

EXECUTIVE SUMMARY

INTRODUCTION

The project proponent, The JN Venter Beleggings Trust, proposes the construction and operation of a 24 poultry broiler house facility, including associated infrastructure, on portions of the Remainder of Farm 191 Coega Kammas Kloof, Nelson Mandela Bay Municipality (hereafter known as **Coega Kammas Kloof**). The farm measures ~1 435ha in extent and is zoned as Agriculture 1. It is proposed that two separately fenced in development clusters, of 12 broiler houses each are constructed, east and west of the R335 (Addo Road). Broiler production refers to the raising of chickens for meat. Associated infrastructure includes, internal roads, access, employee dwellings, bulk services (water, stormwater management, effluent management) and broiler support services (generator room, maintenance unit, tool shed). Subject to the outcome of the detailed specialist assessments as well as public participation, it is anticipated that the development footprint of the facility will be ~80ha (40ha for each of the two clusters).

Water for the development is proposed to be supplied from the Lower Sundays River Water Users Association (LSRWUA) canal system. In order to provide water to the proposed development the proponent proposes the installation of an irrigation pipeline (ø450mm) from an existing farm dam, operated by the proponent, on a farm known as Middledrift, in the Sundays River Valley Municipality (SRVM), over a length of approximately 6.6km, terminating in a proposed new dam on Coega Kammas Kloof. The existing dam on Middledrift (Portion 10 of Farm T'Zoetgeneugd No. 192) currently has a capacity to store 19 600m³ of water (~1.3ha in extent) and is proposed to be expanded to have a capacity of 94 698m³ (~3.9ha). The proposed dam expansion was the subject of a separate Basic Assessment Process and has received Environmental Authorisation (DEDEAT Authorisation Notice: EC06/C/LN1&3/M/19-2019). The proposed pipeline route as well as the length and diameters of the pipeline, will be confirmed through the assessment process. The following properties will be affected by the proposed pipeline route:

- Portion 10 of Farm T'Zoetgeneugd No. 192, SRVM
- Portion 11 of Farm 192, SRVM
- Portion 41 of Farm 192, SRVM
- Farm 717, SRVM and NMBM

The new water storage dam that is proposed to be constructed on Coega Kammas Kloof will have a storage capacity of ~107 000m³, and a footprint of ~3ha.

In addition, the proponent proposes to construct a Photovoltaic Solar Facility on the eastern portion of the Remainder of Farm 191, adjacent to the proposed broiler house facility. The PV plant is proposed to have a capacity to generate 4MW AC electricity and a total combined footprint of ~6ha but is subject to confirmation by the relevant specialists during the assessment process.

The combined development footprint, including associated infrastructure, will be determined by the outcome of the various specialist assessments forming part of this Scoping and Environmental Impact Assessment (Scoping and EIA) Process.

In future, and subject to a separate environmental assessment process the proponent proposes to utilise an approximate 670-hectare portion of Coega Kammas Kloof for the cultivation of citrus and a variety of annual crops, including associated infrastructure (internal roads, irrigation infrastructure, laydown areas, logistical facility and offices). The logistical services area will provide joint services to the proposed Umzi Wabantu Agricultural Development proposed to be located on portions of Coega Kammas Kloof as well as the adjacent Portions 2, 3 and 4 of Farm 191, should such receive environmental authorisation.

In terms of the NEMA EIA Regulations, 2014 (as amended), published in GN R326, 327, 325 and 324, promulgated under Chapter Five of the National Environmental Management Act (Act 107 of 1998) (NEMAA), and published in Government Gazette 40772 on the 7 April 2017, the project requires full Scoping and EIA, prior to the commencement of any activities on the site due to, amongst others, activities listed in GN R325, namely:

"15. The clearance of an area of 20 hectares or more of indigenous vegetation, excluding where such clearance of indigenous vegetation is required for -..."

Chapter Four of this report provides details of the listed activities which require Environmental Authorisation. The project proponent has appointed Public Process Consultants as the independent Environmental Assessment Practitioner (EAP) to undertake the Scoping and EIA for the project. The competent authority who must consider and decide upon this application is the Provincial Department of Economic Development, Environmental Affairs and Tourism (DEDEAT), Sarah Baartman Region.

