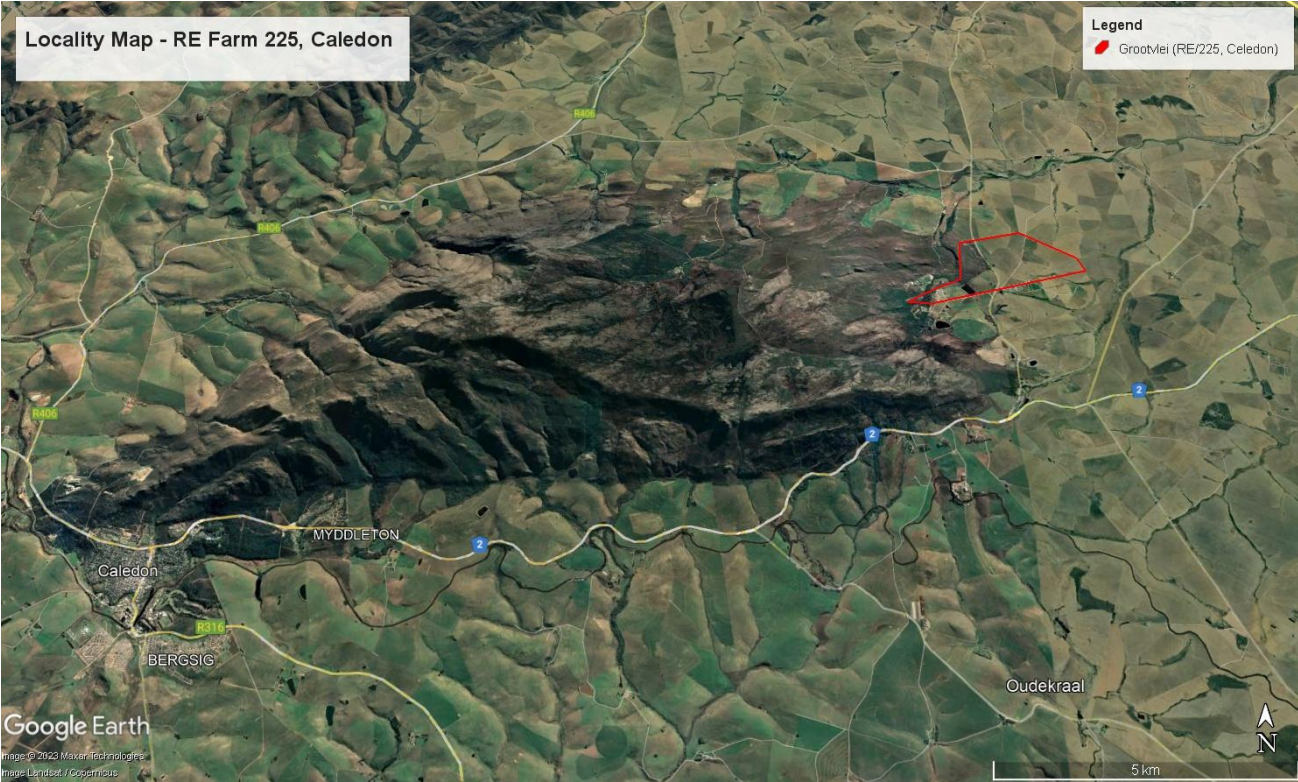


Figure 1: Location of the development site – RE/225, Grootvlei, Caledon

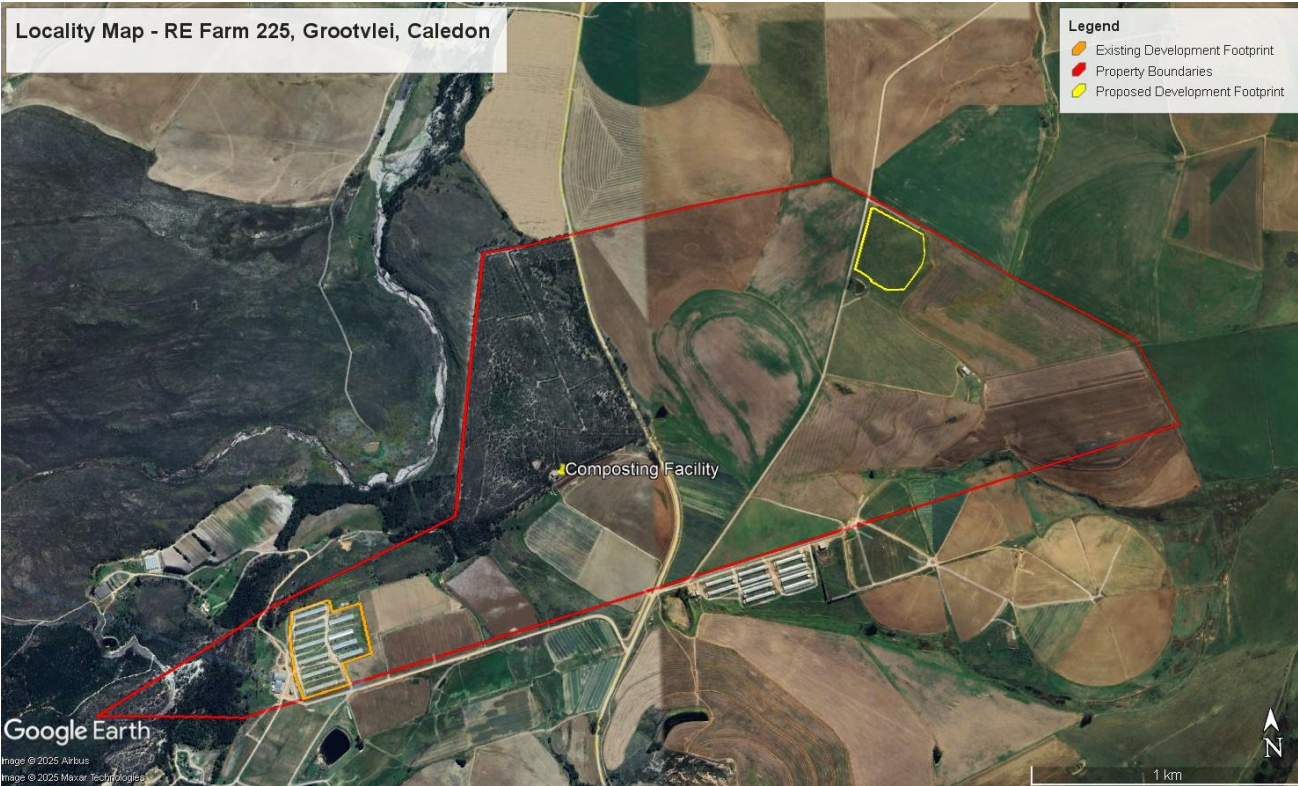


Figure 2: Site map indicating the location of the existing poultry rearing facility

