

Table 11: Stakeholders identified during the PPP.

Name	Organisation/Farm	Postal Address	Contact details
Ms. Nelisiwe Sithole	Mpumalanga Department of Agriculture, Rural Development and Land Administration	Private Bag X11219 Nelspruit 1200	Tel: 013 766 6067/6068 Email: sitholenl@mpg.gov.za
Mr. David Mahlobo	Mpumalanga Department of Co-operative Governance and Traditional Affairs	Private Bag X11304 Nelspruit 1200	Tel:013 766 6087/6675 Cell:082 338 9881 Fax: 013 766 8441/2 Email: MahloboD@mpg.gov.za
Mr ST Sibiya / Mr. Isaiah Khoza	Mpumalanga Department of Safety, Security and Liaison	Private Bag X11269 Nelspruit 1200	Tel: 013 766 4600 Fax: 013 766 8422 Email: phiwe@mpg.gov.za
Ms. Sibongile Nkosi	Mpumalanga Department of Culture, Sport and Recreation	PO Box 1243 Nelspruit 1200	Tel: 013 766 5242 Fax: 013 766 5612 Email: nkosist@mpg.gov.za
Ms. Mahlasedi Mhlabane	Mpumalanga Department of Education	Private Bag X11341 Nelspruit 1200	Tel: 013 766 5000 Email: p.moosa@education.mpu.gov.za Fax: 013 766 5577
Mr. J. Mbatha	Mpumalanga Department of Finance	Private Bag X11205 Nelspruit	Tel: 013 766 4229 Cell: 082 331 4533



		1200	Fax: 013 766 4604 Email: echego@mpg.gov.za
Mr M.R Mnisi/ Dr. Johnson Jerry Mahlangu	Mpumalanga Department of Health and Social Development	Private Bag X11285 Nelspruit 1200	Tel: 013 766 3429/30/28 Fax: 013 766 3458 Email: florencekh@social.mpu.gov.za
Mr. David Dube	Mpumalanga Department of Human Settlements	Private Bag X11328 Nelspruit 1200	Tel: 013 766 6233 Fax: 013 766 8430 Email: APohl@mpg.gov.za
Mr. Kgopana Mathew Mohlasedi	Mpumalanga Department of Public Works, Roads and Transport	Private Bag X11310 Nelspruit 1200	Tel: 013 766 6978/9 Fax: 013 766 8449 Email: kmohlasedi@mpg.gov.za
Mr.Guma / Mr. M. Mahunonyane	Department of Water Affairs, Mpumalanga Regional Office	Private Bag X11259 Nelspruit 1200	Tel: 013 759 7310 Fax: 013 759 7525 Email: guma@dwa.gov.za
Fikile Mnisi	Department of Water Affairs	Private Bag X11259 Nelspruit 1200	Fax: 086 600 9287 Email: mnisif@dwa.gov.za
Mr. Phillip Hine	South African Heritage Resources Agency (SAHRA)	PO Box 4637 Cape Town 8000	Tel:021 462 4502 Fax: 021 462 4509 Email: phine@sahra.org.za
Mr. Tendo Ramagoma	National Heritage Council (NHC)	PO Box 74097 Lynnwood Ridge Pretoria	Tel:013 932 2061 Fax:086 212 1220 Email: P.Ramagoma@nhc.org.za



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Mr. T.D. Hlanyane	Gert Sibande District Municipality	PO Box 1748, Ermelo, 2350	Tel: 017 801 7000 Cell: 082 696 0046 Email: dan.hlanyane@gsibande.gov.za
Mr. N.L. Maimela	Lekwa Local Municipality	PO Box 66, Standerton, 2430	Fax: 017 712 6808
Cllr. Ntombi Z.E. Sithoni	Lekwa Local Municipality – Ward 13	PO Box 66, Standerton, 2430	Cell: 079 495 7701



Shangoni sent registered letters to the Departments and Organs of State containing a background information document (BID), map showing the location of the site, and a stakeholder registration form. All surrounding properties are owned by the applicant so no adjacent land owners require notification. Figure 53 provides an example of the letters sent out to Departments, Organs of State and potential I&APs. Figures 54 and 55 provide proof that notification letters were sent to Departments, Organs of state and potential I&APs.

The table below provides a list of the I&APs who registered and were added to the database of I&APs during the PPP.

Table 12: Registered I&APs.

Name	Farm/Association	Postal Address	Contact details
L.B. Tshabalala	Lekwa Local Municipality	P.O. Box 66 Standerton 2430	Tel: 017 712 9600 Fax: 017 712 6808
Jenna Lavin	South African Heritage Resources Agency	PO Box 4637 Cape Town 8000	Tel: 021 462 4502 Email: jlavin@sahra.org.za





Figure 53: Example of a notification letter to stakeholders.




List of REGISTERED LETTERS Lys van GEREGISTREERDE BRIEWE



(with an insurance option/met 'n versekeringsopsie)

Full tracking and tracing/Volledige volg en spoor

Name and address of sender:
Naam en adres van afsender: Shangoni Management Services
Po Box 74726, Lynnwood Ridge, Pretoria, 0040
Liette Craus




Enquiries/Navrae
Toll-free number
Tolvry nommer
0800 111 502

No	Name and address of addressee Naam en adres van geadresseerde	Insured amount Versekerde bedrag	Insurance fee Versekeringsgeld	Postage Pragseld	Service fee Diensgeld	Affix Track and Trace customer copy Plak Volg-en-Spoor-Klantenkaart
1	Department of Water Affairs - Fikile Mntsi P/Bag X 11259, Nelspruit, 1200					REGISTERED LETTER (with a document insurance option) RD 716 549 324 ZA CUSTOMER COPY 30128R
2	SAHRA- Mr Phillip Hine PO Box 4637, Cape Town, 8000					REGISTERED LETTER (with a document insurance option) RD 716 549 315 ZA CUSTOMER COPY 30128R
3	Letaba Local Municipality - Cde Manki Sithshani PO Box 66, Standerton, 2430					REGISTERED LETTER (with a document insurance option) RD 716 549 338 ZA CUSTOMER COPY 30128R
4	Department of Water Affairs - Mr. M. Mathemphane P/Bag X 11259, Nelspruit, 1200					REGISTERED LETTER (with a document insurance option) RD 716 549 355 ZA CUSTOMER COPY 30128R
5	NHC - Mr. Tendo Ramogana PO Box 74097, Lynnwood Ridge, 0040					REGISTERED LETTER (with a document insurance option) RD 716 549 372 ZA CUSTOMER COPY 30128R
6	Gen Sirabane District Municipality PO Box 1743, Emele, 2050					REGISTERED LETTER (with a document insurance option) RD 716 549 347 ZA CUSTOMER COPY 30128R
7	Letaba Local Municipality - Mr. Jaco Finsloo PO Box 66, Standerton, 2430					REGISTERED LETTER (with a document insurance option) RD 716 549 369 ZA CUSTOMER COPY 30128R
8	Letaba Local Municipality - Mr. Seppie Claasson PO Box 66, Standerton, 2430					REGISTERED LETTER (with a document insurance option) RD 716 549 386 ZA CUSTOMER COPY 30128R
9	Letaba Local Municipality - Mr. N.K. Maimela PO Box 66, Standerton, 2430					REGISTERED LETTER (with a document insurance option) RD 716 549 390 ZA CUSTOMER COPY 30128R
10	Mpumalanga Department of Co-operative Governance & Traditional Affairs Mr. David Mahlobo - P/Bag X 11204, Nelspruit, 1200					REGISTERED LETTER (with a document insurance option) RD 716 549 409 ZA CUSTOMER COPY 30128R
Number of letters posted Getal briewe gepos		10	R	R	R	R
Signature of client Handtekening van klient						
Signature of accepting officer Handtekening van aanneembeampte						

The value of the contents of these letters is as indicated and compensation is not payable for a letter received unconditionally. Compensation is limited to R100,00. No compensation is payable without documentary proof. Optional insurance of up to R200,00 is available and applies to domestic registered letters only.

Die waarde van die inhoud van hierdie briewe is soos aangedui en vergoeding sal nie betaal word vir 'n brief wat sonder voorbehoud ontvang word nie. Vergoeding is beperk tot R100,00. Geen vergoeding is sonder dokumentêre bewys betaalbaar nie. Opsionele versekering van tot R2 000,00 is beskikbaar en is slegs op binnelandse geregistreerde briewe van toepassing.

Date stamp

 Datumstempel

MAGAZINE PRINTERS 701246


Figure 54: Proof of registered letters sent (pg 1).

LPR-646-12-05-17

List of REGISTERED LETTERS Lys van GEREGISTREERDE BRIEWE

(with an insurance option/met 'n versekeringsopsie)

Full tracking and tracing/Volledige volg en spoor




Post Office


Enquiries/Navrae
Toll-free number
Tollvry nommer
0800 111 502

Name and address of sender:
Naam en adres van afsender: Shangoni Management Services
P.O. Box 74726, Harwood Ridge, Pretoria, 0046
Lizette Craus


No	Name and address of addressee Naam en adres van geadresseerde	Insured amount Versekerde bedrag	Insurance fee Versekeringsgeld	Postage Posgeld	Service fee Diensgeld	Affix Track and Trace customer copy Plak Volg-en-Spoor-klantafskrif
1	<u>Mpumalanga Department of Agriculture & Land Administration - Mr. Melsine Sithula. P/Bag X 11219, Nelspruit, 1200</u>					<small>REGISTERED LETTER</small> <small>With a domestic insurance option</small> <small>0800 111 502 www.postnet.co.za</small> RD 716 549 412 ZA <small>CUSTOMER COPY 381028R</small>
2	<u>Mpumalanga Department of Public Works, Roads & Transport - Mr. Kgopana Mphlasoele. P/Bag X 11210, Nelspruit, 1200</u>					<small>REGISTERED LETTER</small> <small>With a domestic insurance option</small> <small>0800 111 502 www.postnet.co.za</small> RD 716 549 307 ZA <small>CUSTOMER COPY 381028R</small>
3						
4						
5						
6						
7						
8						
9						
10						
		Total Totaal	R	R	R	R

Number of letters posted
Getal briewe gepos: 2

Signature of client
Handtekening van klient: 

Signature of accepting officer
Handtekening van aanneembeampte: 

Date stamp
Datumstempel



Datumstempel

The value of the contents of these letters is as indicated and compensation is not payable for a letter received unconditionally. Compensation is limited to R100,00. No compensation is payable without documentary proof. Optional insurance of up to R200,00 is available and applies to domestic registered letters only.

Die waarde van die inhoud van hierdie briewe is soos aangedui en vergoeding sal nie betaal word vir 'n brief wat sonder voorbehoud ontvang word nie. Vergoeding is beperk tot R100,00. Geen vergoeding is sonder dokumentêre bewys betaalbaar nie. Opsionele versekering van tot R2 000,00 is beskikbaar en is slegs op binne-landse geregistreerde briewe van toepassing.

MAILSHAKE PRINTERS 791348

Figure 55: Proof of registered letters sent (pg 2).

4.5.3 Comments and Response Report

Comments and concerns received from I&APs were incorporated into a Comments and Responses Report, which is given below and in Appendix E.

Table 13: Comments and response report.