PROJECT OVERVIEW

Subject to the outcome of the assessment process, specialist studies, technical input and consultation process, the project proponent, JN Venter Beleggings Trust, proposes to establish 24 fully enclosed broiler houses, consisting of two, separately fenced-in clusters, with 12 houses each on the Farm Coega Kammas Kloof (~1435,32ha). The broiler houses will be constructed to accommodate 45 000 to 48 000 birds each, with the standard 56-day grower (8-week) model applying. The farm is currently zoned Agriculture 1 and the area to be cleared to accommodate the proposed poultry broiler facility, including associated infrastructure (internal roads, bulk services, employee dwellings and broiler supporting infrastructure), is anticipated to be ~80ha in extent (~40ha for each of the two clusters). Each cluster will be fenced in and will consist of four, separately fenced in operational units, comprising three broiler houses each. It is proposed that the two separately fenced-in clusters of 12 houses each be constructed with a separation distance of ~2km's between the clusters, for biosecurity reasons. Therefore, one cluster is proposed to be located in the western half of the farm and the other cluster in the eastern half of the farm. However, the preferred development footprint will be determined through specialist and technical input, authority consultation, as well as consultation with I&APs.

Associated with each of the ~40ha development clusters are the following project components, amongst others:

- Twelve broiler houses
- Access point and access road with a wash bay area
- Manager's dwelling
- Four employees' dwellings
- Two boiler rooms and coal stores
- Tool shed
- Maintenance unit
- Generator room
- Four internal entrances, one for each operational unit (including washroom and chemical store)
- Twelve feed silos
- Four mortality rooms

In addition, the following bulk services will also be required for the facility:

- A water treatment facility including two water storage reservoirs, a pump room and water storage tanks.
- Water reticulation infrastructure for the 24 broiler houses, as well as for domestic consumption.
- Domestic effluent management infrastructure.
- Stormwater management infrastructure.
- A new servitude road for adjacent landowner.
- Internal roads.

The additional services infrastructure required to support the facility will require input from suitably qualified professionals including a Civil Engineer (Roads and Wet Services Report) and a Traffic Specialist (Traffic Impact Assessment).

Preconstruction Phase

Prior to commencement with construction activities on site, the detailed design drawings for the proposed poultry breeder facility, solar PV facility and associated supporting infrastructure must be finalised. It is anticipated that the affected portion of the farm to be occupied by the proposed poultry broiler facility, will require Special Consent zoning from the Municipality (NMBM). Therefore, the pre-construction phase will also include the obtaining of the necessary municipal approvals.

Construction Phase

The project will entail the clearing of vegetation, levelling of the site and the establishment of the bulk services infrastructure (i.e. electricity supply infrastructure, water supply infrastructure and domestic effluent and stormwater management infrastructure), prior to the construction of the poultry houses.

The proposed construction phase of the project will entail the following activities on the site:

- Demarcation of the development footprints and equipment laydown areas.
- Clearing of indigenous vegetation from the development footprints.
- Fencing in the site.
- Stockpiling of equipment and construction material.
- Site excavation and levelling.
- Construction of the proposed poultry breeder house facility and associated infrastructure including:
 - Construction of new access point and access road, as well as new servitude road for adjacent landowner.
 - New internal road network.

- Water storage and reticulation infrastructure.
- Effluent management infrastructure.
- Stormwater management infrastructure.
- Construction of employees' houses.
- Construction of a photovoltaic plant.
- Installation and construction of the water supply infrastructure including the bulk water pipelines, proposed dam and water treatment facilities.
- Installation and construction of the electricity supply infrastructure including the Solar PV array and associated storage and distribution infrastructure (i.e., inverter, battery and generator rooms) as well as the new ESKOM spur line and private power line.
- Rehabilitation of disturbed areas on the site.

Operational Phase

Poultry Broiler Facility

Once the necessary infrastructure has been constructed, the poultry broiler facility will commence operations. The facility is proposed to consist of 24 fully enclosed broiler houses, consisting of two, separately fenced-in clusters, with 12 houses each, to accommodate 45 000 to 48 000 birds in each house (totaling 1.08 million to 1.15 million for the whole facility), with the standard 56-day grower (8 week) model applying

The broiler houses are fully enclosed and environmentally controlled ventilated facilities. The ongoing maintenance of this system is directly linked to the health and survival of the flock, as well as having indirect environmental and other benefits. It is vital that a certain temperature, humidity and air quality is maintained within the house at all times, this varies for the age of the chicks. This system is computer controlled (for each element) and any breakdowns in this system triggers remote alarms, ensuring a prompt response and intervention.