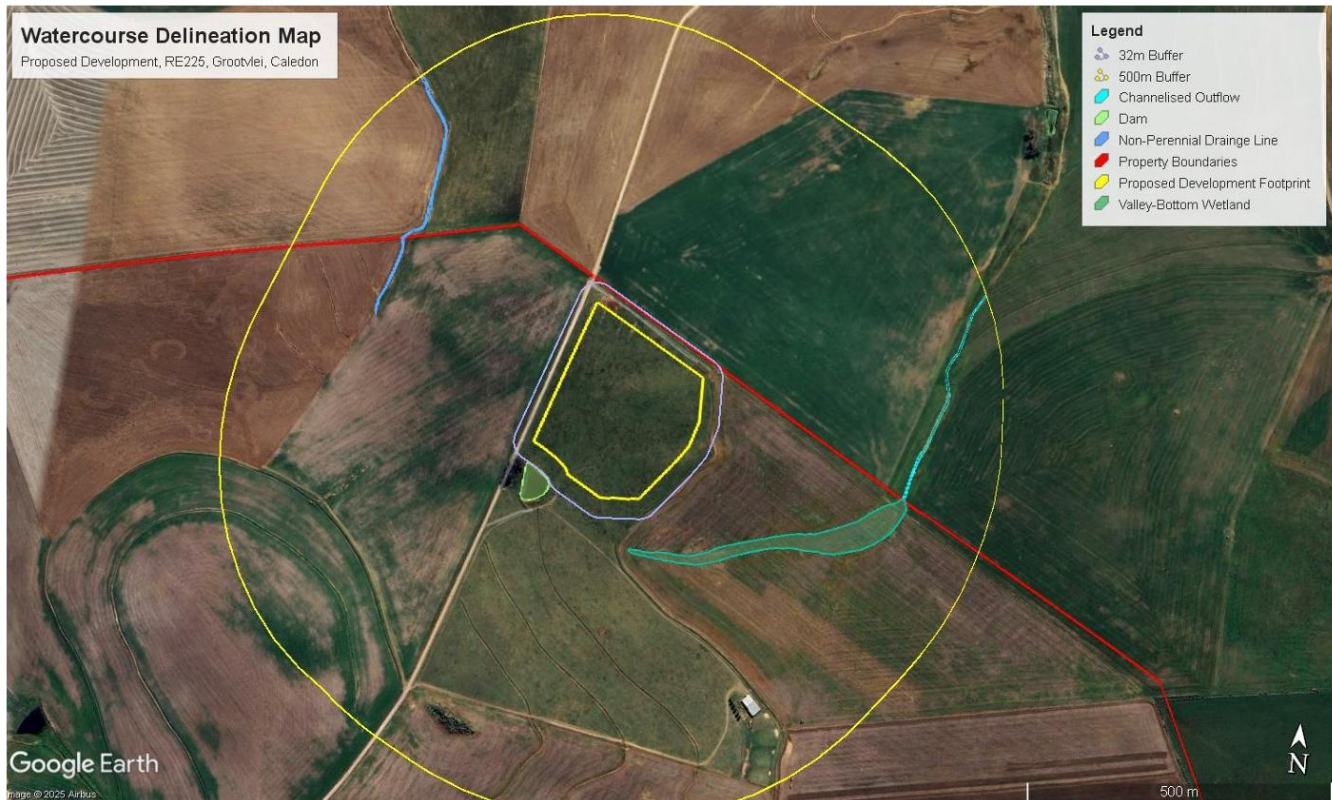


Figure 3: Environmental Sensitivities Map: Proposed development on RE/225, Grootvlei Caledon

1.3. Status of the EMPr

The Environmental Authorization will ascribe legal status to the EMPr and any subsequent amendments thereto. The EMPr includes all relevant documentation within this report and/or referred to within it. The National Environmental Management Act, 1998 (Act No. 107 of 1998) is pertinent to the project. All activities on site must adhere to and comply with the provisions of the Act. The approval of the EMPr by DEA&DP will require that the applicant/ landowner and all appointed contractors must comply with the requirements therein. Any amendments/ changes/ upgrades to the EMPr will require submission to and approval by DEA&DP.

1.4. Comment to the EMPr

The EMPr forms part of the contract identifying and specifying the procedures to be followed by the operator in order to eliminate or reduce adverse impacts of the free-range chicken farming activities. Should the operator or employee persistently fail to observe provisions of the EMPr, the site manager should notify the relevant authority for a compliance audit, and possibly the prosecution of an individual.

The OEMPr will include goals and objectives set to achieve the required environmental standards. The NEMA Application identified issues that will have to be addressed in the operational phase to ensure mitigated impact on the environment.

NOTE: The EMPr must be implemented in conjunction with conditions contained in the Environmental Authorization.

1.5. The competent authority

DEA&DP will review the EMPr and on approval they may have the following role to play:

- Review and monitor implementation of the EMPr;
- Review whether there is compliance by the applicant;
- Perform random control checks;
- Review Site Manager/ECO, incident and audit reports;
- Enforce legal mechanisms for contraventions of the EMPr.

1.6. Department of Water and Sanitation (BOCMA)

The DWS is the national authority that authorizes and licenses the use of water and water resources in South Africa, and BOCMA is the designated representative in this area. The BOCMA may require additional measures in the WUA/GA (if relevant) which will have to be implemented alongside this EMPr.

SECTION 2: RESPONSIBILITIES AND ENFORCEMENT OF THE EMPr

2.1. The Applicant / Operator

The applicant/operator is accountable for the potential impacts of the activities that are undertaken and is responsible for managing these impacts. The applicant has the overall environmental responsibility to ensure that the implementation of the operational requirements complies with the relevant legislation and the conditions of the approved EMPr.

The applicant must ensure that he/she is fully familiar with the requirements of this EMPr, any relevant Environmental Authorisation, General Authorisation (water use) or any other legally binding documentation. Training on the requirements of the EMPr will be presented to the applicant by the EAP upon appointment.

Environmental awareness training of all staff/contractors involved in the EMPr work activities will be completed by the site manager or ECO on their roles and responsibilities, compliance to the EMPr and required monitoring as outlined in Section 5 of this document. The applicant must ensure that the required training takes place.

2.2. Environmental control onsite

2.2.1. Operational Manager / Site Manager

An operations or site manager or similar must be identified to assume overall responsibility for managing the day-to-day operations onsite including managing any contractors that may be required and ensuring that the environmental

management requirements are met. All decisions regarding environmental procedures and protocol must be approved by the site manager, who also has the authority to stop any activity in contravention of the EMPr.

The site manager will have the following environmental control responsibilities:

- Present environmental awareness training to all staff in conjunction with the ECO,
- Regularly monitor the site and operation of the facility for potential environmental issues,
- Consult with the ECO, applicant/operator, and all staff/contractors to resolve emerging environmental issues,
- Issue any instructions related to environmental management to the management team via an appropriate management tool, and
- Keep a digital Site Control Register consisting of the following sections:
 - The **Site Control Sheet** will be used to record the comments from site monitoring as they relate to potential environmental aspects and any problems encountered as it relates to works from the site.
 - The **Environmental Site Instruction Section** will be used for the recording of general site instructions relating to the protection of environmentally sensitive or potentially impacted areas or features on the site.
 - The **Incidents Reporting Section** will be used to record all incidents pertaining to environmental issues onsite as well as remedial actions steps that were or need to be taken.
 - The **Complaints Register** will be used to record all complaints received and responses thereto.

2.2.2. Environmental Control Officer (ECO)

A suitably qualified individual should be trained and appointed by the applicant to fulfil the role of Environmental Control Officer, to ensure and oversee the implementation of the EMPr in its entirety on site during operation.

The responsibilities of the ECO during the operational phase of the project will include:

- To review method statements and to determine the most environmentally sensitive options of modus operandi for the operational tasks.
- To oversee the implementation of environmental procedures set out in this document.
- To report on environmental issues.
- Liaison with the operational / site manager, contractors and authorities.
- Compilation of a monitoring plan.
- Monitoring of contractors, the OEMPr and the monitoring plan.
- Conflict resolution.
- Meetings and obtain specialist environmental input if required.