Raised by:	Date	Issue/ Comment/ Concern	Response
L.B. Tshabalala Lekwa Local Municipality	06/09/2012	<ol style="list-style-type: none"> 1. Your letter dated 2012-08-16 received regarding the above said application refers. 2. Please be advised that the Lekwa local Municipality has received your application for the above said development. 3. The Lekwa Municipality require that you comply with all the necessary legislation regarding, pollution, emissions, water use and any other affected environmental issues that might be triggered by your activities. 4. Council will further support any comments or requirements lodged by and not limited to the Department of Water Affairs and Forestry (DWAF), Department of Co-operative Governance and Traditional Affairs Mpumalanga (COGTA) and the Department of Agricultural, Rural Development and land Administration. 5. Included hereto please find the completed Stakeholder Registration Form for your attention. 6. Thank you. 	<p>Your letter dated 29 August 2012 refers: We hereby confirm receipt of your stakeholder registration form and that you have been added to the Register of Interested and Affected Parties for the above mentioned project.</p> <p>We further confirm receipt of your comments. They will be included in the Basic Impact Assessment reports for this project.</p> <p>Thank you for your inputs.</p>
Jenna Lavin South African Heritage Resources Agency	31/01/2013	<p>EXPANSION OF THE LANGSPRUIT BOERDERY BROILER FACILITIES ON PORTION 48 OF THE FARM DIEPSPRUIT 414 IS, MPUMALANGA.</p> <p>Thank you for your indication that development is to take place in this area.</p> <p>In terms of the National Heritage Resources Act, no 25 of 1999, heritage resources, including archaeological or palaeontological sites over 100 years old, graves older than 60 years and structures older than 60 years are protected. They may not be disturbed without a permit from the relevant heritage resources authority.</p> <p>In terms of Section 38(8) of the NHRA, before any development proposed in terms of NEMA (No. 14 of 2009) is approved, it is incumbent on the developer to ensure that any potential impacts to heritage resources are assessed to the satisfaction of the relevant heritage authority. Appropriate mitigation, which involves recording, sampling and dating sites that are to be destroyed, may be required depending on the nature and significance of the resources identified.</p> <p>SAHRA has assessed the BID and Draft BAR submitted to our offices in January 2013 to determine the likelihood of the proposed development impacting on significant heritage resources. The photographs of the proposed development areas provided in the Draft BAR</p>	<p>We hereby acknowledge receipt of SAHRA's comments. The comments will be included in the final Basic Assessment Report for this project prior to its submission to the competent authority.</p> <p>We thank you for your inputs.</p>



		<p>indicate that the areas proposed for development are not pristine and have most likely been previously cultivated. The likelihood of impacting on significant archaeological heritage resources is therefore low.</p> <p>The surrounding area is underlain by sandstone, shale or mudstone of the Madzaringwe Formation of the Karoo Supergroup. The site itself, however, is underlain by fine-grained felsic rocks of the Karoo Dolerite Suite. Although the Karoo Supergroup is known to be significant in terms of paleontological heritage, the Karoo Dolerite Suite has a low paleontological sensitivity. Therefore the likelihood of the proposed development impacting on significant fossil heritage is low.</p> <p>Decision</p> <p>Consequently, SAHRA Archaeology, Palaeontology & Meteorites (APM) Unit has no objection to the proposed development on the condition that if any evidence of archaeological sites or remains (e.g., remnants of stone-made structures, indigenous ceramics, bones, stone artefacts, ostrich eggshell fragments, marine shell and charcoal/ash concentrations), unmarked human burials, fossils or other categories of heritage resources are found during the proposed activities, SAHRA APM Unit (Jenna Lavin/Colette Scheermeyer 021 462 4502) must be alerted immediately, and a professional archaeologist or palaeontologist, depending on the nature of the finds, must be contacted as soon as possible to inspect the findings. If the newly discovered heritage resources prove to be of archaeological or paleontological significance, a Phase 2 rescue operation might be necessary.</p> <p>This exemption is only valid for the expansion of the Langspruit Boerdery Broiler Facilities on the identified proposed sites.</p> <p>Should you have any further queries, please contact the designated official using the case number quoted above in the case header.</p> <p>Yours faithfully</p>	
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4.5.4 Registering Stakeholders

All key stakeholders were registered and received the draft Basic Assessment Report.

4.5.5 Press Notices

In accordance with the National Environmental Management Act (NEMA) 1998, (Act No. 107 of 1998), a notice was placed in the Standerton Advertisement, on the 17th of August 2012. The press notice is shown in the figure below.

Press notices are crucial to create awareness of the project and to reach a broader range of I&APs.



LANGSPRUIT LANDGOED (PTY) LTD**PUBLIC NOTICE OF APPLICATION FOR ENVIRONMENTAL AUTHORISATION**

Notice is hereby given that an application for environmental authorisation in terms of the EIA Regulations of 2010 (Regulations in terms of Chapter 5 of the National Environmental Management Act of 1998, as amended) has been lodged with the Mpumalanga Department of Economic Development, Environment and Tourism.

Legislation:

The activity requires an application subject to a Basic Impact Assessment Process as required by Sections 21 to 25 of Government Notice R. 543 of the EIA Regulations.

Listing Notice 1, R. 544 of 18 June 2010, Activity No. 32:

The expansion of facilities for the concentration of poultry, excluding chicks younger than 20 days, where the capacity of the facility will be increased by:

- (ii) more than 5 000 poultry per facility situated outside an urban area.

Activity Description:

- The construction of an additional eight (8) poultry broiler houses.
- Each house will be capable of housing 26 000 chickens and will have a surface area of 1 800m² (120m x 15m).
- The expansion will add 208 000 chickens to the current production capacity of the farm.
- The development footprint of the new houses will be approximately 5.3ha.

Applicant: Langspruit Landgoed (Pty) Ltd.

Project Name: Expansion of the Langspruit Boerdery Broiler Facilities.

Location: Portion 48 of the farm Diepspruit 414 IS.

Reference number: 17/2/3 GS-125

Environmental Consultants:

Shangoni Management Services (Pty) Ltd

PO Box 74726

Tel: (012) 807 7036

Lynnwood Ridge

Fax: (012) 807 1014 / 086 643 5360

Pretoria

Mobile: +27 71 673 3355

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E-mail: lizette@shangoni.co.za

Invitation to Participate:

Should you require any additional information or wish to register as I&AP and/or inform us of any other I&APs and/or organisation and/or organ of state who should be notified, please submit your name, contact information, and interest in the matter in writing to the above address not later than **17 September 2012**.

Figure 56: Wording of site notice (English).



LANGSPRUIT LANDGOED (PTY) LTD

PUBLIEKE KENNISGEWING TER AANSOEK VIR OMGEWINGSMAGTIGING

Belanghebbende en Geaffekteerde partye word hiermee in kennis gestel dat 'n aansoek vir omgewingsmagtiging ingevolge die Omgewings Impak Studie Regulasies van 18 Junie 2010, in terme van Hoofstuk 5 van die Nasionale Omgewings Bestuur Wet van 1998, soos gewysig, ingedien is by die Mpumalanga Departement van Ekonomiese Ontwikkeling, Omgewing en Toerisme.

Wetgewing:

Die aktiwiteite vereis dat 'n Basiese Omgewingsimpakstudie proses gevolg word soos vereis deur Artikel 21 tot 25 van Staats Kennisgewing R. 543 van die Omgewings Impak Studie regulasies.

Kennisgewingsnommer 1, R. 544 van 18 Junie 2010, Aktiwiteit Nr. 32:

Die uitbreiding van fasiliteite vir die konsentrasie van pluimwee, uitsluitend kuikens jonger as 20 dae, waar die kapasiteit van die fasiliteit verhoog sal word met:

(ii) meer as 5 000 pluimwee per fasiliteit geleë buite 'n stedelike gebied.

Beskrywing van aktiwiteit:

- Die konstruksie van agt (8) addisionele braaikuiken produksie huise.
- Elke huis sal 26 000 hoenders kan huisves en sal 'n oppervlakarea van 1 800m² (120m x 15m) hê.
- Die uitbreiding sal die huidige produksie kapasiteit van die plaas met 208 000 hoenders vermeerder.
- Die ontwikkelingsgebied van die nuwe huise sal ongeveer 5.3ha wees.

Applikant: Langspruit Landgoed (Pty) Ltd.

Projek naam: Uitbreiding van die Langspruit Boerdery braaikuiken fasiliteite.

Ligging: Gedeelte 48 van die plaas Diepspruit 414 IS.

Verwysingsnommer: 17/2/3 GS-125

Omgewingskonsultante: Shangoni Management Services (Pty) Ltd.

Shangoni Management Services (Pty) Ltd

PO Box 74726

Tel: (012) 807 7036

Lynnwood Ridge

Faks: (012) 807 1014 / 086 643 5360

Pretoria

Sel: +27 71 673 3355

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E-pos: lizette@shangoni.co.za

Publieke Deelname Uitnodiging:

Vir enige navrae, of indien u as belanghebbende en/of geaffekteerde party wil registreer of ons wil inlig van enige ander partye en/of organisasie en/of staatsinstelling wat in kennis gestel moet word, kan u gerus vir Lizette Crous kontak by die bogenoemde kontakbesonderhede, nie later as **17 September 2012** nie.



SHANGONI

 Management Services (Pty) Ltd

Figure 57: Wording of site notice (Afrikaans).

Standerton Advertiser - Classifieds 17 August 2012

Advertiser
CLASSIFIEDS
 Tel: 017 712 2204
 E-mail: classifieds@stadvertiser.co.za

MISTAKES & QUERIES
 All mistakes and queries must be received in writing within 1 week of placement and accompanied by a reference number. Only mistakes that change the effectiveness of the advert (contact info or price) will be credited or republished. (no credit for spelling)

0303 Beauty & Health
ANNIQUE ROOIBOS
 veeleorg beskikbaar by Irma 083 278 6773 of Louise 071 671 0385.

BIO SCULPTURE GEL:
 Leading nail care. Removable gel. Visit your authorised Bio Sculpture Salon today. Enrol for certified Bio Sculpture education.
 Call Thelma 017 712 2706 / 082 789 6086.

0200 HOME IMPROVEMENTS

0205 Builders & Contractors

A & A ALERT WENDY'S
 2x2=R3 550. 2x3=R3 700. 3x3=R4 000. 3x4=R4 700. 3x5=R8 000. The sooner you order the sooner we deliver. The wendy made from treated pallet wood with 10 years guarantee. The wendy comes with 1 door, wooden floor, zinc roof & 1 window with glass.
 Jerry 078 397 5045.

AABCD WENDYS:
 2x2=R3 500. 2,4x2,4=R3 800. 3x3=R4 000. 3x4=R4 700. 3x5=R8 000. Made from quality pallet wood. Including door, window with glass. Treated for water proofing and termites. 10 years guarantee in case of leaks. Knotty pine and log cabin also available.
 Call Joe 073 283 5945.

ABA WENDIES:
 Special price in Standerton, including delivery. 3x3m @ R4 000. 3x4m @ R4 700. Include: 1 door, 1 window with a glass, zinc roof, wooden floor and its treated.
 Call Marius 073 133 1452.

ARE YOU SAFE?
 For Spanish bars, 10-12mm twisted bar, burglarproof, security & sliding gates, and any odd jobs.
 Call Mac 083 363 9044.

HOME PLANS:
 Building plans / bouplanne. Jeff: 084 505 4762. 21A Mulder Street, Meyerville.

HOUSE PAINTING:
 waterproof, roof repairs; repainting of roofs, 1 year guarantee. Insurance claims welcome.
 Chris Pienaar, 072 837 7050. 28 Years experience.

PATRICK KOMELLO:
 For all your tiling work.
 Call 079 613 4857.

0300 SERVICES

SLEEPWAENS TE HUUR / TRAILERS FOR HIRE
 Tel: 082 553 3245 / 082 377 9536

0740 Used Cars

EK KOOP
 byna alle 2de handse motors, dak kappies, bakkes, ventures & condor vir konstant. Ek is bereid om op te tel.
 Skakel Yunus 082 959 9120 / Aflan 072 203 1614 / 017 687 0191.

0348 General Repairs

NAALDWERK:
 Vir diens en herstel van naaldwerk en omkapmasjien en die styp van skare.
 Pieter Geel, Smutsstr 11A, Meyerville, Standerton. 017 712 2706 / 082 789 6086.

1997 ISUZU KB260LE
 D/C te koop R85 000. Skakel Francois 083 410 9756.

0745 Vehicle Maintenance / Services

0366 Pest Control

WILLIE'S PEST SOLUTIONS:
 Plagbeheer, knikkarotte, miers, rotte, pesbeheer, termiete & londsiebehandeling, ens.
 Registrasie P33234. Willie 083 458 7564.

0369 Pet Services / Accommodation

ANIMAL BOARDING:
 Available at reasonable rates.
 Phone the SPCA at 017 632 2654

0800 VACANCIES

0802 Vacancies

0391 TV & Video Repairs

TELETRONICS:
 Repairs to TVs, DVDs, hi-fi's, washing machines, fridges, etc. Multichoice agent & accredited satellite installer.
 12 Dr Beyers Naudé St. 017 712 2313 or 017 712 2440.