Feed delivered to the facility (2 feed trucks per day) is stored in silos at the end of each house and is mechanically provided on-demand to the chicks. In much the same manner, chicks are provided with water via a low pressure nipple-type drinking system. Both feeding and watering systems are designed to minimise waste and spillage of moisture to the bedding material which can impact on odours.

All chicks are removed from the site and are transported to the Sovereign Foods Factory in Uitenhage for processing. From one crop of chicks to the next crop of chicks is approximately a 56 day cycle with approximately 6.5 cycles per year including a 14-day clean out period per cycle. The production process must comply with the standard operating procedures for broiler facilities of Sovereign Foods.

Mechanical ventilation is typically provided using a negative-pressure system, with exhaust fans drawing air out of the house, and fresh air returning through ducts around the perimeter roof. The ventilation system uses exhaust fans to remove moisture and noxious gasses during the winter months and excess heat during the summer months.

The following operational procedures, are fundamental to the management and sustainability of a broiler farm:

- Litter Removal and Disinfection
- Disposal of Mortalities
- Biosecurity
- Domestic Waste Management

Litter Removal and Disinfection

Broiler houses are operated on an "all-in / all-out" basis and require time for cleaning and repair between flocks. The most common type of housing for broilers is enclosed housing with a concrete floor covered with dry bedding. Dry bedding (litter) can be sawdust, wood shavings, chopped straw or other products, depending on availability and cost. Manure as excreted by birds has a high-water content, thus the litter absorbs moisture excreted by the birds.

A typical broiler house with a capacity for 44 000 birds per cycle will produce 240 tons of manure per year. Stockpiling of manure on site can result in the contamination of the next flock of birds, result in odours impacts as well as impacts to ground water, therefore no manure is stockpiled on site at broiler house farms. The manure accumulates within the house during the 42-day cycle and at the end of each cycle the manure, is removed from the house, both mechanically and by hand, and transported in covered vehicles to a registered poultry litter composting facility and fertiliser processing plant (also owned by the proponent).

Disposal of Mortalities

The houses are checked every 2nd to 3rd day for dead chicken carcasses, which are bagged and removed from the house for storage in a locked freezer facility on site (450 litre freezer capacity per operational area of 3 houses). Failure to remove the carcasses from the houses within a 24-hour period poses a biosecurity and disease risk as

well as result in unpleasant odours. Thereafter, the chicken carcasses are removed from the facility, on a weekly basis, dependent on mortality rates and capacity of the mortality chamber), for disposal at a registered disposal facility (Aloes).

Biosecurity

Biosecurity control and disease management on site are important in order to ensure the health and survival of the flock. This entails different measures to prevent the introduction of diseases to the flock, contamination between flocks as well as response plans in case of an outbreak of disease, as follows:

- Disinfection and clean out between flocks (14 days) which entails both a dry and wet cleaning procedure
- Strict limited access to the site (permission is required to access the site).
- Fencing of the site, as well as the facility to limit unrestricted access.
- Disinfection protocol for vehicles, personnel or others entering or exiting the facility. This entails the washing down of all vehicles and includes individuals showering in and out before entering or exiting a facility
- In case of the outbreak of a disease Sovereign Foods subscribes to the "CONTINGENCY PLAN IN CASE OF AN OUTBREAK OF NOTIFIABLE AVIAN INFLUENZA (NAI) IN POULTRY IN SOUTH AFRICA" as compiled by: Dr RF Horner, Allerton PVL, Pietermaritzburg and Dr ACE Pienaar, National Directorate of Animal Health, Pretoria (EDITION 3 REVISED JUNE 2009).

Domestic Waste Management

General waste that will be generated at the employees houses and at the admin and maintenance areas of the poultry broiler facility, may contain hazardous elements (e.g. fluorescent tubes/ light bulbs), Such waste will be classified, separated and temporarily stored in a designated waste storage area in suitably marked bins, before final disposal at an appropriate registered facility.