SECTION 3: IMPACTS AND MITIGATION

The following possible impacts and associated mitigation measures have been identified for the operational phase of the proposed development:

	<u>IMPACT</u>	<u>NATURE OF IMPACT</u>	<u>PROPOSED MITIGATION</u>
1	<u>Increased use of access roads</u>	<u>Intensified use of access roads potential resulting in congestion, road degradation and safety concerns.</u>	<ul style="list-style-type: none"> - <u>Minimize the number of vehicles accessing the site to what is strictly necessary for operations.</u> - <u>Vehicles and machinery accessing the site must be kept in a good working order.</u> - <u>A speed limit of 20-40 km/h should be enforced on all private roads.</u> - <u>Vehicles transporting materials to and from the site must be secured to prevent spillage of manure, fuel, or other materials. In the event of spillage, the site manager is responsible for ensuring that affected public or private roads are promptly and thoroughly cleaned.</u> - <u>Maintain all onsite roads in a good condition (in conjunction with other road users)</u> - <u>Regularly monitor roads for damage or erosion.</u> - <u>Should damage or erosion be noted it must be addressed immediately.</u> - <u>Undertake strategic road widening at key points to allow for safe passing</u> - <u>Install warning signs before blind rises.</u>
2	<u>Generation of operational waste</u>	<u>Improper management of waste generated from the operational phase (manure, litter, litter, etc.) resulting in environmental contamination.</u>	<ul style="list-style-type: none"> - <u>All manure on the hard-stand areas where chickens move in and out of the houses must be swept back into the chicken houses regularly to maintain overall cleanliness.</u> - <u>At the end of each production cycle, manure must be removed from the poultry houses and directed to one of the following:</u> <ul style="list-style-type: none"> - <u>The onsite registered composting facility.</u> - <u>A pre-determined onsite agricultural use location, or</u> - <u>Collection by neighboring farmers or local buyers, as per existing operations.</u> - <u>If manure / litter is disposed of, it must be via a licensed waste disposal facility.</u> - <u>No manure may be stored outside prior to removal to composting facility or use locations.</u> - <u>A strict cleaning schedule must be maintained to ensure ongoing cleanliness and to prevent the accumulation of organic waste</u> - <u>Chicken pens must be dry-swept after each production cycle, ensuring that all manure, litter, and feed are removed before high-pressure washing.</u> - <u>High-pressure washing is only permitted once dry matter has been cleared, and the use of wash water inside units must be limited such that residual moisture can evaporate naturally</u> - <u>Where manure is re-used onsite, practices must comply with the provisions of the National Environmental Management: Waste Act (NEM:WA).</u> - <u>All sweepings are to be contained and disposed of at the onsite composting facility or another approved reuse location.</u> - <u>Wash water generated within units must not leave the developed area and must not be re-used onsite.</u> - <u>Stormwater ingress into units must be strictly prevented to protect runoff quality.</u> - <u>Contain all wash water within the developed area and ensure no uncontrolled runoff occurs.</u> - <u>Compost all biodegradable domestic waste generated onsite and recycle all plastic containers.</u> - <u>Minimize new materials brought on site.</u> - <u>Maximize recycling and waste separation onsite.</u> - <u>Reuse existing materials where possible.</u> - <u>No burning of waste on site.</u>

			<ul style="list-style-type: none"> - <u>Provide an adequate number of bins on site and encourage personnel to dispose of their waste responsibly.</u> - <u>Refuse must be removed weekly from the facility and disposed of at a suitable licensed waste disposal site.</u> - <u>A conservancy tank will be installed onsite for wastewater management and must be regularly emptied by a qualified service provider as arranged by the applicant.</u>
3	<u>Odour related impacts</u>	<u>Odour generated from chicken pens resulting in air pollution and nuisance to nearby land users</u>	<ul style="list-style-type: none"> - <u>Manure must as far as possible be maintained within the poultry houses through the production cycle.</u> - <u>All manure on the hard-stand areas where chickens move in and out of the houses must be swept back into the chicken houses regularly to maintain overall cleanliness.</u> - <u>At the end of each production cycle manure must be removed to the onsite composting facility, pre-determined onsite use location or collected by local buyers.</u> - <u>Manure must be covered during transport</u> - <u>No composting or outside storage of manure within the development footprint</u> - <u>Mortalities (not infectious) must be transported in sealed containers.</u> - <u>Removal as per strict cleaning schedule to ensure clean environment.</u> - <u>Vehicles transporting materials to and from the site must be secured to prevent spillage of manure, fuel, or other materials. In the event of spillage, the site manager is responsible for ensuring that affected public or private roads are promptly and thoroughly cleaned.</u>
4	<u>Vector related impacts</u>	<u>Without proper management the facility may attract disease vectors such as flies and rodents resulting in biosecurity and health risks</u>	<ul style="list-style-type: none"> - <u>Implement strict waste management measures as per impact 2</u> - <u>Maintain good general housekeeping, including prompt removal of manure, spilled feed, and litter.</u> - <u>Store feed in sealed, rodent-proof containers and secure water sources.</u> - <u>Birdproof poultry houses to prevent wild birds gaining access</u> - <u>No feeding of wild animals</u> - <u>Feral cats and dogs should be removed</u> - <u>Use only biologically friendly pesticides and fertilizers</u> - <u>No waste left out to attract scavengers</u> - <u>No pets on site</u> - <u>Mortalities removed to onsite composting facility are to be fully integrated into and covered by composting material to deter scavengers</u> - <u>Remove debris and clutter that could harbour pests</u>
5	<u>Adverse impacts on nearby freshwater systems</u>	<u>Water quality impairment and changes to the hydrological regime within the nearby, downstream, CVB wetland resulting from contaminated stormwater</u>	<ul style="list-style-type: none"> - <u>The CVB wetland and buffer area should be demarcated as a No-Go area for the development.</u> - <u>Implement strict stormwater management:</u> <ul style="list-style-type: none"> o <u>Water use onsite must be minimized wherever possible, including irrigation practices.</u> o <u>Chicken pens must be dry-swept after each production cycle, ensuring that all manure, litter, and feed are removed before high-pressure washing.</u> o <u>High-pressure washing is only permitted once dry matter has been cleared, and the use of wash water inside units must be limited such that residual moisture can evaporate naturally.</u> o <u>All sweepings are to be contained and disposed of at the onsite composting facility or another approved reuse location.</u> o <u>Wash water generated within units must not leave the developed area and must not be re-used onsite.</u>

		and increased runoff from the development site.	<ul style="list-style-type: none"> Stormwater ingress into units must be strictly prevented to protect runoff quality. Contain all wash water within the developed area and ensure no uncontrolled runoff occurs. A stormwater collection channel must be constructed around the perimeter of the developed chicken houses to capture any potentially nutrient-enriched stormwater. Collected stormwater is to be directed to a designated vegetated ingress area, allowing natural settling and infiltration. <ul style="list-style-type: none"> Refuelling or maintenance of vehicles may only take place on designated, bunded surfaces. All intervening areas between buildings, poultry houses, and roads must be maintained in a stable, vegetated condition using locally appropriate grass or groundcover species Maintain vegetation around the facility to enhance soil stability, minimize erosion, and provide natural filtration of any runoff. Inspect all facilities, vehicles, and machinery daily for the early detection of deterioration or leaks and strictly prohibit the use of any vehicles or machinery from which leakage has been detected. Any vehicles accessing the site should be regularly serviced. Prohibit the use of any vehicles or machinery from which leakage has been detected. Mixing and transferring of chemicals or hazardous substances must take place outside of the No Go area, and must take place on drip trays, shutter boards or other impermeable surfaces. Drip trays must be utilised at all fuel dispensing areas, as applicable. Vehicles and machinery should preferably be cleaned off site. Should cleaning be required on site it must only take place within designated areas outside of the watercourse and its associated buffer area and should only occur on bunded areas with a water/oil/grease separator. Implement appropriate erosion control measures in susceptible areas, such as using geotextiles, brush packing, straw bales, mulch, sandbags, and silt fences or traps to prevent sediment runoff.
6	Potential soil and groundwater pollution	Potential soil and groundwater pollution	<p>Already implemented:</p> <ul style="list-style-type: none"> Development footprint setback from the downstream freshwater system compared to layout 1 <p>Still to be implemented:</p> <ul style="list-style-type: none"> Implement strict waste management measures as per impact 2 Implemented strict freshwater impact mitigation and stormwater management measures as per impact 5 Manure must not be stored in open or outside areas under any circumstances No composting or outside storage of manure may occur within the development footprint; all composting must take place at the registered facility on bunded or impervious surfaces to prevent infiltration.
Z	Risk of infectious mortalities during	Infectious mortalities may occur during the	<ul style="list-style-type: none"> Infected mortalities arising from the onsite poultry rearing facilities must be managed and disposed of under strict guidance of the state veterinarian. Safe disposal certificates for hazardous waste removed from the facility must be kept on record for a minimum period of 5 years.