0400 FOR SALE

0406 General

ANTRASJET
 te koop. Skakel Daan Grobler, 082 490 3756.

KRAALMIS BESKIKBAAR
 @ R25.00 vir 50kg sakke. Skakel 076 989 5230.

TROUROK TE KOOP:
 Wit trourok te koop. Grootte: Nummer 36. Skakel 082 575 0063.

0700 MOTORING

VACANCY:
 Paint & Hardware business is looking for a freelance external sales rep to procure and maintain new customers in Standerton. Hours of work - freelance. Salary - commission-based (very high earning potential).
 E-mail CV (include contact details) to: jmhhardware@gmail.com

VAKATURE:
 Ons benodig 'n beamster met die vermoë vir Standerton en omringende area.
 Skakel 017 712 1651.

0824 Employment Wanted

WORK WANTED:
 Liesbeth seeks partfull time work cleans, iron, trustworthy loyal refs available.
 Call 083 276 6539.

TENDER & NOTICE

Gert Sibande District Municipality
REQUEST FOR QUOTATIONS
 Project No. GSDM 01/2012
 Provide Overalls and Shirts for Gert Sibande District Municipality

Bidders should note that the GSDM Supply Chain Management Policy will be adhered to in the selection of awarding the bid.
 Note that this is a request for a quotation only and does not constitute any agreement to purchase any of the above-mentioned items.
 Purpose area: The main output of this project is the provision of overalls and t-shirts that will facilitate the implementation of the Phuzankhondo Programme.
 General profile: Phuzankhondo Programme
 Total number of overalls: 700 with printing and logo and t-shirts 700 with our logo (should be 100 per our Local Municipality)
 Bidders are requested to provide the following information regarding their companies and the costs: • Name of provider • Telephone number • E-mail address • Costs: Fees including VAT.
 Enquiries may be directed to Mr Thulani Ndlovu at (017) 801-7001/7062.
 Bidders should ensure that quotations are delivered, timeously to the correct address. Late quotations will not be accepted for consideration.
 The following documentation must accompany quotations, in compliance with the above-mentioned procurement policy: • Declaration of interest • Company profile • A valid BBBEE Status Level Verification Certificate • valid Tax Clearance Certificates. Kindly submit quotations electronically to thulani@gertsibande.gov.za or by facsimile at 017 811 1157 by no later than 17 August 2012 on or before 12:00. The GSDM reserves the right not to accept the lowest or any quotation received.
 Mr DV Ngcobo - Acting Municipal Manager

A District Municipality striving to excel in good governance and quality infrastructure

NOTICE OF APPLICATION FOR ENVIRONMENTAL AUTHORISATION

Notice is hereby given that an application for environmental authorisation in terms of the EIA Regulations of 2010 (Regulations in terms of Chapter 5 of the National Environmental Management Act of 1998, as amended) has been lodged with the Mpumalanga Department of Economic Development, Environment and Tourism (MDEDET). The activity required an application subject to a Basic Assessment Process as required by Sections 21 to 25 of Government Notice R. 543 of the EIA Regulations.

Ref. Number: 17/2/15-125.

Applicant: Langspruit Landgoed (Pty) Ltd.

Project Name: Expansion of the Langspruit Boerdery Troler Facilities.

Project Location: Portion 48 of the farm Diepspruit 414 IS, Mpumalanga. The project site is located approximately 16.8km to the east of Standerton.

Project Description: The proposed expansion project will entail the following:
 • The construction of an additional eight (8) poultry broiler houses.
 • Each house will be capable of housing 26 000 chickens and will have a surface area of 1 800 m² (120m x 15m).
 • The expansion will add 208 000 chickens to the current production capacity of the farm.
 • The development footprint of the new houses will be approximately 5.3 ha.

Activities applied for: EIA Regulations Listings Notice 1 of 2010 (RS44), Activity No. 32.
 The expansion of facilities for the concentration of poultry, excluding chicks younger than 20 days, where the capacity of the facility will be increased by: (i) more than 5 000 poultry per facility situated outside an urban area.

Invitation to participate: Should you wish to be included in the register of interested and Affected Parties, please submit your name, contact information, and interest in the matter in writing to the below address not later than 17 September 2012.

Independent Environmental Assessment Practitioner:
 Shangoni Management Services (Pty) Ltd.
 PO Box 74726, Lynnwood Ridge, Pretoria 0040.
 Contact Person: Miss L. Croux.

Tel: (012) 807 7036, Cell: 071 673 8355, Fax: (012) 807 1014, Fax to E-mail: 086 643 5360.
 E-mail: lzette@shangoni.co.za. For Online Participation go to www.shangoni.co.za and click on Public Documents.

Figure 58: Proof of newspaper advertisement.

4.5.6 Placement of Public Notices

The site notices (A2) were placed on the perimeter fence surrounding the Langspruit Boerdery Broiler Facilities (as shown in the figures below).



Figure 59: Photograph of site notice (1).



Figure 60: Photograph of site notice (2).





Figure 61: Photograph of site notice (3).

4.5.7 Issuing I&APs and Stakeholders with a Draft BAR

The draft Basic Assessment Report was sent to all Departments and Organs of State as well as all registered I&APs in order to obtain their comments and notices. The report was also submitted to the Mpumalanga Department of Economic Development, Environment and Tourism for review. The review period was from the 17th of January 2013 to the 5th of March 2013.

4.5.8 Issuing I&APs and Stakeholders with the final BAR

This final Basic Assessment Report will be sent to all registered I&APs so that they may review the report and direct any final comments to the Mpumalanga Department of Economic Development, Environment and Tourism. The report will also be submitted to the Mpumalanga Department of Economic Development, Environment and Tourism for consideration.

4.5.9 Conclusions of the Public Participation Exercise

In conclusion, the Public Participation exercise has provided adequate information to enable an understanding of what the proposed broiler facility expansion project would entail and also to address the concerns and comments of this Basic Assessment.



5. NEED AND DESIRABILITY FOR THE ACTIVITY

While the concept of need and desirability relates to the type of development being proposed, essentially, the concept of need and desirability can be explained in terms of the general meaning of its two components, where need refers to time and desirability to place – i.e. is this the right time and is it the right place for the type of land-use or activity being proposed? Need and desirability can be equated to wise use of land – i.e. the question of what is the most sustainable use of land (DEA&DP, 2010).

A need and desirability for this project is evident from the following perspectives:

5.1 Developer

Current demand for chicken in South Africa is not being met. Langspruit Boerdery plans to expand their broiler facilities in the near future, to meet current demand. The expansion will allow the developer to earn more money through the sale of more chickens to Earlybird Farm.

The proposed project will entail the construction of an additional eight poultry broiler houses. The eight houses will be identical to those houses of the existing broiler facility. The proposed technology, design and process of the project were determined by the applicant to be the most economically, socially and environmentally sustainable option for this specific venture.

Langspruit Boerdery falls within a region zoned as Existing Agriculture and High soil potential (Refer to Figure 45). The land use (rearing of broilers) is thus considered in compliance with the existing approved Spatial Development Framework (SDF).

5.2 Local Community

The proposed project will create 50 employment opportunities for unskilled laborers during the construction phase and approximately 20 permanent employment opportunities during the operational phase of the expanded facility. The creation of jobs will have a positive impact on the local community.

5.3 District and Provincial Benefit

In the last 15 years the poultry sector has developed substantially and there are approximately 50 poultry broiler farms in the Lekwa municipal area.



A considerable amount of contract work is associated with the construction and operation of a broiler facility, thereby creating secondary employment in the broader local economy. Contract work can include:

- Construction companies.
- Delivery of chicks to the farm.
- Broiler house bedding.
- Chicken feed companies.
- Manure and mortality collection.



6. IDENTIFIED ALTERNATIVES

Typically, alternative assessments are conducted to assist in comparing various projects or attributes of projects that will occur. The most critical comparison is evaluating any proposed project against the No-Go option. The alternatives assessment then considers alternatives to project site selection for the proposed development; alternatives to layout of the development; and alternatives to construction methodologies and/or materials used for the development.

The alternatives assessment was conducted using a simple cost-benefit analysis of each proposed alternative, through assessing various environmental attributes. These attributes can include physical (geology and soils, surface water quality and quantity, groundwater quality and quantity); biophysical (flora and fauna, sensitive environments); and social (site of archaeological or cultural importance, land use issues, social health and welfare).

The impact of the each alternative was then evaluated in terms of whether it has a positive, negative, or no impact. In this instance, the impact is not evaluated in terms of significance but rather whether or not it will arise. Positive impacts are assigned a value of 1; no impact a value of 0; and a negative impact a value of -1.

By adding all of the attribute scores for each alternative, a suitability score is derived which indicates the preferred alternative. A total positive score indicates the project benefits outweigh the potential negative impacts, while a total negative score indicates the project's environmental costs outweigh the potential benefits. Essentially, the highest scoring alternative is then carried forward for full impact evaluation.

6.1 No-Go Option

The potential impact of the preferred project option on environmental and socio-economic attributes – identified during the assessment phase – is evaluated against the potential impact of the no-go option on the same attributes. The summary of this assessment is provided in the table below.



Table 14: Development vs. No-Go Option

Attribute	Development Option	No-go Option 2
Physical environment		
Air Pollution	-1	-1
Noise Pollution	0	0
Water Quality	-1	-1
Water Quantity	-1	-1
Visual Aesthetics	0	0
Biophysical environment		
Fauna and Flora	0	0
Sensitive Environments	0	0
Social environment		
Traffic	-1	-1
Impact on property values	1	0
Safety and security	0	0
National and regional economy	1	0
Infrastructure development	0	0
Total	-2	-4

The no-go alternative means that the broiler facility is not expanded and will not benefit from a higher overall production rate and stimulation of the local economy.

The negative environmental impacts expected by the proposed development can be mitigated to acceptable limits. The positive social impacts outweigh the negative impacts and the consideration of the “no-go” option can be justifiably dismissed as a sustainable alternative.

6.1 Construction Alternatives:

6.1.1 Site selection

Firstly, it must be stated that the proposed development aims at utilizing the applied property to its full economic potential, taking the natural as well as socio-economic environment into consideration. Refer to Figure 62 for the proposed site alternatives.

Both sites are dominated by the monocrop “Oulandsgras” and as such no natural vegetation will be disturbed by expanding the broiler facility onto either site.

Developing alternative site 1 would mean that the broiler houses are more concentrated, whereas developing site 2 would make the broiler facility more elongated.



There are different costs associated with the two alternatives. Site 1 would require cutting and infilling during construction while site 2 will require the extension of the internal access road further away from the main access road to the site. The client would prefer to construct the broiler houses on site alternative 1 (See Figure 62 below).



Figure 62: Proposed site alternatives.

6.1.2 Alternative Design

As the proposed activity is the expansion of an existing broiler facility, the expansion will have the same design as the existing facility.

6.1.3 Scheduling Alternatives

It is recommended that construction take place during the drier months to avoid any complications in wet weather. No detailed information regarding the proposed time frame for the project is available yet.

6.2 Operational Alternatives:

6.2.1 Activity Alternatives

No activity alternatives exist as the proposed development is the expansion of an existing facility.



6.2.2 Process Alternatives

Further research and consulting is required to determine which technology, design and process would be the most economically, socially and environmentally sustainable option for the handling, storage and disposal of waste such as mortalities and ash (Refer to Section 7.2 for the environmental impact assessment of waste generated during the operational phase).

6.2.3 Input Alternatives

Due to the fact that the expansion will form part of the controlled environment of the existing broiler facilities, not much variation can be allowed for in terms of the materials that can be used for a development of this nature.



7. ENVIRONMENTAL IMPACT ASSESSMENT

All activities that are related to the proposed expansion of the broiler facility that could have some impact on the environment were identified. These impacts can be of an environmental, socio-economic or cultural nature. Impacts are often not only confined within the direct scope of the proposed activity and can accumulate as a network of indirect impacts on the surrounding area.