Electricity Supply Infrastructure

The proposed Photovoltaic Solar Facility will have a total capacity to generate 4MW AC (Alternating Current) electricity. Electricity generated by the PV array will be transmitted via underground cables (22kv) to the inverter room to be converted from DC (Direct Current) current to AC (Alternating Current) current, and then either stored in a battery container facility, or transmitted to the ESKOM metering point, to be fed into the ESKOM grid. The generator ensures that the inverter will continue to function during periods when electricity is not available from ESKOM.

The PV panels are monitored remotely for faults, so maintenance is usually conducted as and when required, although, on average, this is anticipated to be twice a year. Dirt accumulates on the panels over time, and this will reduce the efficiency thereof. Therefore, the panels need to be washed a few times a year, however, the frequency of washing is dependent on various factors, predominantly the local climate.

Refer to Chapter Two of the Draft Consultation Scoping report for a detailed project description.

AFFECTED ENVIRONMENT

The vegetation on the properties surrounding Coega Kammas Kloof to the north and north-west appears to be largely degraded presumably associated with game grazing. The properties west of the farm seems to be largely intact natural vegetation (Bontveld) with some evidence of modification (cut lines, vehicle tracks and clearings). Towards the south-west and west of Coega Kammas Kloof clearing is evident, mostly attributed to the mining activities of PPC Cement SA (Pty) Ltd., however, the majority of the property appears to be near-natural Bontveld. This property also includes the production of renewable energy from wind turbines which can be seen from the R335 and Coega Kammas Kloof. The property adjacent to the eastern boundary of Coega Kammas Kloof, Portion 717 where a section of the proposed pipeline will be installed, is largely modified for cultivation of citrus, pivots and rangelands. The areas immediately east and north-east are mostly degraded presumably due to domestic livestock and game grazing.

The site visit and preliminary input from the vegetation specialist, as well as a review of a previous specialist assessment for the same activity, confirmed that the vegetation on Coega Kammas Kloof is predominantly Sundays Valley Thicket and Koedoeskloof Karroid Thicket as described in the NMBM Bioregional Plan mapping resources. Some Sundays Spekboom Thicket also occurs on the farm in the north-eastern corner.

These onsite observations were supplemented by the review of relevant aerial Imagery and Planning Frameworks and are subject to assessment by a Terrestrial, as well as an Aquatic Biodiversity specialist during the EIA Phase of the assessment.

For further information regarding the affected environment See Chapter Three of the Draft Consultation Scoping report.

ALTERNATIVES

The following alternatives are being considered in this assessment process:

- No-Go alternative
- Property/ Location alternatives
- Land-Use alternatives
 - Grazing/ game
 - Crop cultivation/ pivot irrigation and citrus orchard establishment
 - Poultry Broiler Facility
- Layout alternatives (development footprints)
- Infrastructure/ Technology Alternatives
 - Source of water and water pipeline (river crossing and route alternatives)
 - Electrical infrastructure, Eskom and potential Photovoltaic facility

The preferred layout/ development footprint for the proposed project will be determined by specialist, as well as technical input in the EIA phase of the assessment.

OVERVIEW OF THE ASSESSMENT PROCESS AND PUBLIC PARTICIPATION

This Scoping and EIA Process is being implemented in four phases, the details of which are outlined in Chapter Four of this report:

- Pre-Application Scoping Phase (**WE ARE HERE**)
- Application and Scoping Phase
- Environmental Impact Assessment Phase
- Decision Making and Appeal Period

Public Process Consultants has been appointed as the independent Environmental Assessment Practitioner (EAP) to conduct the Scoping and EIA, including Public Participation for the proposed development. The Scoping and EIA process initially commenced in July 2019. However, in order to take into account legislative changes as well as amendments to the project description, an additional "Project and Registration" comment period, which extended from the 10 September 2021 to 11 October 2021, was provided. The notice of intention to commence was submitted to the competent authority, DEDEAT, Sarah Baartman Region as well as all identified Interested and Affected Parties (I&APs) and affected/juristic Organs of State and State Departments.

In order to commence the legislated portion of the Scoping and EIA process, an Application Form for Environmental Authorisation in terms of the NEMA EIA Regulations, 2014 (as amended) is being prepared and will be submitted to the competent authority prior to the release of the Consultation Scoping Report (CSR) for the legislated 30-day consultation period. All registered I&APs will be notified in writing of the release of the CSR for the legislated 30-day comment period.