	<u>operations (hazardous waste).</u>	<u>operational phase</u>	
8	<u>Ongoing employment opportunities from agricultural operations.</u>	<u>Employment opportunities from expanded onsite agricultural operations</u>	- <u>No required</u>
9	<u>Noise and dust from site activities.</u>	<u>Noise and dust generated from operational activities on site. Some vehicle movements associated with the facility typically occur during the early morning hours.</u>	<p><u>Already implemented:</u></p> <ul style="list-style-type: none"> - <u>The operation is part of a large farm with neighbours a considerable distance away.</u> <p><u>To be implemented:</u></p> <ul style="list-style-type: none"> - <u>As far as possible, restrict working hours to weekdays and half day Saturday and no work (except for vital tasks) on Sundays and public holidays.</u> - <u>Awareness on site of workers to keep noise levels down outside of working hours.</u> - <u>Establish suitable vegetation within any bare areas onsite.</u> - <u>Plant trees along the site boundary to screen noise and dust.</u> - <u>Dissipate dust with water if needed.</u> - <u>Vehicles and machinery must be kept in good, working order to reduce unnecessary noise.</u> - <u>A speed limit of 20-40 km/h should be enforced on all private roads.</u> - <u>Idling will be restricted, and loading activities managed efficiently to limit noise generation.</u> - <u>Transport routes will remain within agricultural areas of low population density, reducing exposure to residents.</u> - <u>The site manager will be responsible for monitoring and addressing any unreasonable noise impacts from operations.</u>
10	<u>Increased visual intrusion in the agricultural landscape.</u>	<u>Increase in visual intrusion within the agricultural landscape</u>	<p><u>Already implemented:</u></p> <ul style="list-style-type: none"> - <u>The operation is part of a large farm with neighbours a considerable distance away.</u> - <u>Minimised development footprint compared to Layout 1</u> <p><u>Still to be implemented:</u></p> <ul style="list-style-type: none"> - <u>Implement visual screening by planting trees along the site boundaries</u> - <u>Make use of earth-toned paints on buildings and charcoal-coloured roofs to increase visual absorption.</u> - <u>All intervening areas between buildings, poultry houses, and roads must be maintained in a stable, vegetated condition using locally appropriate grass or groundcover species.</u> - <u>Bare or eroded areas must be rehabilitated as soon as possible to prevent stormwater runoff, sedimentation, and nutrient migration toward the wetland or any watercourse.</u>

			<ul style="list-style-type: none"> - <u>Vegetated zones must be monitored and maintained throughout the operational life of the facility</u> - <u>Each unit is to be uniform and similar in design to the existing units onsite</u>
11	<u>Faunal Impacts</u>	<u>Potential impact on grasshopper SCC and blue cranes in the region.</u>	<u>Overall, the proposed development is unlikely to generate significant negative impacts on the grasshopper SCC flagged, or on the breeding activities of the Blue Crane. The specialists' opinion is that the proposed development will have an overall low significance on the insect and Blue Crane – No mitigation measures were recommended.</u>

SECTION 4: REQUIREMENTS AND OPERATIONAL GOALS

The BAR identified several operational impacts and concerns that were addressed through the process. Many of the issues need to be mitigated by ongoing management procedures and therefore goals need to be set to ensure implementation of these measures. Management activities are described to achieve the objectives together with monitoring and target criteria.

4.1. Components of Operational Management

- Goals: The key environmental goals are set for the operation of the property.
- Objectives: These are set to meet the goals.
- Risk: If the goal is not achieved.
- Actions: Measures put in place to achieve objectives.
- Monitoring: To check if the objectives are achieved.
- Targets: Indicators of the effectiveness of the programme.
- Remedial Action: If targets aren't met.

During the lifespan of human habitation people generally waste on a daily basis. This includes food waste, packaging (paper, plastic, cardboard), glass bottles, metal cans, sewage etc. Excessive use of water and electricity is also wastage.

To minimize potential environmental impacts, the measures outlined below should be integrated into the operation of the chicken rearing facility on a daily basis:

4.1.1. Water

Water will be supplied from existing registered sources. The water from the source should be managed according to water saving principles and stormwater runoff quality should be protected against possible pollution sources:

- Capture and use rainwater from gutters and roofs into rainwater storage tanks for individual structures where viable;
- Washbasin and shower taps to be fitted with flow reduction devices, aerators and motion sensors to ensure water conservation and prevent that they can be left running;

- Toilets should be fitted with reduced flow or preferably a dual flush system;
- Re-use water for gardening and/or flushing;
- Washing facilities to be provided with flow reduction devices and adequate catchment to contain wash water;
- All hoses to be fitted with trigger gun spray nozzles to limit wastage;
- Preference should be given to planting only endemic/indigenous gardens and using such for landscaping to minimize water demand;
- Have timed irrigation systems with the focus on the hours when the least evaporation occurs; rain sensors to form part of the irrigation system.
- Taps around the farm fitted with locks to prevent unauthorized use and included on a maintenance schedule to detect and repair leaks;
- Washing appliances (dishwashers and washing machines) filled only to the minimum level required for effective functioning;
- Physical brushing or sweeping used in preference to water cleansing wherever possible (e.g. cleaning pathways and inside the units);
- After the units have been dry swept and inspected, they will be washed down with high pressure hoses. Units should be raised from the ground to ensure that rainwater does not enter the units during rainfall events, thus protecting the quality of the runoff from site.

4.1.2. Electricity

Electricity will be supplied by Eskom. Internal reticulation will be according to the appointed Electrical Engineers standards.

The following energy saving mechanisms should be implemented:

- Energy saving bulbs in all structures, alternatively use low voltage or compact fluorescent lights;
- Use energy saving geysers;
- Use proper insulation to reduce the need for air conditioning;
- Solar glazing or energy efficient windows to reduce the need for air conditioning;
- Maximize the use of solar heating where viable;
- Structures should be orientated to optimize use of ambient weather and climate conditions for heating and cooling;
- Natural light used wherever possible during the day in preference to artificial light (trade off between using large windows for use of sunlight but this may require additional air-conditioning);
- Programmed lighting;
- Cold rooms and freezers fitted with counter-weight doors to ensure that they cannot be left open unnecessarily;

4.1.3. Sewage

Staff ablutions with sufficient capacity must be available. Through the above water saving mechanisms the load on the general sewage flow will be reduced and therefore limit the load on the system. A conservancy tank will be installed to manage sewage flows from the proposed development. A reputable local contractor must be appointed to undertake regular emptying of the conservancy tank and waste must be disposed of at a licensed facility.

4.1.4. Materials

Material used during construction or in the life-cycle of the project should be focused on renewable and recyclable elements:

- Select building materials for durability to minimize maintenance or replacement;
- Use standard materials to increase the potential for re-use and re-cycling;
- Materials should be sourced locally where possible; and
- Use recycled shuttering, door and window frames, sanitary ware, concrete aggregate and roofing materials where possible.