Different impacts are associated with the construction and operational phases of the proposed activity. The significance will be determined by both the extent and duration of the impact. The environmental risk of any aspect is determined by a combination of parameters associated with the impact. Each parameter connects the physical characteristics of an impact to a quantifiable value to rate the environmental risk. A description of the parameters used in this impact assessment is listed in the table below.

Table 15: Environmental impact assessment parameters

Parameters	Description
Extent	Refers to the physical or geographical size that is affected by the impact. It can be categorised into the following ranges: <ul style="list-style-type: none"> Onsite – Within the specific site boundary (weight value – 1) Local – Within the municipal boundary (weight value – 2) Regional – Outside the municipal boundary (weight value – 3)
Duration	Time span associated with impact: <ul style="list-style-type: none"> Short term – 1 Year or less (weight value – 1) Medium term – 1-5 Years (weight value –2) Long term – Longer than 5 Years (weight value – 3)
Intensity and reversibility	The severity of an impact on the receiving environment: <ul style="list-style-type: none"> Low – Natural and/or cultural processes continue in a modified way and is reversible (weight value – 1) Medium – Natural and/or cultural processes stop and is partially reversible (weight value – 2) High – Natural and/or cultural processes disturbed to an irreversible state (weight value – 3)
Significance of Impact / Consequence	Adding the extent, duration and intensity together provides the significance of the impact (High, Medium or Low). Extent + Duration + Intensity = High/Medium/Low Impact
Probability	The likelihood of an impact occurring: <ul style="list-style-type: none"> Unlikely – 0% - 45% chance of the potential impact occurring (weight value – 1) Possible – 46% - 75% chance of the potential impact occurring (weight value – 2) Likely - >75% chance of the potential impact occurring (weight value – 3)
Environmental Risk Refer to the table below	Multiplication of the significance of the impact by the probability of the impact occurring produces a final conclusion of the overall risk that an impact poses to the surrounding environment. High/Medium/Low Impact X Probability = High/Medium/Low Environmental Risk



Table 16: Environmental Risk Matrix

		Significance of Impact		
		Low Impact (3 → 5)	Medium Impact (6 → 8)	High Impact (9)
Probability	Definite / Very Likely 3	9 - 15 L - M	18 - 24 M - H	27 H
	Possible 2	6 - 10 L - M	12 - 16 M	18 M - H
	Unlikely 1	3 - 5 L	6 - 8 L	9 L
ENVIRONMENTAL RISK		Guidelines for Control Strategies		
(H) - High		Proactively reduce risk level, short term response.		
(M- H) Medium to High		Proactively reduce risk level, short term response.		
(M) – Medium		Management strategies to reduce risk level, short to medium term response.		
(L – M) Low to Medium		Management strategies to reduce risk level, short to medium term response, operational control and housekeeping.		
(L) - Low		Operational control and housekeeping.		

See the tables below for a summary of impacts, their associative mitigating actions and the significance of the pre- and post- mitigation of each of the identified activities. The tables also provide an environmental risk assessment of pre- and post- mitigation of identified activities. The tables are for Construction- and Operational- phases of the proposed project.



7.1 Construction Phase

Table 17: Environmental risk assessment: Environmental Awareness and Training

Activity: Construction activities required to expand the broiler facilities.	
Aspect: Lack of environmental knowledge among employees.	
Nature of Environmental Impact: Harm to the environment due to employees or contractors being unaware of how their activities may impact the environment or due to unauthorised access to the site.	
Before Mitigation	
Extent of the Impact	2
Duration of the Impact	1
Intensity of the Impact	2
Significance of Impact = Extent of Impact + Duration of Impact + Intensity of Impact	5
Probability	2
Environmental Risk = Significance of Impact X Probability	10
Objective of Mitigation Measures	
To prevent harm to the environment through the actions of uneducated employees or contractors.	
Proposed Mitigation	
<ul style="list-style-type: none"> The contractor is to ensure that all employees, including sub-contractors and their employees, are required to attend onsite Environmental Awareness/Training prior to commencing work on site. Follow-up Environmental Awareness/Training may be required from time to time as new subcontractors or crews commence work or for specific activities that may potentially impact the environment. The contractor is to maintain accurate records of any training undertaken. The ECO shall monitor the contractor's compliance with the requirement to provide sufficient environmental awareness training to all site staff. Training is to cover all aspects of the EMP and procedures to be followed. 	
After Mitigation	
Extent of the Impact	1
Duration of the Impact	1
Intensity of the Impact	1
Significance of Impact = Extent of Impact + Duration of Impact + Intensity of Impact	3
Probability	1
Environmental Risk = Significance of Impact X Probability	3

Table 18: Environmental risk assessment: Site clearance

Activity: Clearance of the site.	
Aspect: Removal of indigenous vegetation (Weeping love grass also known as Oulandsgras) outside the project footprint.	
Nature of Environmental Impact: Loss of indigenous grassland, terrestrial habitat, and forage for life stock in the surrounding environment.	
Before Mitigation	
Extent of the Impact	2
Duration of the Impact	1
Intensity of the Impact	2
Significance of Impact = Extent of Impact + Duration of Impact + Intensity of Impact	5



Probability	2
Environmental Risk = Significance of Impact X Probability	10
Objective of Mitigation Measures	
To prevent the removal of vegetation outside the project footprint during site clearance.	
Proposed Mitigation	
<ul style="list-style-type: none"> • Before any construction takes place the proposed area for the expansion will be pegged out. All construction activities will be limited to within these areas in order to reduce the footprint of the proposed activity and avoid impact on adjacent natural vegetation and animal life. • Construction areas should be fenced off or barricaded prior to and during construction. • Site clearing is to be limited to only the area necessary for carrying out the specified work. • The contractor is to draw up a plan for submission to the ECO and the broiler facility manager indicating the locations of construction infrastructure including the site-camp, paint or cement cleaning pits, toilets, stores, site office. • The site boundary is to be clearly demarcated and screened from the commencement of works. The erection of the final boundary fence or wall is preferable. • All demarcation is to be regularly maintained. • No unauthorised entry, stockpiling, dumping or storage of equipment outside the site boundary is permitted. • All construction activities, plant, labour and materials are to be restricted within the site boundary. • Removal of vegetation is to be avoided until such time as soil stripping is required. • Cleared indigenous vegetation can be stockpiled for possible reuse in later rehabilitation or landscaping, or as a brush pack for erosion prevention. • Once the construction activities have been completed, the remaining disturbed area must be top soiled, sloped and re-vegetated as soon as possible using suitable grass species. • Compacted soil should be ripped to ensure effective re-vegetation. • Soil stabilising measures could include rotovating in straw bales (at a rate of 1 bale/20m²), applying mulching or brush packing, or creating windbreaks using brush or bales. 	
After Mitigation	
Extent of the Impact	1
Duration of the Impact	1
Intensity of the Impact	1
Significance of Impact = Extent of Impact + Duration of Impact + Intensity of Impact	3
Probability	1
Environmental Risk = Significance of Impact X Probability	3

Table 19: Environmental risk assessment: Topsoil stockpiling

Activity: Stockpiling of topsoil and cleared vegetation.	
Aspect: Topsoil is exposed to the elements.	
Nature of Environmental Impact: Degradation and erosion of a valuable resource (topsoil).	
Before Mitigation	
Extent of the Impact	1
Duration of the Impact	2
Intensity of the Impact	3
Significance of Impact = Extent of Impact + Duration of Impact + Intensity of Impact	6
Probability	3
Environmental Risk = Significance of Impact X Probability	18
Objective of Mitigation Measures	



To reduce the duration and extent of exposure of topsoil, in order to preserve it as a resource and protect it from erosion.

Proposed Mitigation	
<ul style="list-style-type: none"> • Before any construction takes place the proposed area for expansion will be pegged out. All construction activities will be limited to these areas. • Topsoil (top 150mm) is to be stockpiled in discrete areas and retained for future landscaping efforts. • Any sub-soil or rocks removed should also be stockpiled separately and be used during the rehabilitation. • Topsoil stockpiles shall not exceed 1m in height and 2m in width and shall be protected from wind, erosion and runoff by covering with a suitable fabric approved by the ECO. • The contractor is to ensure that all reasonable measures are taken to limit erosion during construction phase. Erosion protection measures include sand bags, cut-off drains and/or berms. • Cleared indigenous vegetation should be used as a brush pack on topsoil stockpiles for erosion prevention. • If sterilization of the topsoil during stockpiling has occurred inorganic fertilizers will be used to supplement the soils before seeding of the area takes place. 	
After Mitigation	
Extent of the Impact	1
Duration of the Impact	1
Intensity of the Impact	3
Significance of Impact = Extent of Impact + Duration of Impact + Intensity of Impact	5
Probability	2
Environmental Risk = Significance of Impact X Probability	10

Table 20: Environmental risk assessment: Fire risk

Activity: Hot work activities, smoking and cooking.	
Aspect: Runaway veldt fire.	
Nature of Environmental Impact: Loss of indigenous grassland, terrestrial habitat, and forage for life stock in the surrounding environment.	
Before Mitigation	
Extent of the Impact	2
Duration of the Impact	1
Intensity of the Impact	2
Significance of Impact = Extent of Impact + Duration of Impact + Intensity of Impact	5
Probability	2
Environmental Risk = Significance of Impact X Probability	10
Objective of Mitigation Measures	
To prevent the occurrence and spreading of a veldt fire.	
Proposed Mitigation	
Equipment	
<ul style="list-style-type: none"> • Basic fire-fighting equipment is to be placed at strategic locations on site and readily available (e.g. at the site office, flammable material store and watchman's container). • Equipment is to be maintained in good working order to the satisfaction of local fire authorities. • All personnel handling fuels and hazardous materials are to be issued with the appropriate Personal Protective Equipment (PPE). 	
Signage	



- Safety signage including “No Smoking”, “No Naked Lights” and “Danger”, and product identification signs, are to be clearly displayed on fuel storage facilities and tanks.
- Emergency numbers are to be clearly displayed.
- All construction workers shall be issued with ID badges and clearly identifiable uniforms.

Training

- An emergency procedure, taking into consideration all potential emergencies, such as a fire outbreak, hazardous chemical spill, etc. should be compiled.
- The contractor is to ensure that all employees, including sub-contractors and their employees, are trained on the emergency procedure.
- Follow-up emergency training may be required from time to time as new subcontractors or crews commence work.
- The contractor is to maintain accurate records of any emergency training undertaken.
- The ECO shall monitor the contractor’s compliance with the requirement to provide sufficient emergency training to all site staff.

Activities

- All construction workers shall be transported to and from site on a daily basis.
- Workers shall remain on the site at all times during the work day and no one will be allowed to leave site by foot, not even during break times.
- Cooking during lunch is to be restricted to bottled gas facilities in designated areas approved by the ECO. This facility is to be supervised and strictly controlled.
- A dedicated braai facility may be permitted in an area approved by the ECO, if the campsite is in close proximity to firefighting equipment. At no time is a braai fire to be left unattended.
- Smoking is prohibited near places where any readily combustible or flammable materials are present. Notices are to be prominently displayed prohibiting smoking in such areas.
- Welding, flame cutting and other hot work is only to be undertaken in places where the necessary safety precautions are in place (i.e. not near potential sources of combustion and with a fire extinguisher immediately accessible).
- Night watchmen are to be provided with adequate cooking and heating facilities (no open fires), a suitable method of disposing of wastewater, and access to communication equipment.
- No open fires are permitted.

Flammable materials

- Flammable materials storage must comply with standard fire safety regulations.
- All flammable materials are to be stored in a suitable, lockable storage area.
- Combustible materials may not accumulate on the construction site.
- Access to fuel and chemical stores should be strictly controlled.
- Stockpiles of vegetation are only to be located in areas approved by the facility manager and may not exceed 2m in height. Methods of stacking must take cognizance of the possible creation of a fire hazard.
- No burning of stockpiled vegetation is permitted.