The Final Scoping Report (FSR), together with the Plan of Study (PoS) for EIA, will be prepared for submission to the Provincial DEDEAT for their decision-making, within 44 days of submission of the Application Form. The FSR will include all the comments received from I&APs during the Project Announcement Phase, as well as the review of the Draft Consultation Scoping Report (Draft CSR) and CSR. Should DEDEAT accept the Scoping Report and approve the PoS for EIA, the assessment process will enter into the EIA Phase.

For further detail regarding the Scoping Phase of the assessment process, including Public Participation, see Chapter Four of the Report. For further detail regarding the Plan of Study (PoS) for EIA, see Chapter Six of the Report.

Identification of Issues

Issues and concerns identified for inclusion in the scoping report that require specialist assessment in the EIA Phase have been identified using the following methods:

- A Site Visit
- Preliminary input from specialists
- Review of existing conservation planning frameworks and environmental management tools
- Scoping of issues and concerns with I&APs, including authorities and affected Organs of State, through correspondence received (emails and comment forms) in response to the project announcement.

Based on issues raised thus far in the process, the table below indicates the specialist studies/ input required for the EIA Phase of the Assessment Process:

Specialist Study	Broad Scope of Assessment	Proposed Specialist
Visual Impact Assessment	To determine the Visual Impacts of the proposed poultry broiler facility and associated infrastructure on the surrounding areas including any changes to the “sense of place” and visual landscape.	Graham Young, Graham A Young Landscape Architect (GYLA)
Phase 1 Archaeological Impact Assessment	To determine the presence of archaeological features on site and assess the potential impacts on these features. To provide recommendations for management/mitigation of residual impacts.	Dr Johan Binneman and Kobus Reichert, Eastern Cape Heritage Consultants
Phase 1 Paleontological Impact Assessment	To determine the presence of significant palaeontological features on site and the impact of the proposed development thereon. To provide recommendations for management/ mitigation of residual impacts.	Dr John Almond, Natura Viva
Terrestrial Biodiversity Impact Assessment	An assessment of the potential impacts on vegetation and fauna (desktop), as well as the delineation of sensitive or other areas to be set aside for biodiversity conservation (No-Go areas). To determine the Present Ecological State of the site and confirm the mapping of CBAs and ESAs, as included in various biodiversity planning frameworks (e.g. ECBCP, SRVM BSP, NMBM BP and VegMap mapping resources). To provide recommendations for management/ mitigation of residual impacts.	Mr Jamie Pote, Independent Terrestrial Biodiversity Specialist
Aquatic Biodiversity Impact Assessment	An assessment of the potential impacts on aquatic features identified within the area under assessment as well as within a 500m radius, including wetlands and watercourses and the determination of suitable buffer zones. To provide recommendations for management/mitigation of residual impacts	Ms Jaclyn Smith, JS Environmental Consulting
Traffic Impact Assessment	To determine the impact of additional trip generation on the public road network, as well as the suitability and safety of the existing and proposed new access point.	Cary Hastie, Engineering Advice and Services
TECHNICAL TEAM		
Roads and Wet Services	To determine the bulk services requirements for the proposed facility (i.e., domestic and process water storage and treatment, effluent management and stormwater management). To provide the size, throughput capacity and route determination for the water pipeline.	Jaco Spies, JJ Spies Civil Engineers
Renewable Energy Specialist	To determine the footprint, location and capacity requirements of the proposed photovoltaic facility and associated electricity supply infrastructure.	Brandon and Louise Polley, Synthesis Power Solutions David Botha, Prime Electrical
Surveyor and Facility Layout Design	To determine the footprint and locality of the poultry broiler facility and additional infrastructure on site (i.e., sheds, dwellings, internal roads).	Bertus Smuts, SURPLAN

The full Terms of Reference (ToR) are contained in Chapter Six of the Draft Consultation Scoping Report. The results of the specialists’ studies and other relevant project information will be integrated into the Draft Environmental Impact Assessment Report (Draft EIA Report)

Current Stage in the Process

The project is currently at a stage where a Draft Consultation Scoping Report (DCSR) including PoS for the EIA (Chapter Six) is being released for a 30-day authority and I&AP review period which will extend from **28 March 2022 to 04 May 2022**. This step in the process will be followed by the submission of the Application Form to the competent authority, the inclusion of the comments received from I&APs during this review period, into the Consultation Scoping Report (CSR), and the legislated 30-day comment period on the CSR.