4.2 Operational Biosecurity Guidelines

Biosecurity is a fundamental management requirement at any poultry rearing facility, as it plays a critical role in preventing the introduction and spread of avian diseases. At the proposed facility, biosecurity must be managed in line with the comprehensive Standard Operating Procedures (SOPs) already in place at the existing operation on site. These SOPs are extensive, ISO-based, and subject to regular audits by Elgin Free Range Chickens, consumer bodies, and, where relevant, State Veterinary Services, ensuring independent verification and compliance with industry best practice. As such, the detailed procedures are not reproduced within this EMPr. Instead, this plan sets out general management guidelines relating to cleaning procedures and the handling of mortalities, with the requirement that the facility continue to comply fully with the audited SOPs. Standard procedures include the screening and washing of staff, vehicles and machinery. Bio-security measures specific to the chicken rearing facility should be implemented at all times, staff should be aware of all requirements and the bio-security of the farm should be monitored continuously.

4.2.1. Cleaning Procedures

All water used during cleaning activities must be metered to prevent overuse. At the end of each production cycle, all dry matter is to be removed from the sheds through thorough dry-sweeping before any washing is undertaken. Units may only be washed with high-pressure hoses once the dry matter has been fully cleared. To protect runoff quality, stormwater ingress into the units must be strictly prevented. Manure must not be stored in open or outside areas under any circumstances, and all manure removed from the houses must be securely covered during transport.

The following cleaning procedure should be followed per pen:

- 1) Manure is removed from unit, including all material from floor, walls, curtain sides and equipment. Blow out switchboard and remove fan belt covers. Remove feed hoppers and remove feed from lines. Empty feed tank and remove boot.
- 2) Dry sweep down walls and floor to remove all material.
- 3) Wash house out with high pressure hoses (using clean water) to remove any remaining dust.
- 4) Use foam soap on all inside areas
- 5) Wash unit inside with high pressure hoses (using clean water) to remove any remaining soap.
- 6) Disinfect unit.

4.2.2. General Mortalities

All mortalities not infected with avian flu must immediately be collected by staff, counted, assessed, and placed within a sealed container. A register must be maintained, recording the number, mass, and possible cause of death. Strict biosecurity and hygiene practices are required during collection, with all containers and equipment washed and disinfected after use. Mortalities must be collected and transported to the registered onsite composting facility every morning (as required) and fully incorporated into the composting material within the concrete bunkers.

4.2.3. Infectious Mortalities

Infected mortalities arising from the onsite poultry rearing facilities must be managed and disposed of under strict guidance of the state veterinarian in line with detailed biosecurity protocols and SOPs. Safe disposal certificates for hazardous waste removed from the facility must be kept on record for a minimum period of 5 years.

NOTE: PRACTICE SPECIFIC BIOSECURITY MEASURES, OPERATIONAL REGULATIONS AND GUIDELINES FOR OPERATION OF CHICKEN LAYING AND REARING FARMS IN SOUTH AFRICA AS ALREADY IMPLEMENTED WITHIN THE EXISTING FACILITY ON THE PROPERTY SHOULD BE ADHERED TO AT ALL TIMES

4.3. Operational Goals and Management Objectives

The following goals were set to ensure minimal environmental impact during the operation and life cycle of the project:

1. Maintain site aesthetics through good housekeeping and landscaping.
2. Ensure responsible water use and management of wash water, and stormwater.
3. Apply responsible waste practices for manure, sewage and domestic waste.
4. Implement strict biosecurity to protect poultry and the surrounding environment.

Goal 1: Maintain site aesthetics through good housekeeping and landscaping

Objective	Risk	Actions	Monitoring	Targets	Remedial Action
<p>Implement and maintain landscaping, screening, and fencing measures to preserve the visual quality of the site throughout operation.</p> <p>Landscaping is to mitigate possible visual intrusion, act as a buffer against noise and to act as a windbreak</p>	<ul style="list-style-type: none"> • Inappropriate landscaping • Development areas not properly screened • Negative visual impact • Decrease in aesthetic appeal • Misuse of water 	<ul style="list-style-type: none"> • Maintain all areas between buildings, poultry houses, and roads with stable, vegetated groundcover using local species. • Use only indigenous water wise plants for landscaping purposes • Promptly rehabilitate bare or eroded areas to prevent runoff, sedimentation, and nutrient migration, and monitor vegetation throughout operations • Plant trees along site boundaries to serve as visual screening for the surrounding landscape • Rain-sensor to be installed as part of automatic irrigation system <p>Responsibility: Operator</p>	<ul style="list-style-type: none"> • Verify implementation of landscaping around the development footprint. • Assess the health and condition of landscaped areas regularly. • Monitor irrigation system for effective use of water – adjust where necessary • Monitor landscaped area to ensure no alien invasive vegetation • Monitor water use on site • Monitor irrigation system for effective use of water – adjust where necessary • Irrigation system to be kept in optimal condition • Leaks to be repaired immediately <p>Responsibility: Operator</p>	<ul style="list-style-type: none"> • Ensure effective screening of development • Ensure optimal & effective water use • Ensure landscaped areas act as buffers • Ensure landscaped areas are alien free <p>Responsibility: Operator</p>	<ul style="list-style-type: none"> • Operator to rectify any non-compliance <p>Responsibility: Operator</p>
<p>Maintenance of chicken houses, buildings and all infrastructure associated with the development.</p>	<ul style="list-style-type: none"> • Decrease in aesthetic appeal • Poor screening of development 	<ul style="list-style-type: none"> • Ensure all buildings and infrastructure remain neat, functional, and 	<ul style="list-style-type: none"> • Regularly inspect units to ensure proper condition and functionality. 	<ul style="list-style-type: none"> • All units and site landscaping to be in a well maintained, 	<ul style="list-style-type: none"> • Operator to rectify any non-compliance

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	<ul style="list-style-type: none"> Poor maintenance of units, fences and natural vegetation Poor maintenance of landscaped areas Contamination of wild birds vice versa 	<p>visually unobtrusive.</p> <ul style="list-style-type: none"> No naked light sources should be visible from outside units, only reflected light to be visible Lighting to be sufficient for safety and clarity of movement only Only low voltage lights to be used. All colours or textures to blend into surrounding landscape Maintain landscaped areas in a healthy, well-kept condition. <p>Responsibility: Operator</p>	<ul style="list-style-type: none"> Monitor lighting to minimize impacts on the surrounding area. Check fencing to maintain biosecurity standards. Promptly repair any faults or damage. Ensure development structures adhere to approved design and colour standards. Check placement of aerials to minimize visual impact. <p>Responsibility: Operator</p>	<p>healthy and functional condition</p> <p>Responsibility: Operator</p>	<p>Responsibility: Operator</p>
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Goal 2: Ensure responsible water use and management of wash water, and stormwater.

Objective	Risk	Actions	Monitoring	Targets	Remedial Action
Optimize water use and manage all wash water to prevent contamination, minimize wastage, and protect surrounding soil and water resources.	<ul style="list-style-type: none"> Contamination of soil or groundwater by nutrients, organic matter, or pathogens if wash water is not properly contained. Excessive water use during cleaning, leading to wastage and erosion due to runoff 	<ul style="list-style-type: none"> Minimize the use of water onsite as far as possible including irrigation. Dry-sweep chicken pens, making every effort to remove all material including all manure, litter, feed etc. before high pressure washing. Minimize the use of wash water inside units such that the moisture left after high pressure washing can evaporate. No wash water from inside the units should reach the outside environment (outside the development area). 	<ul style="list-style-type: none"> Measure water usage through installation of water meters on abstraction and use points Internal audit of the facility to ensure compliance with standard operating procedures. <p>Responsibility: Operator, Site Manager & ECO</p>	<ul style="list-style-type: none"> Ensure minimal water is used for washing such that no run-off is generated Ensure that all water resources remain unpolluted. Maintain hydrology of water resources. Ensure that all water systems are leak free – all leaks to be 	<ul style="list-style-type: none"> Report and repair infrastructure failure immediately. Operator to take immediate action against non-compliance. Penalise individuals