After Mitigation	
Extent of the Impact	1
Duration of the Impact	1
Intensity of the Impact	1
Significance of Impact = Extent of Impact + Duration of Impact + Intensity of Impact	3
Probability	1
Environmental Risk = Significance of Impact X Probability	3



Table 21: Environmental risk assessment: Cement and concrete

Activity: The handling, storage, mixing, and disposal of cement and concrete.	
Aspect: Concrete and cement spillage.	
Nature of Environmental Impact: Potential soil and surface water pollution.	
Before Mitigation	
Extent of the Impact	2
Duration of the Impact	2
Intensity of the Impact	2
Significance of Impact = Extent of Impact + Duration of Impact + Intensity of Impact	6
Probability	2
Environmental Risk = Significance of Impact X Probability	12
Objective of Mitigation Measures	
To prevent the pollution of soil and surface water as a result of concrete and cement improper handling, storage, mixing and disposal of cement and concrete.	
Proposed Mitigation	
<ul style="list-style-type: none"> No mixing of concrete or cement directly on the ground is permitted. The mixing of concrete will only be done on mortarboards (dugga-boards). Ready-mix trucks are not permitted to clean chutes on site. Cleaning into foundations or a dedicated cleaning pit is permitted. Bricklayers and plasterers are to minimise any cement spill or runoff in their work area and are to ensure that the work area is cleaned of all cement spillage at the end of each workday. Both used and unused cement bags are to be stored in weatherproof containers so as not to be affected by rain or runoff. Contaminated soil resulting from concrete or cement spills, including residue produced by the washing of cavities, are to be removed immediately after the spillage has occurred and placed on the appropriate rubble stockpile. Runoff from the washing out of wall cavities is to be contained against the building by excavations of berms around the foundations. All reasonable measures must be taken to prevent the dirty water from contaminating a watercourse. 	
After Mitigation	
Extent of the Impact	2
Duration of the Impact	1
Intensity of the Impact	1
Significance of Impact = Extent of Impact + Duration of Impact + Intensity of Impact	4
Probability	2
Environmental Risk = Significance of Impact X Probability	8

Table 22: Environmental risk assessment: Generation of wastewater

Activity: The cleaning of equipment and construction areas.	
Aspect: Concrete and cement runoff.	
Nature of Environmental Impact: Potential soil and surface water pollution.	
Before Mitigation	
Extent of the Impact	2
Duration of the Impact	2
Intensity of the Impact	2
Significance of Impact = Extent of Impact + Duration of Impact + Intensity of Impact	6



Probability	2
Environmental Risk = Significance of Impact X Probability	12
Objective of Mitigation Measures	
To prevent the pollution of soil and surface water bodies by wash water runoff containing concrete and cement contaminants.	
Proposed Mitigation	
<ul style="list-style-type: none"> No washing of vehicles is permitted on site. A dedicated temporary cleaning area is to be identified to facilitate washing of all cement and painting equipment. The cleaning area could be a plastic lined cleaning pit or dedicated plastic or metal drums, located as close as possible to a water point. No wastewater may be disposed of on site, onto the soil or into any water body. Runoff from the washing activities is to be contained against the building by excavations of berms around the foundations. 	
After Mitigation	
Extent of the Impact	2
Duration of the Impact	1
Intensity of the Impact	1
Significance of Impact = Extent of Impact + Duration of Impact + Intensity of Impact	4
Probability	2
Environmental Risk = Significance of Impact X Probability	8

Table 23: Environmental risk assessment: Vehicle and equipment maintenance.

Activity: Vehicle and equipment maintenance and fueling.	
Aspect: Leaking and/or spilling of fuels, greases and oils.	
Nature of Environmental Impact: Hydrocarbon pollution of soils, surface -and ground water.	
Before Mitigation	
Extent of the Impact	2
Duration of the Impact	2
Intensity of the Impact	3
Significance of Impact = Extent of Impact + Duration of Impact + Intensity of Impact	7
Probability	3
Environmental Risk = Significance of Impact X Probability	21
Objective of Mitigation Measures	
To prevent hydrocarbon pollution of soils, surface- and ground water by spilling of fuel, grease or oil and leaking equipment and vehicles.	
Proposed Mitigation	
<ul style="list-style-type: none"> Equipment and vehicles are to be repaired immediately upon developing leaks. Drip trays shall be supplied for all repair work undertaken on machinery on site. Drip trays are to be utilised during daily greasing and re-fuelling of machinery and to contain incidental spills and pollutants. Drip trays are to be inspected daily for leaks and effectiveness and emptied when necessary. This is to be closely monitored during rain events to prevent overflow. Appropriate equipment to deal with emergency spill incidents is to be readily available on site. This includes fire extinguishers, spill kits for hydrocarbon spills, drip trays for equipment and/or machinery leaks, drums or containers for contaminated water. Soil contaminated with hazardous substances, fuel or oil shall be treated as hazardous waste and 	



removed from site.	
<ul style="list-style-type: none"> • If refueling on site or from drums, the ground must be protected and proper dispensing equipment is to be used i.e. hand pumps and funnels. Drums may not be tipped to dispense fuel. • All liquid fuels (petrol and diesel) are to be stored in tanks or containers with lids. • Inspect vehicles on entering the facility to ensure vehicles are in sound condition to reduce the risk of oil or diesel spillages. 	
After Mitigation	
Extent of the Impact	1
Duration of the Impact	2
Intensity of the Impact	3
Significance of Impact = Extent of Impact + Duration of Impact + Intensity of Impact	6
Probability	2
Environmental Risk = Significance of Impact X Probability	12

Table 24: Environmental risk assessment: General/domestic and hazardous waste

Activity: Handling, storage and disposal of general/domestic and hazardous waste.	
Aspect: Poor waste management.	
Nature of Environmental Impact: Soil, surface- and ground water pollution. Nuisance caused by odours and unsightly appearance of waste onsite.	
Before Mitigation	
Extent of the Impact	2
Duration of the Impact	2
Intensity of the Impact	2
Significance of Impact = Extent of Impact + Duration of Impact + Intensity of Impact	6
Probability	3
Environmental Risk = Significance of Impact X Probability	18
Objective of Mitigation Measures	
To prevent soil, surface- and ground water pollution and the nuisance as a result of poor waste management.	
Proposed Mitigation	
<ul style="list-style-type: none"> • Installation of sufficient waste bins and skips/bulk containers where necessary. • All containers (bins and skips/bulk containers) shall be kept in a clean and hygienic manner. • Containers (bins and skips/bulk containers) utilized for the disposal of general and hazardous waste must be demarcated accordingly. • Waste material may only be temporarily stored at areas demarcated for such storage practices, • General waste shall be stored in a manner that prevents the harbouring of pests. • General waste materials should always be stored or disposed of separately from hazardous waste material (e.g. oil, diesel), • General and hazardous waste generated during production is to be disposed of in appropriately demarcated bins. • Bins are then emptied into appropriately demarcated skips/bulk containers with every break or more as the need arise. • Skips/bulk containers should be removed to a nearby landfill site on a weekly basis or more as the need arise. 	
After Mitigation	
Extent of the Impact	1
Duration of the Impact	1



Intensity of the Impact	1
Significance of Impact = Extent of Impact + Duration of Impact + Intensity of Impact	3
Probability	2
Environmental Risk = Significance of Impact X Probability	6

Table 25: Environmental risk assessment: Dust

Activity: Excavation activities, loading and offloading activities and vehicles travelling to and from the site.	
Aspect: Dust generation.	
Nature of Environmental Impact: Degradation of ambient air quality.	
Before Mitigation	
Extent of the Impact	2
Duration of the Impact	1
Intensity of the Impact	3
Significance of Impact = Extent of Impact + Duration of Impact + Intensity of Impact	6
Probability	3
Environmental Risk = Significance of Impact X Probability	18
Objective of Mitigation Measures	
To minimise the impact of excavation activities, loading and offloading activities, and vehicles travelling to and from the site, on the ambient air quality.	
Proposed Mitigation	
<ul style="list-style-type: none"> • A dustcart needs to be onsite to water down dusty road. • Speed bumps or traffic speed signs need to be erected to reduce speeding onsite that could result in the generation of dust. • Regular maintenance of vehicles to address wear of tires and breaks. Optimal engine combustion will allow for 'cleaner' exhaust emissions. 	
After Mitigation	
Extent of the Impact	2
Duration of the Impact	1
Intensity of the Impact	2
Significance of Impact = Extent of Impact + Duration of Impact + Intensity of Impact	5
Probability	2
Environmental Risk = Significance of Impact X Probability	10

Table 26: Environmental risk assessment: Utilisation of groundwater

Activity: Utilisation of groundwater.	
Aspect: Water leaking from JoJo tanks, pipes, taps etc.	
Nature of Environmental Impact: Wastage/depletion of a valuable resource (groundwater).	
Before Mitigation	
Extent of the Impact	2
Duration of the Impact	1
Intensity of the Impact	2
Significance of Impact = Extent of Impact + Duration of Impact + Intensity of Impact	5
Probability	3
Environmental Risk = Significance of Impact X Probability	15
Objective of Mitigation Measures	



Prevent the wastage/depletion of a valuable resource (groundwater).	
Proposed Mitigation	
<ul style="list-style-type: none"> Regular inspection and maintenance of all boreholes, JoJo tanks, toilets, water pipes and taps. Leaking JoJo tanks, taps, toilets and pipes are to be repaired immediately. Running water taps and pipes may not be left unattended. Each time you flush the toilets approximately 20 litres of water is used, therefore use the toilets accordingly. All pipe/hose and tap connections are to be fitted with correct and appropriate plumbing fittings. 	
After Mitigation	
Extent of the Impact	2
Duration of the Impact	1
Intensity of the Impact	1
Significance of Impact = Extent of Impact + Duration of Impact + Intensity of Impact	4
Probability	2
Environmental Risk = Significance of Impact X Probability	8

Table 27: Environmental risk assessment: Ablution facilities

Activity: Installation and use of ablution facilities.	
Aspect: Unsanitary conditions on site	
Nature of Environmental Impact: Soil, surface- and ground water pollution.	
Before Mitigation	
Extent of the Impact	2
Duration of the Impact	1
Intensity of the Impact	2
Significance of Impact = Extent of Impact + Duration of Impact + Intensity of Impact	5
Probability	2
Environmental Risk = Significance of Impact X Probability	10
Objective of Mitigation Measures	
Prevent soil, surface- and groundwater pollution from unsanitary conditions onsite.	
Proposed Mitigation	
<ul style="list-style-type: none"> Sufficient ablution facilities shall be provided – minimum of 1 toilet per 15 workers. The location of toilets is to be approved by the ECO prior to site establishment, but shall be located within 100m of any work point. Ablating anywhere other than in the toilets shall not be allowed. The ablution facilities are to be secured to avoid them from blowing or falling over. The Contractor shall ensure that any chemicals and/or waste from the ablution facilities are not spilled on the ground at any time. Ablution facilities are to be serviced weekly or more frequently if required. The contractor is to ensure that no spillage occurs and that the contents are removed from site according to approved methods. 	
After Mitigation	
Extent of the Impact	1
Duration of the Impact	1
Intensity of the Impact	1
Significance of Impact = Extent of Impact + Duration of Impact + Intensity of Impact	3
Probability	1



Environmental Risk = Significance of Impact X Probability**3**

Table 28: Environmental risk assessment: Hazardous chemical substances.

Activity: Storage and handling of hazardous chemical substances, including fuel, greases and oils.	
Aspect: Poor management and spills of hazardous chemical substances, including fuel, greases and oils.	
Nature of Environmental Impact: Soil, surface water and groundwater pollution.	
Before Mitigation	
Extent of the Impact	2
Duration of the Impact	2
Intensity of the Impact	3
Significance of Impact = Extent of Impact + Duration of Impact + Intensity of Impact	7
Probability	3
Environmental Risk = Significance of Impact X Probability	21
Objective of Mitigation Measures	
To prevent and minimise soil and water pollution as a result of poor management and accidental spills of hazardous chemical substances including fuel, greases and oils used onsite.	
Proposed Mitigation	
<ul style="list-style-type: none"> Identify all hazardous chemical substances used onsite, including fuel, greases and oils. Obtain the material safety data sheet of each of these hazardous chemical substances. Ensure that the material safety data sheets have sufficient information to enable the user to take the necessary measures to protect his/her health and safety and that of the environment. Material Safety Data Sheets for all hazardous chemical substances must be readily available on site. Keep a stock inventory register of all chemicals in the store. Powders must be stored above liquids. Proper storage of chemicals in a lockable, well ventilated building. Ensure adequate access control for the storage area. Storage areas for hazardous chemicals are to comply with standard fire safety regulations. Safety signage including “No Smoking”, “No Naked Lights” and “Danger”, and product identification signs, are to be clearly displayed in areas housing chemicals. Appropriate equipment to deal with emergency spill incidents is to be readily available on site. This includes fire extinguishers, spill kits for hydrocarbon spills, drip trays for equipment and/or machinery leaks, drums or containers for contaminated water. Chemicals are to be properly labeled and handled in a safety conscious manner. All personnel handling hazardous chemicals and hazardous materials are to be issued with the appropriate Personal Protective Equipment (PPE). Ensure that diesel/ fuel tanks are in a bunded area with capacity of holding 110% of the total storage volume. The removal of only the daily-required amount of chemicals to be used from the shed. If refueling on site or from drums, the ground must be protected and proper dispensing equipment is to be used i.e. hand pumps and funnels. Drums may not be tipped to dispense fuel. Use of drip trays during filling of machinery or equipment. Drip trays should be emptied into secondary containers on a regular basis. Ensure that any spilled chemical cannot exit the designated storage area by constructing a hump / bump at the exit, or store chemicals in a spill tray. Clean all spillage of fuels, lubricants and other petroleum based products immediately. The contaminated material must be disposed of in accordance with the waste management procedure. 	



<ul style="list-style-type: none"> No hazardous chemical must be discarded in the sewage or storm water system. Train staff on the use of chemicals in accordance with the risks as described in the material data sheets. Soil contaminated with hazardous chemical substances shall be treated as hazardous waste and removed from site. 	
After Mitigation	
Extent of the Impact	1
Duration of the Impact	1
Intensity of the Impact	2
Significance of Impact = Extent of Impact + Duration of Impact + Intensity of Impact	4
Probability	2
Environmental Risk = Significance of Impact X Probability	8

Table 29: Environmental risk assessment: Noise

Activity: Construction workers, vehicles, machinery and general noisy construction activities.	
Aspect: Generation of noise.	
Nature of Environmental Impact: Disturbance and nuisance to neighbors.	
Before Mitigation	
Extent of the Impact	2
Duration of the Impact	1
Intensity of the Impact	1
Significance of Impact = Extent of Impact + Duration of Impact + Intensity of Impact	4
Probability	2
Environmental Risk = Significance of Impact X Probability	8
Objective of Mitigation Measures	
Minimise the noise generation during the construction phase.	
Proposed Mitigation	
<ul style="list-style-type: none"> The site workers and contractors will adhere to the requirements of the Occupational Health and Safety Act, 1993 (Act No. 85 of 1993) regarding hearing protection and noise control measures. Regular maintenance of vehicles and equipment. All equipment and machinery should be fitted with adequate silencers. Working hours should be restricted to daylight hours. No sound amplification equipment such as sirens, loud hailers or hooters are to be used on site except in emergencies and no amplified music is permitted on site. If work is to be undertaken outside of normal work hours permission must be obtained from the ECO and the broiler facility manager. No noisy work is to be conducted over the weekends or on public holidays. 	
After Mitigation	
Extent of the Impact	1
Duration of the Impact	1
Intensity of the Impact	1
Significance of Impact = Extent of Impact + Duration of Impact + Intensity of Impact	3
Probability	1
Environmental Risk = Significance of Impact X Probability	3



7.2 Operational Phase

Table 30: Environmental risk assessment: Environmental Awareness and Training

Activity: Operational activities at the broiler facilities.	
Aspect: Lack of environmental knowledge among employees.	
Nature of Environmental Impact: Harm to the environment due to employees being unaware of how their activities may impact the environment or due to unauthorised access to the site.	
Before Mitigation	
Extent of the Impact	2
Duration of the Impact	1
Intensity of the Impact	2
Significance of Impact = Extent of Impact + Duration of Impact + Intensity of Impact	5
Probability	2
Environmental Risk = Significance of Impact X Probability	10
Objective of Mitigation Measures	
To prevent harm to the environment through the actions of uneducated employees.	
Proposed Mitigation	
<ul style="list-style-type: none"> All employees are required to attend onsite Environmental Awareness/Training prior to commencing work on site. Follow-up Environmental Awareness/Training may be required from time to time as new employees commence work or for specific activities that may potentially impact the environment. The facility manager is to maintain accurate records of any training undertaken. The ECO shall monitor the facility managers' compliance with the requirement to provide sufficient environmental awareness training to all site staff. Training is to cover all aspects of the EMP and procedures to be followed. 	
After Mitigation	
Extent of the Impact	1
Duration of the Impact	1
Intensity of the Impact	1
Significance of Impact = Extent of Impact + Duration of Impact + Intensity of Impact	3
Probability	1
Environmental Risk = Significance of Impact X Probability	3

Table 31: Environmental risk assessment: Dust

Activity: Increased traffic frequency	
Aspect: Dust generation.	
Nature of Environmental Impact: Degradation of ambient air quality.	
Before Mitigation	
Extent of the Impact	2
Duration of the Impact	1
Intensity of the Impact	3
Significance of Impact = Extent of Impact + Duration of Impact + Intensity of Impact	6
Probability	3
Environmental Risk = Significance of Impact X Probability	18
Objective of Mitigation Measures	



To minimise the impact of dust generated by the increased traffic frequency on the ambient air quality.	
Proposed Mitigation	
<ul style="list-style-type: none"> • A dustcart needs to be onsite to water down dusty road. • Speed bumps or traffic speed signs need to be erected to reduce speeding onsite that could result in the generation of dust. • Regular maintenance of vehicles to address wear of tires and breaks. Optimal engine combustion will allow for ‘cleaner’ exhaust emissions. • Open areas should be ripped, if the soil is compacted, fertilized to ensure and re-vegetated as soon as possible using suitable grass species. 	
After Mitigation	
Extent of the Impact	2
Duration of the Impact	1
Intensity of the Impact	2
Significance of Impact = Extent of Impact + Duration of Impact + Intensity of Impact	5
Probability	2
Environmental Risk = Significance of Impact X Probability	10

Table 32: Environmental risk assessment: Heatco ovens and coal storage areas

Activity: A-grade coal used in Heatco ovens to heat broiler houses.	
Aspect: Generation of emissions from Heatco ovens (such as carbon dioxide, carbon monoxide, sulphur dioxide and nitrous oxides) and Coal storage areas (Fine coal dust/Particulate matter).	
Nature of Environmental Impact: Degradation of ambient air quality.	
Before Mitigation	
Extent of the Impact	2
Duration of the Impact	1
Intensity of the Impact	2
Significance of Impact = Extent of Impact + Duration of Impact + Intensity of Impact	5
Probability	3
Environmental Risk = Significance of Impact X Probability	15
Objective of Mitigation Measures	
To minimise the impact of emissions generated during the heating of broiler facilities on the ambient air quality.	
Proposed Mitigation	
<ul style="list-style-type: none"> • Continue the use of A-grade coal in the Heatco ovens, as a lower grade coal may result in higher sulphur emissions. • Regular maintenance of the Heatco ovens. Optimal combustion will allow for ‘cleaner’ stack emissions. • Ensure adequate storage of coal to minimize dispersion of fine coal dust, i.e. a covered storage area. • Storage area should be demarcated and Safety signage including “No Smoking”, “No Naked Lights” and “Danger”, are to be clearly displayed at the coal storage area. • Fire extinguishers should be readily available at the coal storage area. 	
After Mitigation	
Extent of the Impact	1
Duration of the Impact	1
Intensity of the Impact	1
Significance of Impact = Extent of Impact + Duration of Impact + Intensity of Impact	3



Impact + Intensity of Impact	
Probability	2
Environmental Risk = Significance of Impact X Probability	6

Table 33: Environmental risk assessment: Noise

Activity: Increased vehicle frequency and general operational activities.	
Aspect: Generation of noise.	
Nature of Environmental Impact: Disturbance and nuisance to neighbors.	
Before Mitigation	
Extent of the Impact	2
Duration of the Impact	1
Intensity of the Impact	1
Significance of Impact = Extent of Impact + Duration of Impact + Intensity of Impact	4
Probability	2
Environmental Risk = Significance of Impact X Probability	8
Objective of Mitigation Measures	
To maintain a dB reading of less than 50dB at the site boundary.	
Proposed Mitigation	
<ul style="list-style-type: none"> The site workers and contractors will adhere to the requirements of the Occupational Health and Safety Act, 1993 (Act No. 85 of 1993) regarding hearing protection and noise control measures. Regular maintenance of vehicles, back-up generators and equipment. All equipment and machinery should be fitted with adequate silencers. No sound amplification equipment such as sirens, loud hailers or hooters are to be used on site except in emergencies and no amplified music is permitted on site. If work is to be undertaken outside of normal work hours permission must be obtained from the ECO and the broiler facility manager. No noisy work is to be conducted over the weekends or on public holidays. 	
After Mitigation	
Extent of the Impact	1
Duration of the Impact	1
Intensity of the Impact	1
Significance of Impact = Extent of Impact + Duration of Impact + Intensity of Impact	3
Probability	1
Environmental Risk = Significance of Impact X Probability	3

Table 34: Environmental risk assessment: Handling and storage of Coal.

Activity: Handling and storage of coal.	
Aspect: Poor management and spillage of coal.	
Nature of Environmental Impact: Soil, surface- and groundwater pollution.	
Before Mitigation	
Extent of the Impact	2
Duration of the Impact	1
Intensity of the Impact	2
Significance of Impact = Extent of Impact + Duration of Impact + Intensity of Impact	5
Probability	2



Environmental Risk = Significance of Impact X Probability	10
Objective of Mitigation Measures	
To ensure the proper handling and storage of coal.	
Proposed Mitigation	
<ul style="list-style-type: none"> • Store coal utilized for climate control in bunkers. • Construct a hump/berm at the bunker entrance to prevent rain water from entering. • Construct a roof to prevent rain water from being contaminated by the coal. • Prevent coal spillages during loading and remove any coal spillages from the soil and return to the coal bunker. 	
After Mitigation	
Extent of the Impact	1
Duration of the Impact	1
Intensity of the Impact	1
Significance of Impact = Extent of Impact + Duration of Impact + Intensity of Impact	3
Probability	2
Environmental Risk = Significance of Impact X Probability	6

Table 35: Environmental risk assessment: General/domestic and hazardous waste

Activity: Handling, storage and disposal of general/domestic and hazardous waste.	
Aspect: Poor waste management.	
Nature of Environmental Impact: Soil, surface- and ground water pollution. Nuisance caused by odours and unsightly appearance of waste onsite.	
Before Mitigation	
Extent of the Impact	2
Duration of the Impact	2
Intensity of the Impact	2
Significance of Impact = Extent of Impact + Duration of Impact + Intensity of Impact	6
Probability	3
Environmental Risk = Significance of Impact X Probability	18
Objective of Mitigation Measures	
To prevent soil, surface- and ground water pollution and the nuisance as a result of poor waste management.	
Proposed Mitigation	
<ul style="list-style-type: none"> • Develop a waste management plan. • Take note that hazardous waste includes; litter, mortalities, ash, empty hazardous chemical substance containers, soil and material (e.g. cloths) contaminated by hazardous chemical substances, etc. • The waste management plan should consider the type of waste, description, source, storage, disposal method, disposal facility and responsible person. • The implementation of the waste management plan should ensure; <ul style="list-style-type: none"> ➢ Installation of sufficient waste bins and skips/bulk containers where necessary. ➢ All containers (bins and skips/bulk containers) shall be kept in a clean and hygienic manner. ➢ Containers (bins and skips/bulk containers) utilized for the disposal of general and hazardous waste must be demarcated accordingly. ➢ Waste material may only be temporarily stored at areas demarcated for such storage practices, ➢ General waste shall be stored in a manner that prevents the harbouring of pests. ➢ General waste materials should always be stored or disposed of separately from hazardous waste 	



<ul style="list-style-type: none"> ➤ material (e.g. oil, diesel), ➤ General and hazardous waste generated during production is to be disposed of in appropriately demarcated bins. ➤ Bins are then emptied into appropriately demarcated skips/bulk containers with every break or more as the need arise. ➤ Skips/bulk containers should be removed to a nearby landfill site on a weekly basis or more as the need arise. ➤ Safe disposal certificates should be requested from general and hazardous landfill sites with every waste dumping. ➤ These safe disposal certificates should be kept on file to illustrate compliance with the cradle to grave principle. ➤ The ECO shall monitor the compliance with the cradle to grave principle. 	
<ul style="list-style-type: none"> • No incineration of any kind of waste will be permitted onsite. 	
After Mitigation	
Extent of the Impact	1
Duration of the Impact	1
Intensity of the Impact	1
Significance of Impact = Extent of Impact + Duration of Impact + Intensity of Impact	3
Probability	2
Environmental Risk = Significance of Impact X Probability	6

Table 36: Environmental risk assessment: Handling, storage and disposal of ash.