		<ul style="list-style-type: none"> No water used during washing of units to be re-used on site. Maintain all equipment in optimal condition to ensure minimal water usage. Vehicles and machinery should preferably be cleaned off site. Should cleaning be required on site it must only take place within designated areas outside the delineated watercourse and its associated buffer area and should only occur on bunded areas with a water/oil/grease separator. <p>Responsibility: Operator, Site Manager & ECO</p>		<p>repaired immediately.</p> <p>Responsibility: Operator, Site Manager & ECO</p>	<p>who do not comply to bio-security measures which have been implemented.</p> <p>Responsibility: Operator, Site Manager & ECO</p>
Optimize water use and manage all stormwater to prevent contamination and protect surrounding soil and water resources.	<ul style="list-style-type: none"> Runoff from contaminated areas entering nearby watercourses. 	<ul style="list-style-type: none"> Minimize all water use onsite as far as possible Lock farm taps Implement water awareness signage Maintain all areas between buildings, poultry houses, and roads with stable, vegetated groundcover using local species. Implement waterwise landscaping. Irrigate early in the morning or late at night No removal of any vegetation unless authorised Establish vegetated perimeter drainage channels to capture all potentially nutrient enriched stormwater from the development site Direct stormwater to a designated vegetated ingress area where settling and infiltration can take place <p>Responsibility: Operator, Site Manager & ECO</p>	<ul style="list-style-type: none"> Monitor all water infrastructure for leaks and repair as soon as detected. Maintain all onsite landscaping in a healthy condition. Maintain integrity of perimeter drainage channels. Monitor water usage of all development aspects. <p>Responsibility: Operator, Site Manager & ECO</p>	<ul style="list-style-type: none"> Minimize all onsite water use. Ensure that all water resources remain unpolluted. Maintain hydrology of water resources. Ensure that all water systems are leak free – all leaks to be repaired immediately. <p>Responsibility: Operator, Site Manager & ECO</p>	<ul style="list-style-type: none"> Report and repair infrastructure failure immediately Operator to take immediate action against non-compliance Increased awareness programme amongst staff <p>Responsibility: Operator, Site Manager & ECO</p>

Goal 3: Apply responsible waste practices for manure, sewage and domestic waste

Objective	Risk	Actions	Monitoring	Targets	Remedial Action
Ensure all manure is managed safely and sustainably to minimize environmental and health impacts.	<p>Irresponsible waste management can result in:</p> <ul style="list-style-type: none"> • Unsightly facility • Negative odour impacts • Attraction of pests • Nutrient leaching • Contamination of soil and water 	<ul style="list-style-type: none"> • Manure must as far as possible be maintained within the poultry houses. • <u>All manure on the hard-stand areas where chickens move in and out of the houses must be swept back into the chicken houses regularly to maintain overall cleanliness.</u> • At the end of each production cycle manure must immediately be removed to the onsite composting facility, pre-determined onsite use location or collected by local buyers. • Manure must be covered during transport • No composting or storage of manure within the development footprint • Composting at the registered facility on the farm. • If re-used, must conform to the provisions of NEM:WA 	<ul style="list-style-type: none"> • Monitor containment of manure within chicken houses throughout each production cycle. • Check suitable removal of manure from the development footprint. • Track manure volumes produced and distributed • Monitor for odour, pest presence and action corrective measures where necessary <p>Responsibility: Operator, Site Manager / ECO</p>	<ul style="list-style-type: none"> • All manure stored indoors during production cycle • No waste or pollution incidents may occur <p>Responsibility: Operator, Site Manager / ECO</p>	<ul style="list-style-type: none"> • Any non-compliance to be referred to operator <p>Responsibility: Operator, Site Manager / ECO</p>

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		<ul style="list-style-type: none"> • A strict cleaning schedule must maintained to ensure ongoing cleanliness and to prevent the accumulation of organic waste <p>Responsibility: Operator, Site Manager / ECO</p>			
Ensure sewage is managed safely and sustainably to minimize environmental and health impacts.	<ul style="list-style-type: none"> • Potential contamination of groundwater or surface water if improperly handled. 	<ul style="list-style-type: none"> • Conservancy tank system used for management • Follow regular collection schedule by means of a reputable service provider <p>Responsibility: • Operator, Site Manager & ECO</p>	<ul style="list-style-type: none"> • Monitor sewage system on a weekly basis <p>Responsibility: • Operator, Site Manager & ECO</p>	<ul style="list-style-type: none"> • No ground water pollution incidents may occur <p>Responsibility: • Operator, Site Manager & ECO</p>	<ul style="list-style-type: none"> • Any non-compliance to be referred to operator <p>Responsibility: • Operator, Site Manager & ECO</p>
Minimise and manage generation of domestic waste.	<ul style="list-style-type: none"> • Lack of on site waste management 	<ul style="list-style-type: none"> • Provide adequate waste bins for staff and operational areas. • Ensure regular collection and suitable disposal. • Segregation of recyclables and non-recyclables where feasible. 	<ul style="list-style-type: none"> • Check operational components if recycling is followed • Institute a litter collection programme 	<ul style="list-style-type: none"> • Recycling to be actively implemented by the operator, manager and staff • Minimise waste to landfill so encourage re-use options 	<ul style="list-style-type: none"> • Refer non-compliance to the operator and site manager •

Goal 4: Implement strict biosecurity to protect poultry and the surrounding environment.

Objective	Risk	Actions	Monitoring	Targets	Remedial Action
Implement industry standard bio-security measures	<ul style="list-style-type: none"> Contamination of wild birds Contamination of chickens 	<ul style="list-style-type: none"> Implement all industry standard operating procedures in accordance with ISO-based standard Comply with the audited bio-security SOPs already implemented at the existing facility on the site, at all times Fence site to ensure bio-security of wild birds and chickens Birdproof all poultry houses to prevent wild birds from entering The design should included pop holes that are positioned low and open horizontally from the bottom up, effectively ensuring that wild birds cannot access the poultry houses. Train all staff and contractors to ensure an understanding of bio-security measures Determine baseline for regarding cleanliness of units Delegate responsibility to specific members of staff for aspects of bio-security 	<ul style="list-style-type: none"> Onsite biosecurity measures must be and independently verified through third-party audits. Monitor staff training and actions Monitor staff's adherence to bio-security measures Monitor cleanliness of units according to baseline which has been set. Minimise use of washing water to ensure that no run-off occurs <p>Responsibility: Site Manager/ECO</p>	<ul style="list-style-type: none"> Ensure environmental health – for surrounding environment as well as for chickens Ensure that staff understands importance of bio-security measures. <p>Responsibility: Site Manager/ECO</p>	<ul style="list-style-type: none"> Operator to take immediate action against non-compliance Penalise individuals who do not comply to bio-security measures which have been implemented Deviation from job description must be dealt with in terms of contractual or employment terms of reference. <p>Responsibility: Site Manager/ECO</p>

		<ul style="list-style-type: none"> • Remove manure after each rearing cycle • Ensure that no accidental run-off from the units leaves the development footprint. <p>Responsibility: Site Manager/ECO</p>			
Prevent and control vectors to protect poultry health, maintain biosecurity, and minimize nuisance.	<ul style="list-style-type: none"> • Rodents, flies, or other pests spreading disease or causing nuisance. • Contamination of wild birds • Stray animals attracted to waste or spilled feed. 	<ul style="list-style-type: none"> • Implement strict waste control measures as per goal 3. • Maintain good general housekeeping, including prompt removal of manure, spilled feed, and litter. • Store feed in sealed, rodent-proof containers and secure water sources. • Birdproof poultry houses to prevent wild birds gaining access • No feeding of wild animals • Feral cats and dogs should be removed • Use only biologically friendly pesticides and fertilisers • No waste left out to attract scavengers • No pets on site • Mortalities removed to onsite composting facility are to be fully integrated into and covered by composting material to deter scavengers 	<ul style="list-style-type: none"> • Regularly inspect poultry houses, feed stores, and waste areas for signs of rodents or pests. • Monitor for any disease outbreaks or pest-related issues among poultry. • Monitor disposal and removal of waste streams from site <p>Responsibility: Operator, Site Manager & ECO</p>	<ul style="list-style-type: none"> • Zero significant rodent, fly, or bird infestations within poultry houses. • All feed and water sources remain free from contamination. • No reported pest-related disease outbreaks or operational disruptions. <p>Responsibility: Operator, Site Manager & ECO</p>	<ul style="list-style-type: none"> • Operator to take immediate action against non-compliance <p>Responsibility: Operator, Site Manager & ECO</p>

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		<ul style="list-style-type: none">• Remove debris and clutter that could harbour pests <p><i>Responsibility: Operator, Site Manager & ECO</i></p>			
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SECTION 5: GENERAL MANAGEMENT REQUIREMENTS

The following items must be integrated into the management of the activity whenever relevant:

5.1. Environmental awareness training

All employees (including seasonal laborers) must be briefed on their obligations towards environmental controls and methodologies. The briefing should take the form of an on-site talk and demonstration by the ECO, Site Manager and/or the Operator. All environmental impacts and aspects and their mitigating measures must be discussed, explained, and communicated to employees.

The environmental awareness education program should commence with entry onto the site and is likely to be an ongoing process. All personnel must be made aware of the details of the EMPr which will be applicable to them. It must be ensured that staff members who are not proficient in the language of instruction are provided with training in a suitable alternative language. Responsibilities for mitigation and monitoring actions should be clearly defined. These responsibilities will be delegated by management to the workers.

As a minimum the training must include:

- Explanation of the reason for complying with the EMPr;
- Discussion of the potential environmental impacts of operation activities;
- Employees' roles and responsibilities on site, including emergency preparedness;
- Explanation of the mitigation measures that must be implemented when carrying out the activities;
- Explanation of the specifics of this EMPr and its specifications (no-go areas, etc.);
- Explanation of the management structure of individuals responsible for matters pertaining to the EMPr.

Environmental meetings can be held with management, and selected groups of supervisors and/or employee representatives. The meetings will aid in environmental awareness being generated at all levels, as well as assist in identifying new environmental issues, concerns, or potential pollution sources.

On the job training is an essential tool in environmental awareness. Employees involved with the operation will be suitably trained in order to identify, prevent, minimize or manage actions or behaviors that could potentially result in negative environmental impacts. Employees will be given details of the expected environmental issues and concerns specifically related to their occupation. Employees will be trained in how to respond if an environmental problem or source of environmental pollution arises. The training will be on-going, and all new employees will be provided with the same standard of training as existing employees.

A regularly updated record must be kept of all personnel attending the Environmental Awareness training sessions.

5.2. Stormwater Management

Effective stormwater management is essential to protect surrounding soil and water resources from possible contamination, minimize wastage, and optimize overall water use efficiency. At the proposed facility, stormwater and wash water management measures will be implemented to ensure runoff quality is maintained and that the volume and nature of water leaving the property remains negligible.

Water Use and Wash Water Management:

- Water use onsite must be minimized wherever possible, including irrigation practices.
- Chicken pens must be dry-swept after each production cycle, ensuring that all manure, litter, and feed are removed before high-pressure washing.
- High-pressure washing is only permitted once dry matter has been cleared, and the use of wash water inside units must be limited such that residual moisture can evaporate naturally.
- All sweepings are to be contained and disposed of at the onsite composting facility or another approved reuse location.
- Wash water generated within units must not leave the developed area and must not be re-used onsite.
- Stormwater ingress into units must be strictly prevented to protect runoff quality.
- Contain all wash water within the developed area and ensure no uncontrolled runoff occurs.

Stormwater Infrastructure and Landscaping:

- A stormwater collection channel must be constructed around the perimeter of the developed chicken houses to capture any potentially nutrient-enriched stormwater.
- Collected stormwater is to be directed to a designated vegetated ingress area, allowing natural settling and infiltration.
- All intervening areas between buildings, poultry houses, and roads must be maintained in a stable, vegetated condition using locally appropriate grass or groundcover species.
- Bare or eroded areas must be rehabilitated as soon as possible to prevent stormwater runoff, sedimentation, and nutrient migration toward the wetland or any watercourse.
- Vegetated zones must be monitored and maintained throughout the operational life of the facility.
- No indigenous vegetation may be removed unless specifically authorised, and all onsite landscaping must be kept in healthy condition.
- The integrity of vegetated drainage channels must be maintained at all times.

Water Monitoring, Awareness, and Maintenance:

- All equipment must be kept in optimal condition to reduce unnecessary water use.
- Water meters must be installed on abstraction and use points to allow accurate monitoring.

- Water usage across all operational aspects of the development must be tracked, with internal audits carried out to confirm compliance with standard operating procedures.
- Infrastructure must be regularly inspected for leaks, with immediate repairs where issues are identified.
- Additional controls include locking farm taps and installing water awareness signage to encourage responsible use.

The stormwater and wash water management measures outlined above are designed to protect runoff quality against pollution sources, minimise wastage, and ensure effective use of water resources. Successful implementation of these measures will ensure that the facility operates within best-practice environmental standards and that stormwater leaving the site remains negligible in both volume and potential impact.

5.3. Waste Management

Waste management at the facility will focus on the responsible handling, reuse, and disposal of all waste streams to ensure compliance with environmental legislation and protection of surrounding resources. The main waste categories include manure generated by the poultry houses and general operational refuse.

Manure Management:

A registered composting facility is located onsite, and a portion of the manure produced will be processed there. The remainder may be used directly in the agricultural industry by neighbouring farmers and contracted growers, or for approved onsite agricultural use.

- During production, manure on the hard-stand areas where chickens move in and out of the houses must be swept back into the chicken houses regularly to maintain overall cleanliness.
- At the end of each cycle, manure must immediately be removed from the poultry houses and directed to one of the following:
 - The onsite registered composting facility,
 - A pre-determined onsite agricultural use location, or
 - Collection by neighbouring farmers or local buyers, as per existing operations.
- If manure is disposed of, it must be via a licensed waste disposal facility.
- Manure must always be covered during transport to minimise odour, dust, and potential pollution.
- No composting or storage of manure may occur within the development footprint; all composting must take place at the registered facility.
- A strict cleaning schedule must be maintained to ensure ongoing cleanliness and to prevent the accumulation of organic waste
- Where manure is re-used, practices must comply with the provisions of the National Environmental Management: Waste Act (NEM:WA).

General Waste Management:

- Standard refuse generated from operations must be contained onsite in appropriate bins, with separation of different waste types where feasible.
- Refuse must be removed weekly from the facility and disposed of at a suitable licensed waste disposal site.
- A conservancy tank will be installed onsite for wastewater management and must be regularly emptied by a qualified service provider appointed by the applicant.

5.4. Noise Impacts

During the operational phase, the site manager must take appropriate measures to limit the impact of unreasonable noise from operational activities. Operational activities are to be limited to working hours weekdays and half day Saturdays. No work, besides vital tasks, may be undertaken on Sundays and public holidays and all vehicles and machinery used onsite should be maintained in a good, working condition.

Vehicle movements associated with the facility typically occur during the early morning hours. While some noise is generated, these movements are infrequent and help avoid peak traffic periods and daytime activity, thereby reducing disturbance during regular working hours.