Activity: The burning of A-grade coal in Heatco ovens to heat broiler houses.	
Aspect: Generation of ash.	
Nature of Environmental Impact: Ash consists mainly of inert materials such as alumina and silica and small quantities of sulphur that could, if stored in huge quantities, react with water and cause acid drainage.	
Before Mitigation	
Extent of the Impact	2
Duration of the Impact	2
Intensity of the Impact	2
Significance of Impact = Extent of Impact + Duration of Impact + Intensity of Impact	6
Probability	3
Environmental Risk = Significance of Impact X Probability	18
Objective of Mitigation Measures	
To prevent soil, surface- and ground water pollution and the nuisance as a result of poor waste management.	
Proposed Mitigation	
Note: The management of ash should be included in the waste management plan.	
<ul style="list-style-type: none"> • Ash must be stored on a concrete area or in suitable container prior to removal. • Further research and consulting is required to determine which technology, design and process would be the most economically, socially and environmentally sustainable option for the handling, storage and disposal of ash. 	
After Mitigation	
Extent of the Impact	1
Duration of the Impact	1



Intensity of the Impact	1
Significance of Impact = Extent of Impact + Duration of Impact + Intensity of Impact	3
Probability	2
Environmental Risk = Significance of Impact X Probability	6

Table 37: Environmental risk assessment: Chicken mortalities

Activity: Storage and disposal of chicken mortalities	
Aspect: Poor waste (chicken mortality) management.	
Nature of Environmental Impact: Soil, surface- and groundwater pollution.	
Before Mitigation	
Extent of the Impact	2
Duration of the Impact	2
Intensity of the Impact	2
Significance of Impact = Extent of Impact + Duration of Impact + Intensity of Impact	6
Probability	3
Environmental Risk = Significance of Impact X Probability	18
Objective of Mitigation Measures	
To minimize the impact of hazardous mortality waste on human and other avian health, soil-, surface-, groundwater pollution and the nuisance caused by odours.	
Proposed Mitigation	
Note: The management of chicken mortalities should be included in the waste management plan.	
Temporary storage of mortalities	
<ul style="list-style-type: none"> The temporary storage area for mortalities must be a covered area that has access control, preventing the unlawful removal of mortalities. In the event of temporary storage, mortalities must be stored in sealed bins prior to disposal. 	
Disposal of mortalities	
<ul style="list-style-type: none"> Mortalities must be disposed of as soon as possible. Mortalities are currently incinerated in an old silo. 	
Disposal of mass mortalities	
In the event of a disease outbreak:	
<ul style="list-style-type: none"> Notify the state vet. The state vet must visit the site. The state vet will place the property, or the specific chicken site or house that is infected, under quarantine. Depending on the disease and severity, the chickens can be slaughtered on site or transported to an abattoir with a Red Cross permit. Alternatively, mortalities can be covered with lime and buried. 	
Alternative methods of disposal	
<ul style="list-style-type: none"> The burning of mortalities in the silo triggers both a listed activity in terms of the National Environmental Management: Air Quality Act, 2004 (Act No. 39 of 2004) and in terms of National Environmental Management: Waste Act, 2008 (Act No. 59 of 2008). Mortalities could be disposed of in on-site mortality pits. Take note that a mortality pit will trigger a waste management license in terms of Government Notice No. 718 as contemplated in Section 	



19(1) of the National Environmental Management: Waste Act, 2008 (Act No. 59 of 2008).

- Mortalities could be composted onsite. The implementation of such a facility will entail initial capital investment costs and ongoing operational costs and depending on the design and/or method of composting might trigger a waste management license in terms of Government Notice No. 718 as contemplated in Section 19(1) of the National Environmental Management: Waste Act, 2008 (Act No. 59 of 2008). In the long term the initial capital investment could be offset through the selling of compost.

Further research and consulting is required to determine which technology, design and process would be the most economically, socially and environmentally sustainable option for the handling, storage and disposal of mortalities.

After Mitigation	
Extent of the Impact	1
Duration of the Impact	1
Intensity of the Impact	1
Significance of Impact = Extent of Impact + Duration of Impact + Intensity of Impact	3
Probability	2
Environmental Risk = Significance of Impact X Probability	6

Table 38: Environmental risk assessment: Litter (manure and bedding)

Activity: Handling, storage and disposal of chicken litter.	
Aspect: Poor waste (litter) management.	
Nature of Environmental Impact: Soil, surface- and groundwater pollution.	
Before Mitigation	
Extent of the Impact	2
Duration of the Impact	2
Intensity of the Impact	2
Significance of Impact = Extent of Impact + Duration of Impact + Intensity of Impact	6
Probability	3
Environmental Risk = Significance of Impact X Probability	18
Objective of Mitigation Measures	
To minimize the impact of chicken litter on soil-, surface- and ground-water pollution and the nuisance caused by odors from the litter.	
Proposed Mitigation	
Note: The management of chicken litter should be included in the waste management plan.	
<ul style="list-style-type: none"> • Maintain good litter conditions by keeping the litter dry throughout the production cycle. • Litter should be collected and bagged immediately after a production cycle and prior to removal. • The broiler houses must be dry cleaned efficiently to remove as much litter as possible and to reduce contamination of wash water used. • The removal of manure will occur after every cycle is completed to prevent accumulation on site, keeping the nutrient rich manure from polluting surface and ground water bodies, avoiding offensive smells and ensuring the hygiene and health of the new flock. • Litter will be preserved in a dry area, covered by sheeting or within a shed to protect it from rain and leaching in order to prevent noxious odours and ammonia from forming. • Litter will then be fed to cattle on the farm. 	
Research and consulting will be required to determine which technology, design and process would be the	



most economically, socially and environmentally sustainable option for the handling, storage and disposal of litter.	
After Mitigation	
Extent of the Impact	1
Duration of the Impact	1
Intensity of the Impact	1
Significance of Impact = Extent of Impact + Duration of Impact + Intensity of Impact	3
Probability	2
Environmental Risk = Significance of Impact X Probability	6

Table 39: Environmental risk assessment: Washing of broiler facilities.

Activity: Washing of broiler facilities.	
Aspect: Dirty water run-off.	
Nature of Environmental Impact: Pollution, siltation and erosion of surface water bodies.	
Before Mitigation	
Extent of the Impact	2
Duration of the Impact	1
Intensity of the Impact	2
Significance of Impact = Extent of Impact + Duration of Impact + Intensity of Impact	5
Probability	3
Environmental Risk = Significance of Impact X Probability	15
Objective of Mitigation Measures	
To control waste water runoff from washing of broiler facilities.	
Proposed Mitigation	
<ul style="list-style-type: none"> • Rearing houses are cleaned after each cycle. • After litter is bagged and stored, high-pressure hoses should be used in the washing of the houses, to minimise the amount of water used. • Wash and sanitize rearing facilities with biodegradable soaps and disinfectants. • Use biodegradable soaps and disinfectants in the footbath and shower block. • Use biodegradable soaps and disinfectants for washing of vehicles. • Currently wash water runs off into the surrounding environment. This will no longer be permitted and an alternative method of disposal of wastewater is required. • Further research and consulting will be required to determine which technology, design and process would be the most economically, socially and environmentally sustainable option for the disposal of wastewater from washing of broiler facilities. • Recommendation: Channeling wastewater into onsite evaporation ponds. 	
After Mitigation	
Extent of the Impact	1
Duration of the Impact	1
Intensity of the Impact	1
Significance of Impact = Extent of Impact + Duration of Impact + Intensity of Impact	3
Probability	2
Environmental Risk = Significance of Impact X Probability	6

Table 40: Environmental risk assessment: Storm water control.

Activity: Rain.



Aspect: 'Clean' rainwater running into 'dirty' areas.	
Nature of Environmental Impact: Soil and surface water pollution.	
Before Mitigation	
Extent of the Impact	2
Duration of the Impact	1
Intensity of the Impact	2
Significance of Impact = Extent of Impact + Duration of Impact + Intensity of Impact	5
Probability	3
Environmental Risk = Significance of Impact X Probability	15
Objective of Mitigation Measures	
To prevent the contamination of 'clean' rain water by 'dirty' areas through control of storm water runoff.	
Proposed Mitigation	
<ul style="list-style-type: none"> Clean storm water runoff from the surrounding environment must be channeled away from 'dirty' areas. These 'dirty' areas include the; coal storage area, chemicals storage areas and all waste storage areas. Clean storm water should be diverted and kept in the environment surrounding the site. Storm water measures should be inspected on a regular basis in order to ensure that the structures are functional and not causing soil erosion. Where necessary place culverts underneath road foundations. 	
After Mitigation	
Extent of the Impact	1
Duration of the Impact	2
Intensity of the Impact	1
Significance of Impact = Extent of Impact + Duration of Impact + Intensity of Impact	4
Probability	2
Environmental Risk = Significance of Impact X Probability	8

Table 41: Environmental risk assessment: Chemical substances.

Activity: Storage and handling of Chemical substances, including fuel, greases, vaccines, detergents etc.	
Aspect: Poor management and spills of chemical substances.	
Nature of Environmental Impact: Soil, surface water and groundwater pollution.	
Before Mitigation	
Extent of the Impact	2
Duration of the Impact	2
Intensity of the Impact	3
Significance of Impact = Extent of Impact + Duration of Impact + Intensity of Impact	7
Probability	3
Environmental Risk = Significance of Impact X Probability	21
Objective of Mitigation Measures	
To prevent and minimise soil and water pollution as a result of poor management and accidental spills of chemical substances (fuel, greases, oils, vaccines, detergents etc).	
Proposed Mitigation	
<ul style="list-style-type: none"> Identify all chemical substances used onsite, including fuel, greases, vaccines, detergents etc. Obtain the material safety data sheet of each of these chemical substances. Ensure that the material safety data sheets have sufficient information to enable the user to take the necessary measures to protect his/her health and safety and that of the environment. 	



- Material Safety Data Sheets for all hazardous chemical substances must be readily available on site.
- Develop a dangerous goods management plan based on the material safety data sheets of all identified chemical substances and the 1995 Hazardous Chemical Substances Regulations in terms of the Occupational Health and Safety Act, 1993 (Act no. 85 of 1993).
- Implement a dangerous goods management plan.
- Keep a stock inventory register of all chemicals in the store.
- Powders must be stored above liquids.
- Proper storage of chemicals in a lockable, well ventilated building.
- Ensure adequate access control for the storage area.
- Storage areas for hazardous chemicals are to comply with standard fire safety regulations.
- Safety signage including “No Smoking”, “No Naked Lights” and “Danger”, and product identification signs, are to be clearly displayed in areas housing chemicals.
- Appropriate equipment to deal with emergency spill incidents is to be readily available on site. This includes fire extinguishers, spill kits for hydrocarbon spills, drip trays for equipment and/or machinery leaks, drums or containers for contaminated water.
- Chemicals are to be properly labeled and handled in a safety conscious manner.
- All personnel handling hazardous chemicals and hazardous materials are to be issued with the appropriate Personal Protective Equipment (PPE).
- Ensure that diesel/ fuel tanks are in a bunded area with capacity of holding 110% of the total storage volume.
- The removal of only the daily-required amount of chemicals to be used from the shed.
- If refueling on site or from drums, the ground must be protected and proper dispensing equipment is to be used i.e. hand pumps and funnels. Drums may not be tipped to dispense fuel.
- Use of drip trays during filling of machinery or equipment. Drip trays should be emptied into secondary containers on a regular basis.
- Ensure that any spilled chemical cannot exit the designated storage area by constructing a hump / bump at the exit, or store chemicals in a spill tray.
- Clean all spillage of fuels, lubricants and other petroleum based products immediately.
- The contaminated material must be disposed of in accordance with the waste management procedure.
- No hazardous chemical must be discarded in the sewage or storm water system.
- Train staff on the use of chemicals in accordance with the risks as described in the material data sheets.
- Soil contaminated with hazardous chemical substances shall be treated as hazardous waste and removed from site.

After Mitigation	
Extent of the Impact	1
Duration of the Impact	1
Intensity of the Impact	3
Significance of Impact = Extent of Impact + Duration of Impact + Intensity of Impact	5
Probability	2
Environmental Risk = Significance of Impact X Probability	10

Table 42: Environmental risk assessment: Equipment and vehicle maintenance.

Activity: Vehicle and equipment maintenance and fueling.
Aspect: Leaking and/or spilling of fuels, greases and oils.
Nature of Environmental Impact: Hydrocarbon pollution of soils, surface -and ground water.
Before Mitigation



Extent of the Impact	2
Duration of the Impact	2
Intensity of the Impact	3
Significance of Impact = Extent of Impact + Duration of Impact + Intensity of Impact	7
Probability	3
Environmental Risk = Significance of Impact X Probability	21
Objective of Mitigation Measures	
To prevent hydrocarbon pollution of soils, surface- and ground water by spilling of fuel, grease or oil and leaking equipment and vehicles.	
Proposed Mitigation	
<ul style="list-style-type: none"> • Inspection and maintenance of equipment, generators and vehicles owned by Langspruit boerdery shall take place on a regular basis. • Security shall inspect vehicles (Such as those that belong to Earlybird Farm) on entering the facility to ensure vehicles are in sound condition to reduce the risk of oil or diesel spillages. • Equipment, generators and vehicles are to be repaired immediately upon developing leaks. • Generators must be stored on a concrete floor in a bunded area. • Drip trays shall be supplied for all repair work undertaken on machinery on site. • Drip trays are to be utilised during daily greasing and re-fuelling of machinery and to contain incidental spills and pollutants. • Drip trays are to be inspected daily for leaks and effectiveness and emptied when necessary. This is to be closely monitored during rain events to prevent overflow. • Appropriate equipment to deal with emergency spill incidents is to be readily available on site. This includes fire extinguishers, spill kits for hydrocarbon spills, drip trays for equipment and/or machinery leaks, drums or containers for contaminated water. • Soil contaminated with hazardous substances, fuel or oil shall be treated as hazardous waste and removed from site. • If refueling on site or from drums, the ground must be protected and proper dispensing equipment is to be used i.e. hand pumps and funnels. Drums may not be tipped to dispense fuel. • All liquid fuels (petrol and diesel) are to be stored in tanks or containers with lids. 	
After Mitigation	
Extent of the Impact	1
Duration of the Impact	1
Intensity of the Impact	3
Significance of Impact = Extent of Impact + Duration of Impact + Intensity of Impact	5
Probability	2
Environmental Risk = Significance of Impact X Probability	10

Table 43: Environmental risk assessment: Sanitation

Activity: Installation and use of ablution facilities.	
Aspect: Unsanitary conditions on site	
Nature of Environmental Impact: Potential surface- and/or ground water- contamination.	
Before Mitigation	
Extent of the Impact	2
Duration of the Impact	1
Intensity of the Impact	2
Significance of Impact = Extent of Impact + Duration of Impact + Intensity of Impact	5



Probability	2
Environmental Risk = Significance of Impact X Probability	10
Objective of Mitigation Measures	
Prevent soil, surface- and groundwater pollution from unsanitary conditions onsite.	
Proposed Mitigation	
<ul style="list-style-type: none"> Sufficient ablution facilities shall be provided – minimum of 1 toilet per 15 workers. The location of toilets is to be approved by the ECO prior to site establishment, but shall be located within 100m of any work point. Ablution facilities shall be inspected and maintained to prevent or minimize blockage and leakages. Ablution facilities are to be serviced weekly or more frequently if required. Toilets should have properly closing doors and supplied with toilet paper. Awareness of the importance of proper hygiene should be created among employees. Ablating anywhere other than in the toilets shall not be allowed. 	
After Mitigation	
Extent of the Impact	1
Duration of the Impact	1
Intensity of the Impact	1
Significance of Impact = Extent of Impact + Duration of Impact + Intensity of Impact	3
Probability	1
Environmental Risk = Significance of Impact X Probability	3

Table 44: Environmental risk assessment: Outbreak of disease or infection of chickens

Activity: Rearing of Broilers.	
Aspect: Outbreak of poultry disease	
Nature of Environmental Impact: Infection and possible death of chickens, other avian species and humans.	
Before Mitigation	
Extent of the Impact	3
Duration of the Impact	2
Intensity of the Impact	3
Significance of Impact = Extent of Impact + Duration of Impact + Intensity of Impact	8
Probability	3
Environmental Risk = Significance of Impact X Probability	24
Objective of Mitigation Measures	
To prevent the outbreak of a poultry disease among chickens, other avian species and humans.	
Proposed Mitigation	
<ul style="list-style-type: none"> All chickens should originate from a closed biosecurity compartment. All chicks should originate from disease free sources. Chicks from another farm should not be mixed with chickens in the flock. Access control to and from the premises and access to the premises should only be by prior arrangement. Installation of footbaths with disinfectant at all the entrances to each of the broiler facilities. Installation of showers for all staff working on site. Use a sound vaccination program. Never permit contaminated equipment from other poultry farms in the buildings. Keep wild birds, rodents and predators away from the broiler houses. Installation of rodent bait traps and flytraps. 	



<ul style="list-style-type: none"> • Clean and sanitize broiler houses after each cycle with biodegradable soaps and disinfectants. • Monitoring and auditing of processes by a contracted veterinarian or State Vet. • Obtain a reliable diagnosis before starting treatment for a disease problem. • Seek advice of a trained poultry diagnostician when it is apparent that a disease is present in the flock. • When submitting a sample to a diagnostic laboratory, submit a sample of the problem flock. The sample should include two or more sick birds and freshly dead birds, if any. Take care to preserve dead specimens by cooling and preventing decomposition. It is not recommended to freeze dead birds as this may cause cell rupture and make diagnosis more difficult. • Proper handling, storage and disposal of litter and mortalities, in demarcated areas, away from foot traffic or vehicles entering and leaving the premises. 	
After Mitigation	
Extent of the Impact	1
Duration of the Impact	1
Intensity of the Impact	3
Significance of Impact = Extent of Impact + Duration of Impact + Intensity of Impact	5
Probability	1
Environmental Risk = Significance of Impact X Probability	5

Table 45: Environmental risk assessment: Resource use during operation

Activity: Usage of resources such as electricity and water.	
Aspect: Inefficient and redundant use of a valuable resource.	
Nature of Environmental Impact: Wastage/depletion of valuable resources.	
Before Mitigation	
Extent of the Impact	2
Duration of the Impact	1
Intensity of the Impact	3
Significance of Impact = Extent of Impact + Duration of Impact + Intensity of Impact	6
Probability	2
Environmental Risk = Significance of Impact X Probability	12
Objective of Mitigation Measures	
To prevent the inefficient and redundant use of valuable resources.	
Proposed Mitigation	
General	
<ul style="list-style-type: none"> • Ensure that all employees have been informed on the importance of natural resources (Proper environmental training and awareness). • Regular site inspection by supervisors. • Inspect operations regularly to determine areas of improvement with regards to resource consumption. • Regular maintenance and inspection of equipment, such as hose pipes, to prevent leaks. • Monitoring of resource consumption. • Identify areas where resource consumption can be minimised. • Set targets to try minimise resource consumption. • Identify technologies and practices which may reduce resource consumption. • Implementation of technologies and practices which can reduce resource consumption. 	
Water	



<ul style="list-style-type: none"> Regular inspection and maintenance of all boreholes, JoJo tanks, toilets, water pipes and taps. Leaking JoJo tanks, taps, toilets and pipes are to be repaired immediately. Running water taps and pipes may not be left unattended. Each time you flush the toilets approximately 20 litres of water is used, therefore use the toilets accordingly. All pipe/hose and tap connections are to be fitted with correct and appropriate plumbing fittings. 	
Electricity	
<ul style="list-style-type: none"> Save electricity by turning off lights and computers when leaving the office. Halogen light bulbs convert approximately 80% of the energy used into heat rather than light. Replace spent light bulbs with energy saving CFLs (compact fluorescent light) or newer and more efficient LEDs (light emitting diode). 	
After Mitigation	
Extent of the Impact	1
Duration of the Impact	1
Intensity of the Impact	2
Significance of Impact = Extent of Impact + Duration of Impact + Intensity of Impact	4
Probability	1
Environmental Risk = Significance of Impact X Probability	4

Table 46: Environmental risk assessment: Alien invasive vegetation

Activity: Growth of vegetation.	
Aspect: Infestation of alien invasive vegetation.	
Nature of Environmental Impact: Loss indigenous habitat and excessive water usage.	
Before Mitigation	
Extent of the Impact	2
Duration of the Impact	1
Intensity of the Impact	1
Significance of Impact = Extent of Impact + Duration of Impact + Intensity of Impact	4
Probability	2
Environmental Risk = Significance of Impact X Probability	8
Objective of Mitigation Measures	
To prevent control of alien invasive plant species	
Proposed Mitigation	
<ul style="list-style-type: none"> Ensure all alien invasive plants are identified on the site. Ensure an eradication plan for the removal of the alien invasive vegetation is developed. Ensure all alien invasive vegetation is removed from the site in accordance to the eradication plan. Alien invasive vegetation will be eradicated and controlled by manual removal, chemical application and/or biological control. The regulations in terms of the Conservation of Agricultural Resource Act, 1983 apply. 	
After Mitigation	
Extent of the Impact	1
Duration of the Impact	1
Intensity of the Impact	1
Significance of Impact = Extent of Impact + Duration of Impact + Intensity of Impact	3
Probability	1



7.3 Environmental Impact Statement and Recommendation

During the construction and operational phases, the project can be expected to have low to medium negative impacts on the various environmental attributes prior to mitigation and low negative impacts with proper mitigation measures implemented.

The project can be expected to have a positive impact on the regional and local socio-economy during the construction phase. This will be as a result of the creation of jobs as well as procurement opportunities from local suppliers in the area. These benefits can be maximised through preference in procurement processes to local firms and employment of local labourers.

Once operational, the expansion of the broiler facility will directly contribute to the local economy and indirectly to the regional and national economy. Benefits of the project outweigh the potential negative environmental and social impacts that can be mitigated to within acceptable levels.

Based on the outcomes of the risk assessments conducted as part of the EIA, coupled with the recommendations made by the EAP, the overall negative impact of the project is of **Medium to High significance** that can be reduced to **Low significance** through the implementation of simple, effective mitigation measures.

The following recommendations are thus made:-

- 1) **The project should be approved and allowed to proceed.**
- 2) **The client has identified site 1 as the preferred alternative (See Figure 62). As similar impacts would be experienced on both alternative sites, construction of the broiler houses should be approved for the preferred site (Site 1).**
- 3) **The mitigation measures proposed above that have also been incorporated into the EMP in more detail, must be implemented during the construction and operational phases.**
- 4) **A communications pathway must be established that would allow the designated ECO to accept and deal with stakeholder complaints.**
- 5) **Mitigation measures proposed above should be incorporated as far as possible into the operational plan for the development.**
- 6) **Strict monitoring and enforcement of requirements of the EMP must be undertaken to ensure that contractors and operators adhere to these requirements.**