To minimise noise impacts, the following measures will be implemented:

- Vehicles and machinery will be kept in good working order to reduce unnecessary noise.
- A speed limit of 20-40 km/h will be enforced on all private roads.
- Idling will be restricted, and loading activities managed efficiently to limit noise generation.
- Transport routes will remain within agricultural areas of low population density, reducing exposure to residents.
- The site manager will be responsible for monitoring and addressing any unreasonable noise impacts from operations.

5.5. Road Management

The proposed facility will result in a modest increase in heavy vehicle traffic compared to existing operations. To ensure safety and minimise impacts, the following road management measures will be implemented:

- Vehicles transporting materials to and from the site must be secured to prevent spillage of manure, fuel, or other materials. In the event of spillage, the site manager is responsible for ensuring that affected public or private roads are promptly and thoroughly cleaned.
- A 20-40 km/h speed limit will be enforced on all private access roads, and large truck movements will primarily take place outside business hours to minimise traffic disruption.
- The access road, currently undergoing deproclamation, will be maintained in coordination with other road users (once deproclaimed) to ensure it remains in good condition and capable of safely accommodating operational traffic.

- Strategic road widening can be undertaken at key points along private roads to allow safe passing of vehicles, and warning signs will be installed at blind rises to improve road safety.

5.6. Dust and Erosion Control

The site manager shall take appropriate measures, to minimise the generation of dust nuisance on site. Watering of private roads if required otherwise maintaining a speed limit of 20km/h.

Care must be taken at all times to prevent erosion of soils on the site. Should any erosion be detected on site or on private access roads, the ECO or site manager must identify the cause of such erosion and ensure that the most appropriate method of mitigation or stabilization is employed as soon as possible. In order to prevent erosion from occurring all intervening areas between buildings, poultry houses, and roads must be maintained in a stable, vegetated condition using locally appropriate grass or groundcover species. Bare areas must be rehabilitated as soon as possible to prevent erosion. Vegetated zones must be monitored and maintained throughout the operational life of the facility.

5.7. Safety & Emergencies

The operator is to appoint a safety steward, who will be responsible for safety of the labour force and handling emergency situations on site during operational hours. All accidents and emergency situations are to be reported to the site manager. Emergency contact numbers for fire department to be kept on site.

Fire

In the case of a fire occurring on site, the site manager, safety steward and ECO are to be notified immediately. If fairly localized, an effort should be made to extinguish the fire immediately, and if required, the assistance of the local fire department should be sought by the safety steward.

First Aid

The operator must provide and maintain a suitable first aid kit on site, with a member of staff suitably qualified in first aid on site during working hours, in accordance with the Occupational Health and Safety Act.

5.8. Public Complaints

All public complaints received are to be registered by the site manager and addressed immediately. Public complaints, responses and mitigation measures implemented are to be recorded in the Site Control Register.

5.9. Fuels

Fuels for use in operational machinery are to be stored in suitably equipped storage areas, inside the existing farm work yard. These areas shall comply with general fire safety requirements. Impervious materials are to be used in these storage areas to prevent contamination of the ground in the event of spillages or leaks. Quantities of fuels stored on site should be appropriate to the requirement for these substances on site.

Bulk fuel depots are to be placed within hardened bund areas; bunds are to have a holding capacity equal to 110% of the largest fuel container. The site manager is to ensure that he is aware of the effects of all substances on staff and the environment, and the correct action to take in the case of any incident involving these materials.

5.10. Fossil Finds Procedure

If any potential fossil materials are exposed during any actions on the site, these must immediately be reported to Heritage Western Cape. Heritage remains uncovered or disturbed during the works must not be further disturbed until the necessary approval has been obtained from the competent authority.

SECTION 6: MONITORING AND COMPLIANCE

6.1. Monitoring

The monitoring of works on site is necessary to demonstrate compliance with the specifications of the EMPr and to allow for problems or issues of non-conformance to be identified and appropriate corrective measures to minimize environmental damage to be implemented. Monitoring should include visual checks by the site manager on a daily basis and checks on particular requirements for site activities by the ECO (as required).

The following needs to be monitored on a weekly basis:

- Removal of manure from the facility;
- Removal of mortalities from the facility;
- Pen cleaning procedures;
- The water sources and drainage on site;
- Landscaping (planting of screening vegetation) and soil conditions;

The above listed categories need to be linked to evaluate if the one triggers the other.

Indicators which need to be measured:

- Manure supply and cleaning procedures:
 - Removed from pen and taken to composting facility or relevant use location;

- No storage within development footprint;
- If disposed it needs to be at a licenced facility;
- If re-used it needs to be in line with the provisions of NEM:WA;
- Minimum standard for leftovers after removal from units;
- Wash down procedures and water amount control.
- Water sources and water courses:
 - Stay within the water registered totals;
 - Test water source on an annual basis for quality.
- Landscape and soil conditions:
 - Planting tempo
 - Growth evaluation
 - Visual evaluation

Each of the above components needs to be evaluated and a schedule must be drafted by management with the following headings:

- Timing
- Frequency
- Duration of Mitigation
- Progress
- Results of mitigation

6.2. Penalties and Incentives

Transgressions relate to actions by the operator and operating team members whereby damage or harm is inflicted upon the environment or any feature thereof and where any of the conditions or specifications of the EMPr are infringed upon. In the instance of environmental damage, the damage is where possible to be repaired and rehabilitated using appropriate measures, as specified and undertaken by appropriate specialists, for the account of the guilty party.

Issues of non-compliance are to be communicated to the site manager, who holds the responsibility of ensuring that the relevant parties are made aware of the lack of compliance with EMPr specifications, and that appropriate action is taken to rectify the situation. The ECO will advise on appropriate corrective actions when necessary.

6.3. Site Record

Minutes of meetings on site must reflect environmental queries, complaints, actions agreed upon, dates of eventual compliance and must form part of the official environmental site record.

The site manager shall keep a quarterly (or as considered appropriate) photographic record of issues on site and an ad hoc record of incidents or events on site, especially in the case of transgressions from EMPr specifications. Such photographs are to be taken with an in-camera dating facility.

6.4. Review of EMPr

The EMPr will be reviewed by the ECO on an ongoing basis. Should any changes be required, the competent authority must be consulted to determine the appropriate process to be followed

6.5. Environmental Audit

A suitably qualified Environmental Auditor is to be appointed, at the expense of the applicant, to undertake audits of compliance with the EMPr. An operational audit must be undertaken 6 months after the development becomes operational. A follow-up operational audit must be undertaken 5 years after the EA has been granted.

Objectives should be to audit compliances with the key components of the EMPr, to identify main areas requiring attention and recommend priority actions. The audit should cover a cross section of issues, including implementation of environmental controls, environmental management and environmental monitoring. Results of the audits should inform changes required to the specifications of the EMPr or additional specifications to deal with any environmental issues which arise on site and have not been dealt with in the current document.

6.6. Incident reporting

Environmental incident reporting is a vital part of communication. Employees are required to report all environmental related problems, incidents, and pollution, so that the appropriate mitigation actions can be implemented timeously. See Appendix A for a template that can be used for incident reporting

The operator and the site manager shall investigate the incident and record the following information:

- How the incident happened,
- The reasons the incident happened,
- How rehabilitation or clean up needs to take place,
- The nature of the impact that occurred,
- The type of work, process or equipment involved; and
- Recommendations to avoid future such incidents and/or occurrences.

The operator / site manager shall also:

- Inform the ECO of all incidents that were reported, and
- Consult with the ECO for recommendations on actions to be taken or implemented where appropriate (e.g., clean-ups).

APPENDIX A: INCIDENT REPORT TEMPLATE

Environmental Incident Report

Date:	File reference number:
Name:	
Exact location of incident:	

Section 1: Description of incident

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Section 2: Remedial action required

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Section 3: Relevant Documentation

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Section 4: Steps to prevent recurrence

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Section 5: Signatures

Site manager:	Date:
ECO:	Date:
Landowner:	Date: