



KZN Agriculture and Environmental Affairs

Mnyango: eZolimo neZemvelo

SIFUNDAZWE SAKWAZULU-NATALI

Basic Assessment Report

in terms of the

Environmental Impact Assessment Regulations, 2006

Kindly note that:

1. This **basic assessment report** meets the requirements of regulation 23 of the EIA Regulations, 2006 and is meant to streamline applications.
2. The report may be typed within the spaces provided in the form. The size of the spaces provided is not necessarily indicative of the amount of information to be provided. The report is in the form of a table that can extend itself as each space is filled with typing.
3. Where applicable **cross** the boxes that are applicable or **black out** the boxes that are not applicable in the report.
4. An incomplete report will be returned to the applicant for revision.
5. The use of "not applicable" in the report must be done with circumspection because if it is used in respect of material information that is required by this department for assessing the application, it may result in the rejection of the application as provided for in the regulations.
6. The report must be compiled by an independent environmental assessment practitioner.
7. Unless protected by law, all information in the report will become public information on receipt by this department. Any interested and affected party should be provided with the information contained in this report on request, during any stage of the application process.
8. This department may require that for specified types of activities in defined situations only parts of this report need to be completed. In addition, if it is clear to the EAP that because of the particular circumstances of the case it is not sensible to complete any of the sections indicated under paragraph 3 of this report, he or she may apply for exemption from completing that part of the report in the spaces provided in the report. It must however be noted that if the application for exemption is turned down, the report may have to be resubmitted.
9. No faxed or e-mailed reports will be accepted.
10. This application must be handed in or posted to the appropriate Regional Office of the KwaZulu-Natal Department of Agriculture and Environmental Affairs at one of the following addresses:

- **FOR APPLICATIONS IN NORTHERN KWAZULU-NATAL** (Amajuba, Umkhanyakude, Uthungulu, Umzinyathi and Zululand District Municipalities)

Environment: North Region
KwaZulu Natal Department of Agriculture and Environmental Affairs
Private Bag X1048
RICHARDS BAY
3900

4th Floor ABSA Building
Lakeview Terrace
RICHARDS BAY

Contact Person: Ms Zama Mbanjwa
Telephone No.: (035) 780 6765

Department of Agriculture & Environmental Affairs, KwaZulu-Natal	Basic Assessment Report Version 6, August 2007	Page 1 of 40
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- **FOR APPLICATIONS IN SOUTHERN KWAZULU-NATAL** (Ethekwini Metro, Ilembe, Sisonke, Ugu, Umgungundlovu and Uthukela District Municipalities):

Environment: South Region
KwaZulu-Natal Department of Agriculture and Environmental Affairs
Private Bag X6005
HILTON
3245

A Block
4 Pin Oak Avenue
HILTON

Contact Person: Ms Mavis Padayachee
Telephone No.: (033) 343 8428

COMPLETION OF THIS REPORT

Please indicate the numbers of the sections of this report that have not been completed:

Section C:	6(a)	6(b)	6(c)	6(d)	7	8	9(c)	9(e)	9(f)	9(g)	9(h)	11
Section D:	1	2	3	4	5	6						
Section E:	1(a)	1(b)	1(c)	1(d)	1(f)	1(g)	3					

Provide detailed reasons for not completing the sections indicated:

Section	Reasons for not completing

SECTION A: APPLICATION FOR EXEMPTION

Please provide details regarding any application for exemption from the requirements of the EIA Regulations, 2006:		
Has an application for exemption been submitted to the Department?		NO
Has an Exemption Notice in respect of an application for exemption been issued?		NO
Is a copy of the Exemption Notice attached to this report?		NO

SECTION B: DETAILS OF THE ENVIRONMENTAL ASSESSMENT PRACTITIONER AND SPECIALISTS

1. NAME AND CONTACT DETAILS OF ENVIRONMENTAL ASSESSMENT PRACTITIONER (EAP)

Name and contact details of the EAP who prepared this report:

Business name of EAP:	INDiflora cc Environmental Services		
Physical address:	3 Neptune Road, Westville		
Postal address:	P.O. Box 30657, MAYVILLE		
Postal code:	4058	Cell:	Johan 082 577 0898 Sue 082 961 5750
Telephone:	031 266 1106	Fax:	086 6203 204
E-mail:	joan@indiflora.co.za sue@indiflora.co.za		

2. NAMES AND EXPERTISE OF REPRESENTATIVES OF THE EAP

Names and details of the expertise of each representative of the EAP involved in the preparation of this report:

Name of representative of the EAP	Educational qualifications	Experience at environmental assessments (yrs)
Johan Bodenstein	ND Horticulture, ND Nature Conservation, B Tech Nature Conservation	8yrs
Sue George	NHDip Architectural Technician BA (Environmental Management)	2yrs

3. NAMES AND EXPERTISE OF SPECIALISTS

Names and details of the expertise of each specialist that has contributed to this report:

Name of specialist	Educational qualifications	Experience in field of expertise
Mike van Der Merwe - WSP Noise and Health Assessments	Masters of Public Health UKZN B Tech Environmental Health Technikon Natal	18 years
Brian Stone Civil Engineering	National Diploma in Technology Civil Engineering, Water Registered Professional Technologist	30 years
Rupert Sebire – Geomeasure Group - Principle Geologist	BSc (Hons) Hydro & Engineering Geology - Univ of Bristol UK	15 years
Taryn Wicks – Geomeasure Group Geohydrologist	BSc Geology UKZN BSc Hons Geohydrology UOFS	5 years

SECTION C: ACTIVITY INFORMATION

1. PROJECT INFORMATION

a. Project title

Emeraldene Poultry Farm Expansion

b. Project description

Describe your project in detail:

The owner of the existing Emeraldene Poultry Farm, comprising two laying houses, an egg packaging operation, and ancillary activities on The Farm Rencken No 17364, and four rearing houses and ancillary activities on Portion 11 of the Farm MacCorkindale's Grant No 1810 (hereinafter referred to as MacCork), represented by the landowner Kurt Rencken, is proposing to develop two new laying houses and a mill for poultry feed production on The Farm Rencken No 17364 (Rem of Lot W No. 2981), with associated infrastructural services on the applicant site.

The Emeraldene Poultry Farm operation has been in progress since 1964, prior to the establishment of the town in 1969. In 1994 two open poultry sheds were constructed which allowed open contact with the surroundings, in that dust, smell, feathers, sound, etc. were visible/heard/smelt by passers by. This also allowed wild birds to enter the houses. Migratory and wild birds carry diseases and have played a role in the transmission of Avian Influenza. Likewise insects and rats could freely enter these houses.

The Emeraldene Poultry Farm properties known as The Farm Rencken No 17364 (previously known as Rem of Lot W No 2891), 4,2313Ha in extent, and Portion 11 of the Farm MacCorkindale's Grant No 1810, 4,3240Ha in extent, are situated on agricultural land outside of the existing Nkwazi (Zinkwazi)Town Planning Scheme.

The applicant site, The Farm Rencken No 17364, is located east of the N2 (from Durban to Richards Bay). The site is situated immediately south of and adjacent the P403 to Zinkwazi approximately 2km from the town, and the rearing farm situated on Portion 11 of the Farm MacCorkindale's Grant No 1810 is located west of the N2 and immediately south of District Road P111 approximately 1km from the R102/P111 intersection.

Historically layers were hatched and grown at Emeraldene with the improvement of technology and the expansion of the operation it became necessary to separate the rearing flock and the laying flock to minimise the risk of disease and contamination which resulted in the farm at MacCork being purchased in 2006.

In 2005 two new European style 'Closed' poultry houses at an investment of R26 million were established at Emeraldene to streamline the operation and provide the best bio-security possible and an egg packaging facility was introduced.

There are presently four rearing houses located at MacCork which supply 13000 chickens on a 6 weekly rotation to the laying houses at Emeraldene where there is capacity for 100 000 chickens.

The farmer now wishes to expand the operation by establishing two additional laying houses at Emeraldene as well as his own feed mill. This will involve the importing of raw material(grains) to be milled and blended on site to feed directly into the laying houses and to supply the rearing houses at Mac Cork

A by-product of the operation is chicken litter which is disposed of by sale to commercial compost end users who supply surrounding cane farmers and nurseries.

The farm is managed according to veterinary health, environmental health, best farm management practice, staff welfare and on sound economical, marketing and financial principles. The farm is visited monthly by a registered vet who certifies the farm operation. Certification includes that the flocks are run according to strict control programmes designed to detect, control and prevent infectious diseases. In addition the farm is inspected by officials of the National Department of agriculture under the Agricultural Products Standards Act 119 of 1990 who have commented that the farm has continually improved on

the quality management systems ensuring compliance within regulatory parameters of the government legislation. This department is in support of the proposed expansion.

Eggs, a basic food source to the population, are distributed along the central KZN Coast from Umlazi to Mkuze. Retired layers provide a chicken meat supply to local buyers who purchase directly from the farm.

Presently maize is delivered 3 -4 times a week in 30 ton lorries.

Water is supplied to the poultry farm by means of boreholes (in the process of being registered with the Department of Water Affairs and Forestry in terms of the National Water Act). The farms are serviced by, reticulated electricity (Eskom), an engineered stormwater control system, septic tanks for the disposal of domestic sewage and gravel access roads. Manure/chicken litter from the operations is utilised for composting by contractors off site and compost supply to nurseries.

2. ACTIVITY DESCRIPTION

Describe the activity / activities which is / are being applied for in detail:

Activities applied for:

(please list all the activities applied for)

Indicate the number and date of the relevant notice:	Activity No (s) (in terms of the relevant notice) :	Describe each listed activity:
Notice R386 dated 21 April 2006	1 (j)	The construction of facilities or infrastructure, including associated structures or infrastructure, for (j) agri-industrial purposes, outside areas with an existing land-use zoning for industrial purposes, that cover an area of 1000 square metres or more
Notice R386 dated 21 April 2006	1 (k)	The bulk transportation of sewage and water, including stormwater, in pipelines with – (i) an internal diameter of 0,36 or more; or a peak throughput of 120 litres per second or more
Notice R386 dated 21 April 2006	1 (h) (v)	The construction of facilities or infrastructure, including associated structures or infrastructure, for (h) the concentration of animals for the purpose of commercial production in densities that exceed (v) three square metres per head of poultry and more than 250 poultry per facility at any time, excluding chicks younger than 20 days
Notice R386 dated 21 April 2006	13.	The abstraction of groundwater at a volume where any general authorisation issued in terms of the National Water Act, 1998 (Act No. 36 of 1998) will be exceeded.

3. ALTERNATIVES

Describe alternatives that are considered in this application. Consideration of alternatives must not be limited to site and layout alternatives only. Alternatives assessed must include the consideration of alternative technologies, processes and activities by means of which the objectives of the proposed project may be achieved. The no-go alternative must in all cases be included in the assessment phase as the baseline against which the impacts of the other alternatives are assessed. The determination of whether site or activity (including different processes etc.) or both is appropriate needs to be informed by the specific circumstances of the activity and its environment. After receipt of this report the competent authority may also request the applicant to assess additional alternatives that could possibly accomplish the purpose and need of the proposed activity if it is clear that realistic alternatives have not been considered to a reasonable extent for informed decision making.

2(a) Site alternatives:

Describe site alternative 1 (S1), (**selected site**) for the activity described above, or for any other activity alternative:

The Farm Rencken 17364 (previously known as Rem of Lot W No. 2891) located approximately 1.5km east of the N2 north/south and 2km from the town of Zinkwazi on the P403 and occupied by the existing 2 laying houses, packing shed and labourers accommodation

Describe site alternative 2 (S2), if any, for the activity described above, or for any other activity alternative:

Portion 11 (of 1) of the Farm MacCorkindale's Grant No 1810 located west of the N2 and immediately south of District Road P111 and approximately 1km from the R102/P111 intersection occupied by the 2 existing Rearing Houses

Describe site alternative 3 (S3), **if any**, for the activity described above, or for any other activity alternative:

NIL

2(b) Layout alternatives:

Describe layout alternative 1 (L1), **if any** for the activity described above, or for any other activity alternative:

Describe layout alternative 2 (L2), **if any**, for the activity described above, or for any other activity alternative:

Describe layout alternative 3 (L3), **if any**, for the activity described above, or for any other activity alternative:

2(c) Process (technology) alternatives:

Describe site alternative 1 (P1), **if any** for the activity described above, or for any other activity alternative:

Describe site alternative 2 (P2), **if any**, for the activity described above, or for any other activity alternative:

Describe site alternative 3 (P3), **if any**, for the activity described above, or for any other activity alternative:

4. ACTIVITY POSITION

Indicate the position of the activity using the latitude and longitude of the centre point of the site for each alternative site. The co-ordinates should be in degrees and decimal minutes. The minutes should have at least three decimals to ensure adequate accuracy. The projection that must be used in all cases is the WGS84 spheroid in a national or local projection.

Alternative:

Alternative S1¹ (preferred site alternative Farm Rencken)

Alternative S2 (Mac Corkindale)

Alternative S3 (if any) NIL

Latitude (S):

Longitude (E):

29°	16 '	31°	24 '
29°	15 '	31°	23 '
°	'	°	'

In the case of linear activities: NOT APPLICABLE

Alternative:

Alternative S1 (preferred or only route alternative)

- Starting point of the activity
- End point of the activity

Alternative S2 (if any)

- Starting point of the activity
- End point of the activity

Alternative S3 (if any)

- Starting point of the activity
- End point of the activity

Latitude (S):

Longitude (E):

°	'	°	'
°	'	°	'
°	'	°	'
°	'	°	'

For route alternatives that are longer than 500m, please provide an addendum with co-ordinates taken every 500 meters along the route for each alternative alignment.

5. PHYSICAL SIZE OF THE ACTIVITY

Indicate the physical size of the proposed activity as related to layout alternatives:

Alternative:

Alternative L1² (preferred layout alternative)

Alternative L2 (if any)

Alternative L3 (if any)

Size of the layout:

8000m ²
m ²
m ²

¹ "Alternative S.." refer to site alternatives.

² "Alternative A.." refer to activity, process, technology or other alternatives.

or, for linear activities: **NOT APPLICABLE**

Alternative:

Alternative L1 (**preferred layout alternative**)

Alternative L2 (**if any**)

Alternative L3 (**if any**)

Length of the activity:

	m
	m
	m

Indicate the size of the alternative sites or servitudes (within which the above footprints will occur): **NOT APPLICABLE**

Alternative:

Alternative S1 (**preferred site alternative**)

Alternative S2 (**if any**)

Alternative S3 (**if any**)

Size of the site/servitude:

	m ²
	m ²
	m ²

6. SITE ACCESS

Does ready access to the site exist, or is access directly from an existing road?

YES

If NO, what is the distance over which a new access road will be built

N/A m

Describe the type of access road planned:

The access road in the case of both alternatives is an existing gravel road (±50m) off the existing provincial tar road. The access is typical for agricultural activities and it is planned to continue use of the road as is. The marginal increase in traffic to and from the farm as a result of the expansion of the operation is not anticipated to result in any negative impact on the access road.

Include the position of the access road on the site plan.

7. WASTE, EFFLUENT AND NOISE MANAGEMENT

Please note that the following environmental issues must be described for each alternative site, layout and process.

a. Solid waste management

Will the activity produce solid waste during the construction/initiation phase?

YES

If yes, what estimated quantity will be produced per month?

15 m³

How will the construction solid waste be disposed of (describe)?

The construction solid waste will be stored on site in skips then loaded into a truck and taken to a registered landfill in accordance with the requirements of the Environmental Management Plan for the Construction phase (CEMP)

Where will the construction solid waste be disposed of (describe)?

New Guelderland landfill

Will the activity produce solid waste during its operational phase?

YES

If yes, what estimated quantity will be produced per month?

180 m³

How will the solid waste be disposed of (describe)?

The solid waste generated by the poultry farm activity is primarily chicken litter which is loaded into a tip truck and taken to a registered landfill or collected by outside contractors/nurserymen/farmers to make compost. An ordinary amount of domestic solid waste

Where will the solid waste be disposed if it does not feed into a municipal waste stream (describe)?

The solid waste (chicken litter) can feed into the municipal waste stream via the landfill or be supplied to outside contractors/farmers for utilization as compost.

If the solid waste (construction or operational phases) will not be disposed of in a registered landfill site or be taken up in a municipal waste stream, this must be brought to the attention of the competent authority.

Can any part of the solid waste be classified as hazardous in terms of the relevant legislation?

NO

If yes, inform the competent authority and request a change to an application for scoping and EIA.

Is the activity that is being applied for, for that of a solid waste handling or treatment facility?

NO

If yes, the applicant must consult with the competent authority to determine whether it is necessary to change to an application for scoping and EIA.

Describe the measures, if any, that will be taken to ensure the optimal reuse or recycling of materials:

The manure/chicken litter generated by the activity is to be utilized for composting where possible – the operation has low potential for recycling of materials, packaging from the egg supply would need to be recycled by end-use consumers.

Has a specialist been consulted to assist with the completion of this section?

YES

If YES, please complete:

Name of the specialist:

Brian Stone

Qualification(s) of the specialist:

N Dip Tech Civil Engineering

Postal address:

Pvt Bag 001, Darnall

Postal code:

4480

Telephone: Cell:
 E-mail: Fax:
 Are any further specialist studies recommended by the specialist? YES NO
 If YES, specify:
 If YES, is such a report(s) attached? YES NO

Signature of specialist: _____ Date:

b. Liquid effluent

Will the activity produce effluent, other than domestic sewage? YES NO
 If yes, what estimated quantity will be produced per month? m³
 If not, how will this effluent be disposed of?

Will the activity produce any effluent that will be treated and/or disposed of on site? YES NO
 If yes, the applicant should consult with the competent authority to determine whether it is necessary to change to an application for scoping and EIA.
 Will the activity produce effluent that will be treated and/or disposed of at another facility? YES NO
 If yes, provide the particulars of the facility:

Facility name:
 Contact person:
 Postal address:
 Postal code:
 Telephone: Cell:
 E-mail: Fax:

Describe the measures that will be taken to ensure the optimal reuse or recycling of waste water, if any:

Has a specialist been consulted to assist with the completion of this section? YES NO

If YES, please complete:
 Name of the specialist:
 Qualification(s) of the specialist:
 Postal address:
 Postal code:
 Telephone: Cell:
 E-mail: Fax:

Are any further specialist studies recommended by the specialist? YES NO
 If YES, specify:
 If YES, is such a report(s) attached? YES NO

Signature of specialist: _____ Date:

c. Emissions into the atmosphere

Will the activity release emissions into the atmosphere? YES NO
 If yes, is it controlled by any legislation of any sphere of government? YES NO
 If yes, the applicant should consult with the competent authority to determine whether it is necessary to change to an application for scoping and EIA.
 If no, describe the emissions in terms of type and concentration:

Concern was expressed, by I & AP's responding to the BID, regarding odour and flies resulting in the undertaking of an Environmental Health Impact Assessment by WSP which concluded that Emeraldene Poultry Farm had implemented state of the art technology designed to limit the exposure of chicken manure to excess moisture which would result in odour and flies. The fly infestation and odour were not found to constitute a nuisance to neighbours at the time of the assessment

Has a specialist been consulted to assist with the completion of this section? YES NO

If YES, please complete:
 Name of the specialist:
 Qualification(s) of the specialist:
 Postal address:
 Postal code:
 Telephone: Cell:
 E-mail: Fax:

Are any further specialist studies recommended by the specialist? YES NO
 If YES, specify:
 If YES, is such a report(s) attached? YES NO

Signature of specialist: _____ Date:

d. Generation of noise

Will the activity generate noise?

YES	<input type="checkbox"/>
YES	<input type="checkbox"/>

If yes, is it controlled by any legislation of any sphere of government?

If yes, the applicant should consult with the competent authority to determine whether it is necessary to change to an application for scoping and EIA.

If no, describe the noise in terms of type and level:

The noise assessment conducted by WSP recommend that the calculated and predicted noise levels from the proposed feed mill and pellet plant will be confined to their own premises. The pellet plant is expected to run for 100% of the day and the feed mill for 30% of the operational day. The noise impact of the proposed feed mill and or pellet plant is therefore not considered to be significant

Has a specialist been consulted to assist with the completion of this section?

YES	<input type="checkbox"/>
-----	--------------------------

If YES, please complete:

Name of the specialist:

Michael van der Merwe WSP Environmental (Pty) Ltd

Qualification(s) of the specialist:

Masters of Public Health UKZN BTech Environmental Health

Postal address:

P.O. Box 689, Hilton

Postal code:

3245

Telephone:

033 347 5391

Cell:

076 208 3293

E-mail:

Michael.vanderMerwe@wspgroup.co.za

Fax:

033 347 5391

Are any further specialist studies recommended by the specialist?

NO

If YES, specify:

Noise Impact Assessment attached at Appendix D Specialist Reports

If YES, is such a report(s) attached?

YES	<input type="checkbox"/>
-----	--------------------------

Signature of specialist: _____

Date:

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8. WATER USE

Please note that the following issue must be described for each alternative site, layout and process.

Please indicate the source(s) of water that will be used for the activity by crossing the appropriate box(es)

municipal	water board	Groundwater X	river, stream, dam or lake	other	the activity will not use water
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If water is to be extracted from groundwater, river, stream, dam, lake or any other natural feature, please indicate the volume that will be extracted per month:

1100 kilo litres

Does the activity require a water use permit from the Department of Water Affairs and Forestry?

YES

If yes, please submit the necessary application to the Department of Water Affairs and Forestry and attach proof thereof to this application if it has been submitted. **ATTACHED SEE APPENDIX G OTHER INFORMATION**

9. ENERGY EFFICIENCY

Please note that the following issue must be described for each alternative site, layout and process.

Describe the design measures, if any, that have been taken to ensure that the activity is energy efficient:

'State of the Art' technology from Germany is used which maximizes efficiency in respect of all aspects of the activity

Describe how alternative energy sources have been taken into account or been built into the design of the activity, if any:

The possibility of incorporating solar water heating into farm and staff accommodation is under consideration

10. SITE OR ROUTE PLAN

A detailed site or route plan(s) must be prepared for each alternative site or alternative activity. It must be attached as Appendix A to this document. The site or route plans must indicate the following:

- 10(a) the scale of the plan (appropriate to the extent of the development);
- 10(b) the property boundaries and erf or farm numbers of the adjoining properties;
- 10(c) the current land use as well as the land use zoning of each of the properties adjoining the site or sites;
- 10(d) the position of each element of the application as well as any other structures on the site;
- 10(e) the position of services (e.g. electricity supply cables, water supply pipelines, boreholes, sewage pipelines and storm water infrastructure) including servitudes and the purpose of such servitudes;
- 10(f) sensitive environmental elements on the site/s and within 100m of the site/s including (but not limited thereto):
 - Rivers, streams and drainage lines;
 - wetlands;
 - the 1:100 year flood line (where available or where it is required by DWAF);
 - ridges;
 - cultural and historical features;
 - areas with indigenous vegetation including protected plant species (even if it is degraded or invested with alien species);
- 10(g) contour intervals appropriate to the scale of the development must be indicated on the plan; and
- 10(h) the positions from where photographs of the site were taken must be indicated.
- 10(i) a detailed viewshed illustration (where appropriate)

11. SITE PHOTOGRAPHS

Colour photographs must include important features of the site and a description of each photograph must be provided. Photographs must be attached under Appendix B to this form.

12. ACTIVITY MOTIVATION

12(a) Socio-economic value of the activity

What is the expected capital value of the activity on completion?

What is the expected yearly income that will be generated by or as a result of the activity?

Will the activity contribute to service infrastructure?

Is the activity a public amenity?

How many new employment opportunities will be created in the development phase of the activity?

What is the expected value of the employment opportunities during the development phase?

What percentage of this will accrue to previously disadvantaged individuals?

How many permanent new employment opportunities will be created during the operational phase of the activity?

What is the expected current value of the employment opportunities during the first 10 years?

What percentage of this will accrue to previously disadvantaged individuals?

R10 – R12 million	
R 2.5 million	
	NO
	NO
25 labourers	
R10 0000 – R 15 0000 per month	
	100%
	10
R120 000 p/a escalated at 10% p/a R1.9 million	
	100%

12(b) Need and desirability of the activity

Motivate and explain the need and desirability of the activity (including demand for the activity):

The Need to expand the operation is to meet the growth in the regional customer base. It is desirable to expand this operation as it is an established operation which has been in existence for several years with an established supply network and providing an essential food source to locals and regional retailers. It is an agricultural activity on agricultural land with a limited footprint resulting from its 'state of the art' technology, and located within good proximity to transport networks. The demand has been created by 4 -5 new retailers having been established within the existing supply area who are requesting product (eggs) and existing retailers who are requesting additional supply.

Indicate any benefits that the activity will have for society in general:

The proposed expansion of the poultry farm will provide additional eggs to the region of distribution, the supply of spent layers as a food source (chickens) to the local community and to supply chicken litter as a compost additive to the surrounding agricultural community.

Indicate any benefits that the activity will have for the local communities where the activity will be located:

Temporary employment opportunities will be created during the construction phase of the project. An additional 10 employment opportunities will be created in the operational phase. The local communities will have ready access to spent layers as a food source, and the local agricultural community will be able to utilize the chicken litter as an organic compost additive.

13. APPLICABLE LEGISLATION, POLICIES AND/OR GUIDELINES

List all legislation, policies and/or guidelines of any sphere of government that are applicable to the application as contemplated in the EIA regulations, if applicable:

Title of legislation, policy or guideline:

Administering authority:

Date:

The Constitution (as amended)		Act 108 of 1996
National Environmental Management Act (NEMA) & The National Environmental Management Amendment Act	Department of Agriculture and Environmental Affairs	Act 107 of 1998 & Act 8 of 2004
National Environmental Management: Biodiversity Act (NEMBA)	eZemvelo KZN Wildlife	Act 10 of 2004
National Environmental Management: Air Quality Act	Directorate: Air Quality Management (DEAT)	Act 39 of 2004
Environmental Conservation Act (ECA)	Department of Agriculture and Environmental Affairs	Act 73 of 1989
Natal Nature Conservation Ordinance	eZemvelo KZN Wildlife	Act 15 of 1974
National Water Act (NWA)	Department of Water Affairs and Forestry	Act 36 of 1998
Subdivision of Agricultural Land Act (70 of 70)	National Department of Agriculture	Act 70 of 1970
Conservation of Agricultural Resources Act (CARA)	Department of Water Affairs and Forestry	Act 43 of 1983
Agricultural Products Standards Act (APS)	National Department of Agriculture	Act 119 of 1990
National Forests Act	Department of Water Affairs	Act 84 of
Department of Agriculture & Environmental Affairs, KwaZulu-Natal	Basic Assessment Report Version 6, August 2007	Page 11 of 40

	and Forestry	1998
National Heritage Resources Act	South African Heritage Resources Agency	Act 25 of 1999
KwaZulu Natal Heritage Act	AMAFA aKwaZulu Natali	Act 10 of 1997
Restitution of Land Rights Act	Regional Land Claims Commission	Act 22 of 1994
Removal of Restrictions Act	Department of Traditional and Local Government Affairs	Act 84 of 1967
Atmospheric Pollution Prevention Act	Department of Environmental Affairs and Tourism and Department of Trade and Industry	Act 45 of 1965
Labour Relations Act	Department of Labour	Act 66 of 1995
Basic Conditions of Employment Act	Department of Labour	Act 75 of 1997
Occupational Health and Safety Act	Department of Labour	Act 85 of 1993
Hazardous Substances Act	Department of Health, Welfare and Pensions	Act 15 of 1973
Town Planning Ordinance	Department of Traditional and Local Government Affairs	Ordinance 27 of 1949

SECTION D: SITE/AREA DESCRIPTION

Important note: For linear activities (pipelines etc) as well as activities that cover very large sites, it may be necessary to complete Section C for each part of the site that has a significantly different environment. In such cases please complete copies of Section C and indicate the area, which is covered by each copy No. on the Site Plan.

Section C Copy No. (e.g. A):

(complete only when appropriate)

1. GRADIENT OF THE SITE

Indicate the general gradient of the sites (**Please cross the appropriate box**).

Alternative S1 (preferred site):

Flat	1:50 – 1:20 X	1:20 – 1:15	1:15 – 1:10	1:10 – 1:7,5	1:7,5 – 1:5	Steeper than 1:5
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Alternative S2 (if any):

Flat	1:50 – 1:20	1:20 – 1:15 X	1:15 – 1:10	1:10 – 1:7,5	1:7,5 – 1:5	Steeper than 1:5
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Alternative S3 (if any):

Flat	1:50 – 1:20	1:20 – 1:15	1:15 – 1:10	1:10 – 1:7,5	1:7,5 – 1:5	Steeper than 1:5
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2. LOCATION IN LANDSCAPE

Indicate the landform(s) that best describes the site (**Please cross the appropriate box**).

Alternative S1 (preferred site):

Ridgeline	Plateau	Side slope of hill/mountain	Closed valley	Open valley	Plain	Undulating plain/low hills X	Dune	Sea-front
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Alternative S2 (if any):

Ridgeline	Plateau	Side slope of hill/mountain	Closed valley	Open valley	Plain	Undulating plain/low hills X	Dune	Sea-front
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Alternative S3 (if any):

Ridgeline	Plateau	Side slope of hill/mountain	Closed valley	Open valley	Plain	Undulating plain/low hills	Dune	Sea-front
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3. GROUNDWATER, SOIL AND GEOLOGICAL STABILITY OF THE SITE

Is the site(s) located on any of the following (**cross the appropriate boxes**)?

	Alternative S1 (preferred site):		Alternative S2 (if any):		Alternative S3 (if any):	
	YES	NO X	YES	NO X	YES	NO
Shallow water table (less than 1.5m deep)	YES	NO X	YES	NO X	YES	NO
Dolomite, sinkhole or doline areas	YES	NO X	YES	NO X	YES	NO
Seasonally wet soils (often close to water bodies)	YES	NO X	YES	NO X	YES	NO
Unstable rocky slopes or steep slopes with loose soil	YES	NO X	YES	NO X	YES	NO
Dispersive soils (soils that dissolve in water)	YES	NO X	YES	NO X	YES	NO
Soils with high clay content (clay fraction more than 40%)	YES	NO X	YES	NO X	YES	NO
Any other unstable soil or geological feature	YES	NO X	YES	NO X	YES	NO
An area sensitive to erosion	YES	NO X	YES	NO X	YES	NO

If you are unsure about any of the above or if you are concerned that any of the above aspects may be an issue of concern in the application, an appropriate specialist should be appointed to assist in the completion of this section. (Information in respect of the above will often be available as part of the project information or at the planning sections of local authorities. Where available / they exist, the 1:50 000 scale Regional Geotechnical Maps prepared by the Council for Geo Science may also be consulted).

Has a specialist been consulted to assist with the completion of this section? YES NO

If YES, please complete:

Name of the specialist:

Qualification(s) of the specialist:

Postal address:

Postal code:

Telephone:

E-mail:

Cell:

Fax:

Are any further specialist studies recommended by the specialist? YES NO

If YES, specify:

If YES, is such a report(s) attached? YES NO

Signature of specialist: _____ Date:

4. GROUNDCOVER

Cross the types of groundcover present on the site.

Alternative S1:

Natural veld - good condition ^E	Natural veld with scattered aliens ^E	Natural veld with heavy alien infestation ^E	Veld dominated by alien species ^E	Gardens
Sport field	Cultivated land X	Paved surface X	Building or other structure X	Bare soil X

If any of the boxes marked with an "E" are crossed, please consult an appropriate specialist to assist in the completion of this section if the environmental assessment practitioner doesn't have the necessary expertise. The environmental assessment practitioner or specialist must provide reasons for their selection above in the following box:

Has a specialist been consulted? YES NO

If YES, please complete the following:

Name of the specialist: **Johan Bodenstien**

Qualification(s) of the specialist: **ND Horticulture, ND Nature Conservation, B Tech Nature Conservation**

Postal address: **P.O. Box 30657 Mayville**

Postal code: **4058**

Telephone: **031 266 1106** Cell: **082 577 0898**

E-mail: **johan@indiflora.co.za** Fax: **031 266 9017**

Are there any rare or endangered flora or fauna species (including red data species) present on any of the alternative sites? YES NO

If YES, specify and explain:

Are there any special or sensitive habitats or other natural features present on any of the alternative sites? YES NO

If YES, specify and explain: **EKZNW C-Plan shows area as transformed**

Are any further specialist studies recommended by the specialist? YES NO

If YES, specify:

If YES, is such a report(s) attached? YES NO

Signature of specialist: _____ Date:

The location of all identified rare or endangered species or other elements should be accurately indicated on the site plan(s).

Alternative S2:

Natural veld - good condition ^E	Natural veld with scattered aliens ^E	Natural veld with heavy alien infestation ^E	Veld dominated by alien species ^E	Gardens X
Sport field	Cultivated land X	Paved surface X	Building or other structure X	Bare soil X

If any of the boxes marked with an "E" are crossed, please consult an appropriate specialist to assist in the completion of this section if the environmental assessment practitioner doesn't have the necessary expertise. The environmental assessment practitioner or specialist must provide reasons for their selection above in the following box:

Has a specialist been consulted? **YES**

If YES, please complete the following:

Name of the specialist:	Johan Bodenstein		
Qualification(s) of the specialist:	ND Horticulture, ND Nature Conservation, B Tech Nature Conservation		
Postal address:	P.O. Box 30657 Mayville		
Postal code:	4058		
Telephone:	031 266 1106	Cell:	082 577 0898
E-mail:	johan@indiflora.co.za	Fax:	031 266 9017

Are there any rare or endangered flora or fauna species (including red data species) present on any of the alternative sites? **NO**

If YES, specify and explain: **EKZNW C –Plan indicates area as transformed**

Are there any special or sensitive habitats or other natural features present on any of the alternative sites? **NO**

If YES, specify and explain:

Are any further specialist studies recommended by the specialist? **NO**

If YES, specify:

If YES, is such a report(s) attached? **YES** **NO**

Signature of specialist: _____ Date: _____

The location of all identified rare or endangered species or other elements should be accurately indicated on the site plan(s).

Alternative S3: NOT APPLICABLE

Natural veld - good condition ^E	Natural veld with scattered aliens ^E	Natural veld with heavy alien infestation ^E	Veld dominated by alien species ^E	Gardens
Sport field	Cultivated land	Paved surface	Building or other structure	Bare soil

If any of the boxes marked with an "E" are crossed, please consult an appropriate specialist to assist in the completion of this section if the environmental assessment practitioner doesn't have the necessary expertise. The environmental assessment practitioner or specialist must provide reasons for their selection above in the following box:

Has a specialist been consulted? **YES** **NO**

If YES, please complete the following:

Name of the specialist:			
Qualification(s) of the specialist:			
Postal address:			
Postal code:			
Telephone:		Cell:	
E-mail:		Fax:	

Are there any rare or endangered flora or fauna species (including red data species) present on any of the alternative sites? **YES** **NO**

If YES, specify and explain:

Are there any special or sensitive habitats or other natural features present on any of the alternative sites? **YES** **NO**

If YES, specify and explain: _____

Are any further specialist studies recommended by the specialist? YES NO

If YES, specify: _____

If YES, is such a report(s) attached? YES NO

Signature of specialist: _____ Date: _____

The location of all identified rare or endangered species or other elements should be accurately indicated on the site plan(s).

5. LAND USE CHARACTER OF SURROUNDING AREA

Cross the land uses and/or prominent features that currently occur within a 500m radius of the site
Alternative S1 (preferred site):

Natural area X	Low density residential	Medium density residential	High density residential	Informal residential ^A
Retail	Commercial & warehousing	Light industrial	Medium industrial ^{AN}	Heavy industrial ^{AN}
Power station ^A	Office/consulting room	Military or police base/station/compound	Casino/entertainment complex	Hospitality facility
Open cast mine	Underground mine	Spoil heap or slimes dam ^A	Quarry, sand or borrow pit	Dam or reservoir
Hospital/medical center/clinic	School/creche	Tertiary education facility	Church	Old age home
Sewage treatment plant ^A	Train station or shunting yard ^N	Railway line ^N	Major road (4 lanes or more) ^N	Airport ^N
Harbour	Sport facilities	Golf course	Polo fields	Filling station ^H
Landfill or waste treatment site ^A	Plantation	Agriculture X	River, stream or wetland	Nature conservation area
Mountain, koppie or ridge	Museum	Historical building	Graveyard	Archeological site
Other land uses (describe):	Agricultural Homesteads			

If any of the boxes marked with an ^{AN} are crossed, please consult an appropriate noise specialist to assist in the completion of this section.

Has a specialist been consulted? YES NO

If YES, please complete the following:

Name of the specialist: _____

Qualification(s) of the specialist: _____

Postal address: _____

Postal code: _____

Telephone: _____ Cell: _____

E-mail: _____ Fax: _____

Will the ambient noise level have a negative impact on the proposed activity? YES NO

If YES, specify and explain: _____

Are any further specialist or studies recommended by the specialist? YES NO

If YES, specify: _____

If YES, is such a report(s) attached? YES NO

Signature of specialist: _____ Date: _____

If any of the boxes marked with an ^A are crossed, please consult an appropriate air quality specialist to assist in the completion of this section.

Has a specialist been consulted? YES NO

If YES, please complete the following:

Name of the specialist: _____

Qualification(s) of the specialist: _____

Postal address: _____

Postal code: _____

Telephone: _____ Cell: _____

E-mail: _____ Fax: _____

Will the ambient air pollution level have a negative impact on the proposed activity? YES NO

If YES, specify and explain: _____

Are any further specialist studies recommended by the specialist? YES NO

If YES, specify: _____

If YES, is such a report(s) attached?

YES	NO
-----	----

Signature of specialist: _____ Date: _____

If any of the boxes marked with an ^{“H”} are crossed, please consult an appropriate health assessment specialist to assist in the completion of this section.

Has a specialist been consulted? YES NO

If YES, please complete the following:

Name of the specialist: _____
 Qualification(s) of the specialist: _____
 Postal address: _____
 Postal code: _____
 Telephone: _____ Cell: _____
 E-mail: _____ Fax: _____

Will the surrounding land use pose any unacceptable health risk on the proposed activity? YES NO

If YES, specify and explain: _____

Are any further specialist studies recommended by the specialist? YES NO

If YES, specify: _____

If YES, is such a report(s) attached? YES NO

Signature of specialist: _____ Date: _____

Alternative S2 (if any):

Natural area	Low density residential	Medium density residential	High density residential	Informal residential ^A
Retail	Commercial & warehousing	Light industrial	Medium industrial ^{AN}	Heavy industrial ^{AN}
Power station ^A	Office/consulting room	Military or police base/station/compound	Casino/entertainment complex	Hospitality facility
Open cast mine	Underground mine	Spoil heap or slimes dam ^A	Quarry, sand or borrow pit	Dam or reservoir
Hospital/medical center/clinic	School/creche	Tertiary education facility	Church	Old age home
Sewage treatment plant ^A	Train station or shunting yard ^N	Railway line^N X	Major road (4 lanes or more) ^N	Airport ^N
Harbour	Sport facilities	Golf course	Polo fields	Filling station ^H
Landfill or waste treatment site ^A	Plantation	Agriculture X	River, stream or wetland X	Nature conservation area
Mountain, koppie or ridge	Museum	Historical building X	Graveyard	Archeological site
Other land uses (describe):	Agricultural Homestead			

If any of the boxes marked with an ^{“N”} are crossed, please consult an appropriate noise specialist to assist in the completion of this section.

Has a specialist been consulted? YES NO

If YES, please complete the following:

Name of the specialist: _____
 Qualification(s) of the specialist: _____
 Postal address: _____
 Postal code: _____
 Telephone: _____ Cell: _____
 E-mail: _____ Fax: _____

Will the ambient noise level have a negative impact on the proposed activity? YES NO

If YES, specify and explain: _____

Are any further specialist studies recommended by the specialist? YES NO

If YES, specify: _____

If YES, is such a report(s) attached? YES NO

Signature of specialist: _____ Date: _____

If any of the boxes marked with an "A" are crossed, please consult an appropriate air quality specialist to assist in the completion of this section.

Has a specialist been consulted?

YES	NO
-----	----

If YES, please complete the following:

Name of the specialist: _____
 Qualification(s) of the specialist: _____
 Postal address: _____
 Postal code: _____
 Telephone: _____ Cell: _____
 E-mail: _____ Fax: _____

Will the ambient air pollution level have a negative impact on the proposed activity?

YES	NO
-----	----

If YES, specify and explain: _____

Are any further specialist studies recommended by the specialist?

YES	NO
-----	----

If YES, specify: _____

If YES, is such a report(s) attached?

YES	NO
-----	----

Signature of specialist: _____ Date: _____

If any of the boxes marked with an "H" are crossed, please consult an appropriate health assessment specialist to assist in the completion of this section.

Has a specialist been consulted?

YES	NO
-----	----

If YES, please complete the following:

Name of the specialist: _____
 Qualification(s) of the specialist: _____
 Postal address: _____
 Postal code: _____
 Telephone: _____ Cell: _____
 E-mail: _____ Fax: _____

Will the surrounding land use pose any unacceptable health risk on the proposed activity?

YES	NO
-----	----

If YES, specify and explain: _____

Are any further specialist studies recommended by the specialist?

YES	NO
-----	----

If YES, specify: _____

If YES, is such a report(s) attached?

YES	NO
-----	----

Signature of specialist: _____ Date: _____

Alternative S3 (if any): NOT APPLICABLE

Natural area	Low density residential	Medium density residential	High density residential	Informal residential ^A
Retail	Commercial & warehousing	Light industrial	Medium industrial ^{AN}	Heavy industrial ^{AN}
Power station ^A	Office/consulting room	Military or police base/station/compound	Casino/entertainment complex	Hospitality facility
Open cast mine	Underground mine	Spoil heap or slimes dam ^A	Quarry, sand or borrow pit	Dam or reservoir
Hospital/medical center/clinic	School/creche	Tertiary education facility	Church	Old age home
Sewage treatment plant ^A	Train station or shunting yard ^N	Railway line ^N	Major road (4 lanes or more) ^N	Airport ^N
Harbour	Sport facilities	Golf course	Polo fields	Filling station ^H
Landfill or waste treatment site ^A	Plantation	Agriculture	River, stream or wetland	Nature conservation area
Mountain, koppie or ridge	Museum	Historical building	Graveyard	Archeological site
Other land uses (describe):				

If any of the boxes marked with an ^{uN} "are crossed, please consult an appropriate noise specialist to assist in the completion of this section.

Has a specialist been consulted?

YES	NO
-----	----

If YES, please complete the following:

Name of the specialist:

Qualification(s) of the specialist:

Postal address:

Postal code:

Telephone: Cell:

E-mail: Fax:

Will the ambient noise level have a negative impact on the proposed activity?

YES	NO
-----	----

If YES, specify and explain:

Are any further specialist studies recommended by the specialist?

YES	NO
-----	----

If YES, specify:

If YES, is such a report(s) attached?

YES	NO
-----	----

Signature of specialist: _____ Date:

If any of the boxes marked with an ^{uAu} are crossed, please consult an appropriate air quality specialist to assist in the completion of this section.

Has a specialist been consulted?

YES	NO
-----	----

If YES, please complete the following:

Name of the specialist:

Qualification(s) of the specialist:

Postal address:

Postal code:

Telephone: Cell:

E-mail: Fax:

Will the ambient air pollution level have a negative impact on the proposed activity?

YES	NO
-----	----

If YES, specify and explain:

Are any further specialist studies recommended by the specialist?

YES	NO
-----	----

If YES, specify:

If YES, is such a report(s) attached?

YES	NO
-----	----

Signature of specialist: _____ Date:

If any of the boxes marked with an ^{uHu} are crossed, please consult an appropriate health assessment specialist to assist in the completion of this section.

Has a specialist been consulted?

YES	NO
-----	----

If YES, please complete the following:

Name of the specialist:

Qualification(s) of the specialist:

Postal address:

Postal code:

Telephone: Cell:

E-mail: Fax:

Will the surrounding land use pose any unacceptable health risk on the proposed activity?

YES	NO
-----	----

If YES, specify and explain:

Are any further specialist studies recommended by the specialist?

YES	NO
-----	----

If YES, specify:

If YES, is such a report(s) attached?

--	--

Signature of specialist: _____ Date:

6. CULTURAL/HISTORICAL FEATURES

Alternative S1 (preferred site)

Are there any signs of culturally or historically significant elements, as defined in section 2 of the National Heritage Resources Act, 1999, (Act No. 25 of 1999), including archaeological or palaeontological sites, on or close (within 20m) to the site?	NO	
	Uncertain	
If YES, explain: <input style="width: 100%;" type="text"/>		
If uncertain, conduct a specialist investigation by a recognised specialist in the field to establish whether there is such a feature(s) present on or close to the site.		
Briefly explain the findings of the specialist: <input style="width: 100%;" type="text"/>		
Will any building or structure older than 60 years be affected in any way?	NO	
Is it necessary to apply for a permit in terms of the National Heritage Resources Act, 1999 (Act 25 of 1999)?	NO	
If yes, please submit or, make sure that the applicant or a specialist submits the necessary application to SAHRA or the relevant provincial heritage agency and attach proof thereof to this application if such application has been made.		

Alternative S2 (if any)

Are there any signs of culturally or historically significant elements, as defined in section 2 of the National Heritage Resources Act, 1999, (Act No. 25 of 1999), including archaeological or palaeontological sites, on or close (within 20m) to the site?	YES	
	Uncertain	
If YES, explain: 100yr old house /school building present on site used as staff quarters		
If uncertain, conduct a specialist investigation by a recognised specialist in the field to establish whether there is such a feature(s) present on or close to the site.		
Briefly explain the findings of the specialist: <input style="width: 100%;" type="text"/>		
Will any building or structure older than 60 years be affected in any way?	NO	
Is it necessary to apply for a permit in terms of the National Heritage Resources Act, 1999 (Act 25 of 1999)?	NO	
If yes, please submit or, make sure that the applicant or a specialist submits the necessary application to SAHRA or the relevant provincial heritage agency and attach proof thereof to this application if such application has been made.		

Alternative S3 (if any)

Are there any signs of culturally or historically significant elements, as defined in section 2 of the National Heritage Resources Act, 1999, (Act No. 25 of 1999), including archaeological or palaeontological sites, on or close (within 20m) to the site?	YES	NO
	Uncertain	
If YES, explain: <input style="width: 100%;" type="text"/>		
If uncertain, conduct a specialist investigation by a recognised specialist in the field to establish whether there is such a feature(s) present on or close to the site.		
Briefly explain the findings of the specialist: <input style="width: 100%;" type="text"/>		
Will any building or structure older than 60 years be affected in any way?	YES	NO
Is it necessary to apply for a permit in terms of the National Heritage Resources Act, 1999 (Act 25 of 1999)?	YES	NO
If yes, please submit or, make sure that the applicant or a specialist submits the necessary application to SAHRA or the relevant provincial heritage agency and attach proof thereof to this application if such application has been made.		

Are any further specialist studies recommended by the specialist?	YES	NO
If YES, specify: <input style="width: 100%;" type="text"/>		
Is such a report(s) attached?	<input type="checkbox"/>	<input type="checkbox"/>

Signature of specialist: _____ Date:

SECTION E: PUBLIC PARTICIPATION

Please note that details of all components of this section must be included under Appendix E to this report.

1. ADVERTISEMENT

The environmental assessment practitioner must follow any relevant guidelines adopted by the competent authority in respect of public participation and must at least –

- 1(a) Fix a notice in a conspicuous place, on the property where it is intended to undertake the activity which states that an application will be submitted to the competent authority in terms of these regulations and which provides information on the proposed nature and location of the activity, where further information on the proposed activity can be obtained and the manner in which representations on the application may be made.
- 1(b) inform landowners and occupiers of adjacent land of the applicant's intention to submit an application to the competent authority
- 1(c) inform landowners and occupiers of land within 100 metres of the boundary of the property where it is proposed to undertake the activity and whom may be directly affected by the proposed activity of the applicant's intention to submit an application to the competent authority;
- 1(d) inform the ward councillor and any organisation that represents the community in the area of the applicant's intention to submit an application to the competent authority;
- 1(e) inform the municipality which has jurisdiction over the area in which the proposed activity will be undertaken of the applicant's intention to submit an application to the competent authority; and
- 1(f) inform any organ of state that may have jurisdiction over any aspect of the activity of the applicant's intention to submit an application to the competent authority; and
- 1(g) place a notice in one local newspaper and any *Gazette* that is published specifically for the purpose of providing notice to the public of applications made in terms of these regulations.

2. CONTENT OF ADVERTISEMENTS AND NOTICES

Advertisements and notices must indicate that an application will be submitted to the competent authority in terms of the EIA regulations, the nature and location of the activity, where further information on the proposed activity can be obtained and the manner in which representations in respect of the application can be made;

3. PLACEMENT OF ADVERTISEMENTS AND NOTICES

Where the proposed activity may have impacts that extend beyond the municipal area where it is located, a notice must be placed in at least one provincial newspaper or national newspaper, indicating that an application will be submitted to the competent authority in terms of these regulations, the nature and location of the activity, where further information on the proposed activity can be obtained and the manner in which representations in respect of the application can be made, unless a notice has been placed in any *Gazette* that is published specifically for the purpose of providing notice to the public of applications made in terms of the EIA regulations.

Advertisements and notices must make provision for site alternatives where appropriate.

4. DETERMINATION OF APPROPRIATE MEASURES

The practitioner must ensure that the public participation is adequate and must determine whether a public meeting or any other additional measure is appropriate or not based on the particular nature of each case. Special attention should be given to the involvement of local community structures such as Ward Committees, ratepayers associations and traditional authorities where appropriate. **Please note** that public concerns that emerge at a later stage that should have been addressed may cause the competent authority to withdraw any authorisation it may have issued if it becomes apparent that the public participation process was inadequate.

5. COMMENTS AND RESPONSE REPORT

The practitioner must record all comments and respond to each comment of the public before the application is submitted. The comments and responses must be captured in a comments and response report as prescribed in the EIA regulations and be attached to this application. The comments and response report must be attached under Appendix E.

Department of Agriculture & Environmental Affairs, KwaZulu-Natal	Basic Assessment Report Version 6, August 2007	Page 21 of 40
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6. PARTICIPATION BY DISTRICT, LOCAL AND TRADITIONAL AUTHORITIES

District, local and traditional authorities (where applicable) are all key interested and affected parties in each application and no decision on any application will be made before the relevant local authority is provided with the opportunity to give input. The planning and the environmental sections of the local authority must be informed of the application at least 30 (thirty) calendar days before the submission of the application.

Has any comment been received from the district municipality? NO

If "YES", briefly describe the feedback below (also attach any correspondence to and from this authority with regard to this application):

Ilembe District Municipality - DRAFT BA circulated comment awaited

Has any comment been received from the local municipality? YES

If "YES", briefly describe the feedback below (also attach any correspondence to and from this authority with regard to this application):

Kwa Dukuza Municipality – A meeting was held with the Directorate Development and Planning on 18 July 2007 to determine any necessary planning requirements and compliance with Spatial Development Framework (SDF) – Local Authority advised that the SDF was under review by Iyer Rothaug and preliminary proposal would be made available for public comment – the development of the R102 as an activity corridor was of primary importance in the long term planning. Essentially it was hoped that agricultural activity would be restricted to the area west of the N2 to facilitate future growth of coastal towns westward, however existing established agricultural land uses would be accommodated in planning initiatives. Correspondence provided by I &AP's was forwarded to the Municipality and their comment sought on ahead of the public meeting – no response was provided – Several requests have been made by the landowner to municipal planning officials to inspect the site but to date no site inspection has taken place **DRAFT BA circulated comment awaited**

Has any comment been received from a traditional authority? NO

If "YES", briefly describe the feedback below (also attach any correspondence to and from this authority with regard to this application):

Not Applicable

7. CONSULTATION WITH OTHER STAKEHOLDERS

Any stakeholder that has a direct interest in the site or property, such as servitude holders and service providers, should be informed of the application at least 30 (thirty) calendar days before the submission of the application and be provided with the opportunity to comment.

Has any comment been received from stakeholders? YES

If "YES", briefly describe the feedback below (also attach copies of any correspondence to and from the stakeholders to this application):

1. National Department of Agriculture: Directorate Plant Health and Quality: Agricultural Product Inspection Services – Supports proposed expansion of existing operation based on historical evidence of compliance with Agricultural Products Standards Act 119 of 1990(APS), and continued improvement of quality management systems ensuring compliance with the regulatory parameters of Government legislation. **DRAFT BA circulated further comment awaited -**

2. Department of Agriculture: Macro Planning – The land use is appropriate for the small site and will enhance the existing enterprise – the property is situated outside the existing Nkwazi Town Planning Scheme and is by default designated for agricultural activities – **Recommendation - No objection raised to the proposal on the basis that the expansion will not compromise the agricultural opportunities of the site and represents sound and economically viable land use.**

3. Department of Water Affairs and Forestry (DWAF): Water Quality – **DRAFT BA circulated comment awaited**

<p>4. Department of Traditional and Local Government Affairs – An enquiry was made to determine whether or not there was any requirement for authorisation of the activity in terms of the Town Planning Ordinance. DTGLA have responded that agricultural activities on agricultural land are not subject to any authorisation process. DRAFT BA circulated further comment awaited -</p>
<p>5. EKZNW – C plan data provided – DRAFT BA circulated comment awaited -</p>
<p>6. WESSA – Comment on BID - More information required – licensing of boreholes to be undertaken in line with legislated requirements – potential contamination of groundwater to be considered – cumulative impact on groundwater requires consideration – potential water re-cycling methodologies to be considered – alternative energy sources to be considered where possible – use of environmentally friendly detergents and insecticides to be considered – traffic impacts of expansion to be considered DRAFT BA circulated further comment awaited -</p>
<p>7. Zinkwazi Beach Area Committee Ward 2 – study of effects on Zinkwazi Beach township requested – input from Department of Agriculture regarding proximity of operation to residential area requested – study of effects on values of properties in the Zinkwazi area requested – public meeting requested – advice of procedure for lodging objections requested – acknowledgement of receipt of advice required - DRAFT BA circulated further comment awaited</p>
<p>8. Department of Agriculture Veterinary Services DRAFT BA circulated comment awaited</p>
<p>9. Ward Councillor – Copy of BID provided - comment awaited - DRAFT BA circulated comment awaited -</p>
<p>10. Ratepayers Association – ZBRRA – Interest Registered - DRAFT BA circulated further comment awaited -</p>
<p>11. Nonoti Farm Cottage - Siggy Diedrich - Interest Registered – adjacent neighbour sharing access road - perceives an increase in the fly population over the last 3years – has concern regarding the management of the manure and claims it has been left adjacent the road on occasions causing it to wash down onto the road in rain events – Notice of DRAFT BA circulated further comment awaited -</p>
<p>12. Entembeni & Entelberg Estates – W.A.M. Clewlow – Interest Registered Notice of DRAFT BA circulated further comment awaited</p>
<p>13. Ithuba Estates – A.M Clewlow – Interest Registered - Notice of DRAFT BA circulated further comment awaited</p>
<p>14. Bethany Farm – Basil & Pat Hageman & Kim & Jane Hageman - Notice of DRAFT BA circulated further comment awaited</p>
<p>15. Nokusho Sugar Estate – Bushi Ngidi – Interest Registered - Notice of DRAFT BA circulated further comment awaited</p>

PLEASE SEE COMMENT AND RESPONSE REPORT ATTACHED AT APPENDIX E

SECTION F: IMPACT ASSESSMENT

The assessment of impacts must adhere to the minimum requirements in the EIA Regulations, 2006, and should take applicable official guidelines into account. The issues raised by interested and affected parties should also be addressed in the assessment of impacts.

Please note that details of all components of this section must be included under Appendix F to this report.

1. ISSUES RAISED BY INTERESTED AND AFFECTED PARTIES

List the issues raised by interested and affected parties.

<ol style="list-style-type: none"> 1. Health issues potentially fatal air-borne diseases linked to birds 2. Flies and odour 3. Proximity of poultry farm to residential area 4. Negative implication for tourism development 5. Expansion proposal not in keeping with long term objectives of development of Zinkwazi as upmarket low density holiday/residential area 6. Potential additional strain on infrastructure 7. Perceived negative financial implications to residents, ratepayers, and workers resulting from perceived potential for devaluation of properties 8. Liability for industrial –environmental accidents and contaminations
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Response from the practitioner to the issues raised by the interested and affected parties (A full response must be given in the Comments and Response Report that must be attached to this report):

<ol style="list-style-type: none"> 1. The upgrade of the operation at Emeraldene from Open to Closed poultry houses has significantly reduced any potential that may have existed for the transmission of air-borne disease linked to birds. In addition the SA Poultry Association co-operate fully with the National & Provincial Departments of Agriculture through a control strategy for Notifiable Avian Influenza which includes a surveillance system co-ordinated by the Allerton Provincial Veterinary laboratory, to ensure that any potential is kept to an absolute minimum. Commercial farmers are diligent in maintaining best practice biosecurity to ensure protection. 2. An Environmental Health Assessment has been undertaken by WSP Environmental and the level of fly infestation and odour emission found to be within acceptable norms and not a significant nuisance 3. The Poultry farm is an agricultural activity on agricultural land presently situated 2km away from the town of Zinkwazi which is anticipated to expand on a 10 year time horizon to within 1km of the poultry farm 4. The poultry farm, although located adjacent the provincial road providing access to the town of Zinkwazi, is well screened by vegetation and has been in existence for at least 20years. No measurable negative impact on tourism has resulted to date. The tourism attraction is access to the beaches and coastal holiday facilities which is borne out by the anticipated growth along the coastal strip. The poultry farm operation does not alter that attraction in any way. 5. Discussions with the Local Authority reveal that some residential expansion is anticipated along the coastal strip, but even in the medium term (10 years) residential growth is not anticipated to get closer than 1km to the existing poultry operation. It is of equal importance for municipal management to facilitate the continued operation of viable agricultural activities as it is to allow residential development in the region. 6. The poultry farm is self sufficient in terms of sewage disposal, employs normal agricultural stormwater management principles of soakaways, utilises borehole water, and electricity (when it is available) off the grid with a generated backup supply to ensure continued operation during load shedding events 7. This is a perception which is not based on any substantial fact. The associated negative impacts such as proximity to Zinkwazi, potential for odours and flies, and potential visual impact have been examined and are considered insignificant and capable of mitigation. Verbal discussions with independent estate agents and property valuers reveal that coastal property values such as the properties at Zinkwazi are influenced primarily by beach access, and views (particularly sea views) neither of which are altered by the proposed expansion of the poultry farm operation. 8. The same liability for industrial, environmental accidents and contaminations that is applicable to any other land user is applicable to the poultry farm operation. Polluter pays.

2. IMPACTS THAT MAY RESULT FROM THE PLANNING AND DESIGN PHASE

2. Alternative sites.

Alternative S1 (preferred alternative) Emeraldene

Direct impacts:

- This site already has chicken egg laying houses and can absorb additional egg laying housing structures next to the existing egg laying structures as the bulk earthworks was already done when the existing laying houses were constructed. Operation of proposed new houses does not conflict with the existing egg laying houses.

Indirect impacts:

- The increased number of structures will create a larger footprint, be more visual and create more job opportunities.

Cumulative impacts:

- The community of Zinkwazi become aware of the increased activities.

Alternative S2 Macorkindale

Direct impacts:

- This site has chicken rearing housing structures and **cannot** accommodate chicken egg laying housing structures in close proximity to rearing houses. There is a direct conflict of interest and threat for chicken disease spread neutralising the poultry operation in its entirety.

Indirect impacts:

- There will be an increased footprint, it will be much more visual.

Cumulative impacts:

- The community of Darnall become much, more aware because of the visual impact of the increased operation as it is located on a hill and visible from far and will be much more difficult to screen.

Alternative S3 (if any)

Direct impacts: N/A

Indirect impacts: N/A

Cumulative impacts: N/A

No-go Alternative (Compulsory)

Direct impacts:

- No additional poultry houses will be erected.

Indirect impacts:

- There will be no increased footprint.

Cumulative impacts:

- The communities will not be aware of the activities.

Indicate mitigation measures to manage the potential impacts listed above:

Alternative S1	Alternative S2	Alternative S3
<ul style="list-style-type: none"> • Landscaping and rehabilitation can help screen the operation. 	<ul style="list-style-type: none"> • The close proximity of rearing houses to egg laying houses cannot be mitigated. 	

3. IMPACTS THAT MAY RESULT FROM THE PLANNING AND DESIGN PHASE

a. Site alternatives

List the potential impacts associated with site alternatives that are likely to occur during the planning and design phase:

Alternative S1 (preferred alternative) EMERALDENE

DIRECT IMPACTS:

1. **More land put under development**
 - *Increase in the footprint of the development.*
2. **Increase in visual impact.**
 - *The development will be more visible from the road.*
3. **Increase in chicken egg production.**
 - *Increase in chicken egg production will lead to additional jobs.*
4. **Use of water from a borehole.**
 - *Water abstracted from boreholes cause a temporary drop in the water level in the boreholes.*

INDIRECT IMPACTS:

1. **More land put under development**
 - *There is a reduction in open space.*
2. **Increase in visual impact.**
 - *There will be a perceived change in the sense of place.*
3. **Increase in chicken egg production.**
 - *Increase in the secondary economy.*
4. **Use of water from a borehole.**
 - *The water in the aquifer is reduced.*

CUMULATIVE IMPACTS:

1. **More land put under development**
 - *Agricultural land becomes more developed.*
2. **Increase in visual impact.**
 - *Increase in perception of urban sprawl.*
3. **Increase in chicken egg production.**
 - *Upliftment of local communities.*
4. **Use of water from a borehole.**
 - *The community of Zinkwazi become more aware of other farming activities close to town which contribute to the reduction in ground water levels.*

Alternative S2 MACORKINDALE

DIRECT IMPACTS:

1. **More land put under development**
 - *Increase in the footprint of the development.*
2. **Increase in visual impact.**
 - *There will be a perceived change in the sense of place.*
3. **Increase in chicken egg production.**
 - *Increase in chicken egg production will lead to additional jobs.*
4. **Use of water from a borehole.**
 - *Water abstracted from boreholes cause a temporary drop in the water level in the boreholes*

INDIRECT IMPACTS:

1. **More land put under development**
 - *Increase in the footprint of the development.*
2. **Increase in visual impact.**

<ul style="list-style-type: none"> • <i>There will be a perceived change in the sense of place.</i> <p>3. Increase in chicken egg production.</p> <ul style="list-style-type: none"> • <i>Increase in the secondary economy.</i> <p>4. Use of water from a borehole.</p> <ul style="list-style-type: none"> • <i>The water in the aquifer is reduced.</i> <p>CUMULATIVE IMPACTS:</p> <p>1. More land put under development</p> <ul style="list-style-type: none"> • <i>Agricultural land becomes more developed.</i> <p>2. Increase in visual impact.</p> <ul style="list-style-type: none"> • <i>Increase in perception of urban sprawl.</i> <p>3. Increase in chicken egg production.</p> <ul style="list-style-type: none"> • <i>Upliftment of local communities.</i> <p>4. Use of water from a borehole.</p> <ul style="list-style-type: none"> • <i>The community of Darnall become more aware of other farming activities close to town which contribute to the reduction in ground water levels.</i>

<p>Alternative S3 (if any)</p> <p><i>Direct impacts: N/A</i></p> <p><i>Indirect impacts: N/A</i></p> <p><i>Cumulative impacts: N/A</i></p>

<p>No-go alternative (compulsory) EMERALDENE AND MACORKINDALE</p> <p>DIRECT IMPACTS:</p> <p>1. No additional is land put under development</p> <ul style="list-style-type: none"> • <i>There is no increase in the footprint of the development.</i> <p>2. No increase in visual impact.</p> <ul style="list-style-type: none"> • <i>The development will not be more visible from the road.</i> <p>3. No increase in chicken egg production.</p> <ul style="list-style-type: none"> • <i>No increase in chicken egg production will lead to no additional jobs.</i> <p>4. No water from a borehole will be used.</p> <ul style="list-style-type: none"> • <i>Water is not abstracted from boreholes which may cause a temporary drop in the water level in the boreholes.</i> <p>INDIRECT IMPACTS:</p> <p>1. No more land is put under development</p> <ul style="list-style-type: none"> • <i>There is no reduction in open space.</i> <p>2. No increase in visual impact.</p> <ul style="list-style-type: none"> • <i>There will be no perceived change in the sense of place.</i> <p>3. No increase in chicken egg production.</p> <ul style="list-style-type: none"> • <i>No increase in the secondary economy.</i> <p>4. No water is used from a borehole.</p> <ul style="list-style-type: none"> • <i>The water in the aquifer is not reduced.</i> <p>CUMULATIVE IMPACTS:</p> <p>1. No more land is put under development</p> <ul style="list-style-type: none"> • <i>Agricultural land does not becomes more developed.</i> <p>2. No increase in visual impact.</p> <ul style="list-style-type: none"> • <i>No increase in perception of urban sprawl.</i> <p>3. No increase in chicken egg production.</p> <ul style="list-style-type: none"> • <i>No upliftment of local communities.</i> <p>4. No water is used from a borehole.</p> <ul style="list-style-type: none"> • <i>The community does not become more aware of other farming activities which contribute to the reduction in ground water levels.</i>
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Alternative S1	Alternative S2	Alternative S3
<p>1. Ensure that correct procedures are followed to get approval for the development of agricultural land for agricultural purposes.</p> <p>2. a) Ensure the proposed development makes provision for suitable screening. b) Ensure the design of the buildings blend in with the surrounding development. c) Chooses non-reflective colours that match surrounding colours. d) Ensure suitable screen planting is under taken to minimize the visual impact. e) Plan for lighting to be inward and downward facing to minimize light pollution. f) Use control systems to minimize active lighting whilst not compromising safety and security lighting.</p> <p>3. Ensure that local labour is employed to ensure the economic benefit goes to uplift the local community.</p> <p>4. Borehole tests indicate that there is adequate supply in the aquifer to allow this development. a) Periodic assessment of the static and dynamic water levels by a geohydrologist is required. b) Periodic assessment of the quality of water abstracted must be sent for analysis to determine whether it is fit for its intended use. c) Maintain the Borehole Licence valid at all times.</p>	<p>5. Ensure that correct procedures are followed to get approval for the development of agricultural land for agricultural purposes.</p> <p>6. a) Ensure the proposed development makes provision for suitable screening. b) Ensure the design of the buildings blend in with the surrounding development. c) Chooses non-reflective colours that match surrounding colours. d) Ensure suitable screen planting is under taken to minimize the visual impact. e) Plan for lighting to be inward and downward facing to minimize light pollution. f) Use control systems to minimize active lighting whilst not compromising safety and security lighting.</p> <p>7. Ensure that local labour is employed to ensure the economic benefit goes to uplift the local community.</p> <p>8. Borehole tests indicate that there is adequate supply in the aquifer to allow this development. a) Periodic assessment of the static and dynamic water levels by a geohydrologist is required. b) Periodic assessment of the quality of water abstracted must be sent for analysis to determine whether it is fit for its intended use. c) Maintain the Borehole Licence valid at all times.</p>	

Process, technology, layout or other alternatives

List the impacts associated with any process, technology, layout or other alternatives that are likely to occur during the planning and design phase (please list impacts associated with each alternative separately):

Alternative A1 (preferred alternative) EMERALDENE

<p>DIRECT IMPACTS:</p> <p>1. The use of energy saving technologies such as solar-thermal/gas water heating, ie the use of energy efficient lighting i.e. fluorescent lighting, the use of good insulation material to regulate temperatures. The use of insulation layers between walls and ceilings and the use of double glazed glass in housing design to regulate and control air temperature.</p> <ul style="list-style-type: none"> • <i>Energy usage is reduced resulting in energy cost savings.</i> <p>2. Utilisation of chicken litter as organic manure.</p> <ul style="list-style-type: none"> • <i>Chicken litter is supplied to local, surrounding farms to use as compost.</i> <p>INDIRECT IMPACTS:</p> <p>1. The use of energy saving technologies such as solar-thermal/gas water heating, ie the use of energy efficient lighting i.e. fluorescent lighting, the use of good insulation material to regulate temperatures. The use of insulation layers between walls and ceilings and the use of double glazed glass in housing design to regulate and control air temperature.</p> <ul style="list-style-type: none"> • <i>Reduction of energy consumption from the national electricity supply grid. Less interruptions to power supply due to load shedding.</i> <p>2. Utilisation of chicken litter as organic manure.</p>		
Department of Agriculture & Environmental Affairs, KwaZulu-Natal	Basic Assessment Report Version 6, August 2007	Page 28 of 40

- *Improved soils leading to healthier crops.*

CUMULATIVE IMPACTS:

1. The use of energy saving technologies such as solar-thermal/gas water heating, ie the use of energy efficient lighting i.e. fluorescent lighting, the use of good insulation material to regulate temperatures. The use of insulation layers between walls and ceilings and the use of double glazed glass in housing design to regulate and control air temperature.

- *Longterm reduction in pollution of greenhouse gases i.e. CO₂ emissions and global warming due to decrease in burning of fossil fuel.*

2. Utilisation of chicken litter as organic manure.

- *Overall conservation of the earth's non-renewable resources (soil).*

1. IMPACTS THAT MAY RESULT FROM THE CONSTRUCTION PHASE

a. Site alternatives

List the potential impacts associated with site alternatives that are likely to occur during the construction phase:

Alternative S1 (preferred site) EMERALDENE

DIRECT IMPACTS:

1. Presence of construction workers.

- *Construction workers gathering outside the poultry farm gate waiting to gain entry or seeking temporary employment.*

2. Dust Nuisance Generation

- *Increase in dust generated due to construction activities.*

3. Increase in traffic

- *Increase in vehicles travelling along Road P403 and onto the access road of property.*

4. Increase in stormwater runoff

- *Improper stormwater management on site can result in an increase in erosion on site.*

5. Noise generation

- *Increase in noise generation due to construction activities.*

6. Generation of waste materials

- *Construction activity results in the generation of additional waste material such as solid, refuse and rubble material. This needs to be temporarily stored and disposed of in an environmentally responsible manner.*

INDIRECT IMPACTS:

1. Presence of construction workers.

- *Increased potential for crime.*

2. Dust Nuisance Generation

- *Frustration levels of Zinkwazi residents increases.*

3. Increase in traffic

- *Increased slow traffic.*

4. Increase in stormwater runoff

- *Eroded sediments deposited in water course.*

5. Noise generation

- *Increase in noise generation disturbs the peace of the neighbourhood.*

6. Generation of waste materials

- *The generation of additional waste material such as solid, refuse and rubble material detracts from the appearance of the site.*

CUMULATIVE IMPACTS:

1. Presence of construction workers.

- *Zinkwazi residents may have an increased level of intolerance to workers loitering.*

2. Dust Nuisance Generation

- *Neighbour relations become strained due to nuisance of dust generation in vicinity of the site.*

3. Increase in traffic

- *Increased level of frustration among Zinkwazi town residents.*

4. Increase in stormwater runoff

- *Stormwater drainage system receives more storm water.*

5. Noise generation

- *Neighbouring landowner relations become impaired.*

6. Generation of waste materials

- *Overall increase in waste volume generated exerts a greater demand on capacity of local landfill site to absorb increases in waste.*

Alternative S2 Macorkindale

DIRECT IMPACTS:

1. Presence of construction workers.

- *Construction workers gathering outside the poultry farm gate waiting to gain entry or seeking employment.*

2. Dust Nuisance Generation

- *Increase in dust generated due to construction activities.*

3. Increase in traffic

- *Increase in vehicles travelling along Road P111 and onto the access road of property.*

4. Increase in stormwater runoff

- *Improper stormwater management on site can result in an increase in erosion on site.*

5. Noise generation

- *Increase in noise generation due to construction activities.*

6. Generation of waste materials

- *Construction activity results in the generation of additional waste material such as solid, refuse and rubble material. This needs to be temporarily stored and disposed of in an environmentally responsible manner.*

INDIRECT IMPACTS:

1. Presence of construction workers.

- *Increased potential for crime.*

2. Dust Nuisance Generation

- *Frustration levels of Road P111 landowners increases.*

3. Increase in traffic

- *Increased slow traffic.*

4. Increase in stormwater runoff

- *Eroded sediments deposited in water course.*

5. Noise generation

- *Increase in frustration levels of neighbouring landowners.*

6. Generation of waste materials

- *Increase for potential for pollution.*

CUMULATIVE IMPACTS:

1. Presence of construction workers.

- *Landowners along road P111 may have an increased level of intolerance to workers loitering.*

2. Dust Nuisance Generation

- *Neighbour relations become strained due to nuisance of dust generation in vicinity of the site.*

3. Increase in traffic

- *Increased level of frustration among Road P111 land owners.*

4. Increase in stormwater runoff

- *Stormwater drainage system receives more storm water.*

5. Noise generation

- *Neighbouring landowner relations become impaired.*

6. Generation of waste materials

- *Overall increase in waste volume generated exerts a greater demand on capacity of local landfill site to absorb increases in waste.*

Alternative S3 (if any)

Direct impacts:N/A

Indirect impacts:N/A

Cumulative impacts:N/A

No-go alternative (compulsory)

DIRECT IMPACTS:

1. Presence of construction workers.

- *No increase in construction workers moving through the town.*

2. Dust Nuisance Generation

- *No dust generation resulting in pollution and nuisance to neighbouring residents.*

3. Increase in traffic

- *The traffic volume along roads remains as per pre-development levels.*

4. Increase in stormwater runoff

- *No increase in erosion occurs on site.*

5. Noise generation

- *No disturbance as a result of noise nuisance due to construction activities.*

6. Generation of waste materials

- *Construction activity results in the generation of additional waste material such as solid, refuse and rubble material. This needs to be temporarily stored and disposed of in an environmentally responsible manner.*

INDIRECT IMPACTS:

1. Presence of construction workers.

- *No increase in potential for crime.*

2. Dust Nuisance Generation

- *No neighbouring residents become frustrated.*

3. Increase in traffic

- *The potential for accidents remains unchanged.*

4. Increase in stormwater runoff

- *No disturbance of existing stormwater drainage occurs.*

5. Noise generation.

- *Frustration levels of neighbouring residents remain as before.*

6. Generation of waste materials

- *No increase for potential of pollution.*

CUMULATIVE IMPACTS:

1. Presence of construction workers.

- *Existing residents remain tolerant.*

2. Dust Nuisance Generation

- *Good neighbourly relations are maintained.*

3. Increase in traffic

- *Frustration levels among residents and landowners remain as per pre-development levels.*

4. Increase in stormwater runoff

- *Existing stormwater drainage system remains unstressed.*

5. Noise generation

- *Relations with neighbouring residents remain as before.*

6. Generation of waste materials

- *Overall increase in waste volume generated exerts a greater demand on capacity of local landfill site to absorb increases in waste.*

Indicate mitigation measures to manage the potential impacts listed above:

Department of Agriculture & Environmental Affairs, KwaZulu-Natal	Basic Assessment Report Version 6, August 2007	Page 31 of 40
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Alternative S1	Alternative S2	Alternative S3
<p>1. Presence of construction workers.</p> <ul style="list-style-type: none"> Building Contractor and Sub-contractor must ensure that their workers are transported to and from the site. <p>2. Dust Nuisance Generation</p> <ul style="list-style-type: none"> Ensure that the access road to the site is monitored and dampened on a daily basis when necessary with water and soilbinding chemicals to minimise and prevent dust generation on site. <p>3. Increase in traffic</p> <ul style="list-style-type: none"> Ensure that the route to the site is be manned with flagmen and necessary signage indicating construction activities in progress. <p>4. Increase in stormwater runoff</p> <ol style="list-style-type: none"> Ensure that necessary soil erosion prevention measures are in place on site i.e. sandbag/diversion berms; soil curtains; cut-off trenches and retention ponds. Ensure that this run-off is collected in the municipal stormwater drainage reticulation system. A stormwater management plan needs to be compiled by the Principal Engineer. <p>5. Noise generation</p> <ol style="list-style-type: none"> Ensure construction noise is limited to within daytime week day working hours only. Give 24 hours notice if there will be expected excessive noise. <p>6. Generation of waste materials</p> <ol style="list-style-type: none"> The Building Contractor is to ensure that a waste management plan is compiled and implemented on site and that collection and disposal of all waste generated i.e. solid, rubble & refuse is correctly stored and disposed of at a local registered landfill site. All waybills are to be submitted by the Building Contractor. This also includes any toilet service records for portable/chemical toilets on site. 	<p>1. Presence of construction workers.</p> <ul style="list-style-type: none"> Building Contractor and Sub-contractor must ensure that their workers are transported to and from the site. <p>2. Dust Nuisance Generation</p> <ul style="list-style-type: none"> Ensure that the access road to the site is monitored and dampened on a daily basis when necessary with water and soilbinding chemicals to minimise and prevent dust generation on site. <p>3. Increase in traffic</p> <ul style="list-style-type: none"> Ensure that the route to the site is be manned with flagmen and necessary signage indicating construction activities in progress. <p>4. Increase in stormwater runoff</p> <ol style="list-style-type: none"> Ensure that necessary soil erosion prevention measures are in place on site i.e. sandbag/diversion berms; soil curtains; cut-off trenches and retention ponds. Ensure that this run-off is collected in the municipal stormwater drainage reticulation system. A stormwater management plan needs to be compiled by the Principal Engineer. <p>5. Noise generation</p> <ol style="list-style-type: none"> Ensure construction noise is limited to within daytime week day working hours only. Give 24 hours notice if there will be expected excessive noise. <p>6. Generation of waste materials</p> <ol style="list-style-type: none"> The Building Contractor is to ensure that a waste management plan is compiled and implemented on site and that collection and disposal of all waste generated i.e. solid, rubble & refuse is correctly stored and disposed of at a local registered landfill site. All waybills are to be submitted by the Building Contractor. This also includes any toilet service records for portable/chemical toilets on site. 	<p>N/A</p>

2. IMPACTS THAT MAY RESULT FROM THE OPERATIONAL PHASE

a. Site alternatives

List the potential impacts associated with site alternatives that are likely to occur during the operational phase:

Alternative S1 (preferred alternative) Emeraldene

DIRECT IMPACTS:

1. Waste Generation

- *Solid waste becomes accumulated.*

2. Storm water management

- *Increased run-off in local catchment.*

3. Traffic

- *Minor increase in traffic.*

INDIRECT IMPACTS:

1. Waste Generation

Increase in potential for vermin and disease.

2. Storm water management

- *Increased potential for soil erosion in local catchment.*

3. Increase in traffic

- *Increase in frustration levels.*

CUMULATIVE IMPACTS:

1. Waste Generation

- *Increased pressure on the local authority to manage this increased waste production.*

2. Storm water management

- *Strain exerted on overall efficiency of existing storm water drainage system.*

3. Traffic

- *Increase in potential risk for accidents to occur.*

Alternative S2: Macorkindale

DIRECT IMPACTS:

1. Waste Generation

- *Solid waste becomes accumulated.*

2. Storm water management

- *Increased run-off in local catchment.*

3. Traffic

- *Minor increase in traffic.*

INDIRECT IMPACTS:

1. Waste Generation

Increase in potential for vermin and disease.

2. Storm water management

- *Increased potential for soil erosion in local catchment.*

3. Increase in traffic

- *Increase in potential risk for accidents to occur.*

CUMULATIVE IMPACTS:

1. Waste Generation

- *Increased pressure on the local authority to manage this increased waste production.*

2. Storm water management

- *Strain exerted on overall efficiency of existing storm water drainage system.*

3. Traffic

- *Increase in frustration levels.*

Alternative S3 (if any)

Department of Agriculture & Environmental Affairs, KwaZulu-Natal	Basic Assessment Report Version 6, August 2007	Page 33 of 40
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Direct impacts: N/A

Indirect impacts: N/A

Cumulative impacts: N/A

No-go alternative (compulsory)

DIRECT IMPACTS:

1. Waste Generation

- *No additional waste is generated for the Local authority to dispose of to the local landfill.*

2. Storm water management

- *No additional run-off in local catchment.*

3. Traffic

- *No additional traffic on the local roads.*

INDIRECT IMPACTS:

1. Waste Generation

- *Increase in potential for vermin and disease.*

2. Storm water management

- *No increased potential for soil erosion in local catchment.*

3. Traffic

- *No increased potential for road accidents.*

CUMULATIVE IMPACTS:

1. Waste Generation

- *Increased pressure on the local authority to manage this increased waste production.*

2. Storm water management

- *No strain exerted on overall efficiency of existing storm water drainage system of town.*

3. Traffic

- *Frustration levels of drivers remain as before.*

Indicate mitigation measures to manage the potential impacts listed above:

Alternative S1	Alternative S2	Alternative S3
<p>1. Waste Generation</p> <ul style="list-style-type: none">• The poultry farmer to continue with arrangements with local and surrounding farmers to take the chicken litter as organic fertilizer and spread it onto the farms to improve soil quality and therefore better crops, and in that way reduce the impact on the landfill site. <p>2. Storm water management</p> <ol style="list-style-type: none">Ensure that necessary soil erosion prevention measures are in place on site i.e. sandbag/diversion berms; soil curtains; cut-off trenches and retention ponds.Ensure that this run-off is collected in the municipal stormwater drainage reticulation system.A stormwater management plan needs to be compiled by the Principal Engineer. <p>3. Traffic</p> <ul style="list-style-type: none">• Ensure that the route to the site has the necessary signage indicating heavy trucks turning into the farm road leading to the poultry operation.• Fix traffic calming, rumble strips across the road to ensure motorists slow down.	<p>1. Waste Generation</p> <ul style="list-style-type: none">• The poultry farmer to continue with arrangements with local and surrounding farmers to take the chicken litter as organic fertilizer and spread it onto the farms to improve soil quality and therefore better crops, and in that way reduce the impact on the landfill site. <p>2. Storm water management</p> <ol style="list-style-type: none">Ensure that necessary soil erosion prevention measures are in place on site i.e. sandbag/diversion berms; soil curtains; cut-off trenches and retention ponds.Ensure that this run-off is collected in the municipal stormwater drainage reticulation system.A stormwater management plan needs to be compiled by the Principal Engineer. <p>3. Traffic</p> <ul style="list-style-type: none">• Ensure that the route to the site has the necessary signage indicating heavy trucks turning into the farm road leading to the poultry operation .	<p>N/A</p>

b. Process, technology, layout or other alternatives

List the impacts associated with process, technology, layout or other alternatives that are likely to occur during the operational phase (please list impacts associated with each alternative separately):

NOT APPLICABLE

Alternative A1 (preferred alternative)

<p><i>Direct impacts:</i></p> <p><i>Indirect impacts:</i></p> <p><i>Cumulative impacts:</i></p>

Alternative A2

<p><i>Direct impacts:</i></p> <p><i>Indirect impacts:</i></p> <p><i>Cumulative impacts:</i></p>

Alternative A3

<p><i>Direct impacts:</i></p> <p><i>Indirect impacts:</i></p> <p><i>Cumulative impacts:</i></p>

No-go alternative (compulsory)

<p><i>Direct impacts:</i></p> <p><i>Indirect impacts:</i></p> <p><i>Cumulative impacts:</i></p>

Indicate mitigation measures to manage the potential impacts listed above:

NOT APPLICABLE

Alternative A1	Alternative A2	Alternative A3

3. IMPACTS THAT MAY RESULT FROM THE DECOMMISSIONING OR CLOSURE PHASE

THERE WILL BE NO DECOMMISSIONING OR CLOSURE PHASE

a. Process, technology, layout or other alternatives

List the impacts associated with process, technology, layout or other alternatives that are likely to occur during the decommissioning or closure phase (please list impacts associated with each alternative separately):

NOT APPLICABLE

Alternative A1 (preferred alternative)

<p><i>Direct impacts:</i></p> <p><i>Indirect impacts:</i></p> <p><i>Cumulative impacts:</i></p>

Alternative A2

<p><i>Direct impacts:</i></p> <p><i>Indirect impacts:</i></p> <p><i>Cumulative impacts:</i></p>

Alternative A3

<p><i>Direct impacts:</i></p> <p><i>Indirect impacts:</i></p>

Cumulative impacts:

No-go alternative (compulsory)

Direct impacts:

Indirect impacts:

Cumulative impacts:

Indicate mitigation measures to manage the potential impacts listed above:

Alternative A1	Alternative A2	Alternative A3

B. PROPOSED MONITORING AND AUDITING

For each phase of the project and for each alternative, please indicate how identified impacts and mitigation will be monitored and/or audited.

A) Planning and Design Phase

- Determine the current status of the environment

Alternative S1 (preferred site) Emeraldene	Alternative S2 Macorkindale	Alternative S3
<ul style="list-style-type: none"> Monitor the present storm water control system. Monitor the present waste management system. Monitor the present dust generation. Monitor the present noise levels. Monitor the present traffic impact. 	<ul style="list-style-type: none"> Monitor the present storm water control system. Monitor the present waste management system. Monitor the present dust generation. Monitor the present noise levels. Monitor the present traffic impact. 	N/A

B) Construction Phase

Alternative S1 (preferred site) Emeraldene	Alternative S2 Macorkindale	Alternative S3
<p>1. Presence of construction workers.</p> <p>a) Audit the Building Contractor and Sub-contractors transporting their workers to and from the site.</p> <p>b) The Principal Agent to monitor on a weekly basis by checking the arrival and departure of the workforce through signed entries in a daily attendance register.</p> <p>c) The ECO is to check this register on a monthly basis.</p> <p>d) A complaints register is to be kept on site for the record of complaints by I & APs.</p> <p>e) The ECO is to check this register on a monthly basis.</p> <p>2. Dust Nuisance Generation</p> <p>a) Audit whether the Building Contractor monitors that the access road to the site is dampened when necessary on a daily basis with water and soil binding chemicals to minimize & prevent dust generation. When excessive especially on windy days a water cart must be utilised for dampening</p>	<p>1. Presence of construction workers.</p> <p>a) Audit the Building Contractor and Sub-contractors transporting their workers to and from the site.</p> <p>b) The Principal Agent to monitor on a weekly basis by checking the arrival and departure of the workforce through signed entries in a daily attendance register.</p> <p>c) The ECO is to check this register on a monthly basis.</p> <p>d) A complaints register is to be kept on site for the record of complaints by I & APs.</p> <p>e) The ECO is to check this register on a monthly basis.</p> <p>2. Dust Nuisance Generation</p> <p>a) Audit whether the Building Contractor monitors that the access road to the site is dampened when necessary on a daily basis with water and soil binding chemicals to minimize & prevent dust generation. When excessive especially on windy days a water cart must be utilised for dampening</p>	N/A

<p>purposes. Alternatively a water hose may be used.</p> <p>b) The ECO is to check monthly.</p> <p>c) A complaints register is to be kept on site for recording of complaints.</p> <p>3. Increase in traffic volumes</p> <p>a) Audit the correct signage and traffic controls are used by the Contractor.</p> <p>b) Audit the presence of flagmen actively warning the traffic.</p> <p>4. Increase in surface runoff due to hardening of local catchment</p> <ul style="list-style-type: none"> Check that stormwater controls are in place to accommodate the increase in runoff i.e. attenuation tank and connection to existing drainage system and that it is coping with the storm water and not causing adverse effects. <p>5. Increase in noise generation</p> <p>a) Audit whether the Building Contractor is ensuring that all working activities are limited to within daylight working hours on week days.</p> <p>b) The Principal Agent is to monitor on a weekly basis.</p> <p>c) The ECO is to monitor on a monthly basis.</p> <p>d) A period of 24 hours notice is to be given to neighbours of expected noisy activities.</p> <ul style="list-style-type: none"> causing adverse effects. <p>6. Increase in solid waste volumes (Not chicken litter)</p> <p>a) Audit the disposal of solid waste is implemented and is taken to the New Gelderland Landfill site.</p> <p>b) Audit that no waste is burnt on site.</p>	<p>purposes. Alternatively a water hose may be used.</p> <p>b) The ECO is to check monthly.</p> <p>c) A complaints register is to be kept on site for recording of complaints.</p> <p>3. Increase in traffic volumes</p> <p>a) Audit the correct signage and traffic controls are used by the Contractor.</p> <p>b) Audit the presence of flagmen actively warning the traffic.</p> <p>4. Increase in surface runoff due to hardening of local catchment</p> <ul style="list-style-type: none"> Check that stormwater controls are in place to accommodate the increase in runoff i.e. attenuation tank and connection to existing drainage system and that it is coping with the storm water and not causing adverse effects. <p>5. Increase in noise generation</p> <p>a) Audit whether the Building Contractor is ensuring that all working activities are limited to within daylight working hours on week days.</p> <p>b) The Principal Agent is to monitor on a weekly basis.</p> <p>c) The ECO is to monitor on a monthly basis.</p> <p>d) A period of 24 hours notice is to be given to neighbours of expected noisy activities.</p> <p>6. Increase in solid waste volumes (Not chicken litter)</p> <p>a) Audit the disposal of solid waste is implemented and is taken to the New Gelderland Landfill site.</p> <p>b) Audit that no waste is burnt on site.</p>	
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C) Operational Phase

Alternative S1 (preferred site) Emeraldene	Alternative S2 Macorkindale	Alternative S3
<p>1. Traffic management</p> <ul style="list-style-type: none"> Audit that all warning signage is positioned in town in vicinities that are high risk accident areas. <p>2. Stormwater Management</p> <ul style="list-style-type: none"> Audit that that all stormwater management infrastructure is maintained in a functional state with regular maintenance of the local drainage system. <ul style="list-style-type: none"> <p>3. Generation of solid waste (Not chicken litter)</p> <ul style="list-style-type: none"> Audit the waste trail to the New 	<p>1. Traffic management</p> <ul style="list-style-type: none"> Audit that all warning signage is positioned in town in vicinities that are high risk accident areas. <p>2. Stormwater Management</p> <p>Audit that that all stormwater management infrastructure is maintained in a functional state with regular maintenance of the local drainage system.</p> <p>3. Generation of solid waste (Not chicken litter)</p> <ul style="list-style-type: none"> Audit the waste trail to the New 	N/A

Gelderland land fill site 4. Generation of solid waste (Chicken litter) • Audit the trail of the chicken litter is to the neighbouring and surrounding farmers or to the New Gelderland land fill site	Gelderland land fill site 4. Generation of solid waste (Chicken litter) • Audit the trail of the chicken litter is to the neighbouring and surrounding farmers or to the New Gelderland land fill site	
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D) Closure or Decommissioning Phase

THERE WILL BE NO DECOMMISSIONING PHASE

C. ENVIRONMENTAL IMPACT STATEMENT

Taking the assessment of potential impacts into account, please provide an environmental impact statement that sums up the impact that the proposed activity and its alternatives may have on the environment after the management and mitigation of impacts have been taken into account with specific reference to their type, likelihood, duration and the significance.

Alternative S1 (preferred site) Emeraldene

Impact type	Duration	Status	Likelihood	Significance
1. Increase in stormwater run-off due to hardening of local catchment.	Long term	Negative	Definite	Low
2. Increase in traffic volume.	Long term	Negative	Definite	Medium
3. Increase in volume of solid waste generation resulting in an increase in demand for landfill to absorb increased waste.	Long term	Negative	Definite	Low
4. Presence of Construction workers.	Short term	Negative	Definite	Low
5. Increase in construction dust nuisance generation.	Short term	Negative	Definite	Low
6. Increase in noise generation.	Short term	Negative	Probable	Low

Alternative S2 Macorkindale

Impact type	Duration	Status	Likelihood	Significance
1. Increase in stormwater run-off due to hardening of local catchment.	Long term	Negative	Definite	Medium
2. Increase in traffic volume.	Long term	Negative	Definite	Medium
3. Increase in volume of solid waste generation resulting in an increase in demand for landfill to absorb increased waste.	Long term	Negative	Definite	Low
4. Presence of Construction workers.	Short term	Negative	Definite	Low
5. Increase in construction dust nuisance generation.	Short term	Negative	Definite	Low
6. Increase in noise generation.	Short term	Negative	Probable	Low

Alternative S3

Department of Agriculture & Environmental Affairs, KwaZulu-Natal	Basic Assessment Report Version 6, August 2007	Page 38 of 40
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	N/A
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No-go alternative (compulsory)

Impact type	Duration	Status	Likelihood	Significance
1. No increase in stormwater run-off due to hardening of local catchment.	Long term	Negative	Definite	No impact
2. No increase in traffic volume.	Long term	Negative	Definite	No impact
3. No increase in volume of solid waste generation resulting in an increase in demand for landfill to absorb increased waste.	Long term	Negative	Definite	No impact
4. No presence of Construction workers.	Short term	Negative	Definite	No impact
5. No increase in construction dust nuisance generation.	Short term	Negative	Definite	No impact
6. No increase in noise generation.	Short term	Negative	Probable	No impact

D. RECOMMENDATION OF PRACTITIONER

Is the information contained in this report and the documentation attached hereto sufficient to make a decision in respect of the activity applied for (in the view of the environmental assessment practitioner).

YES	NO
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If "NO", indicate the aspects that should be assessed further as part of a Scoping and EIA process before a decision can be made (list the aspects that require further assessment):

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If "YES", please list any recommended conditions, including mitigation measures that should be considered for inclusion in any authorisation that may be granted by the competent authority in respect of the application:

- | |
|---|
| <ul style="list-style-type: none"> • A formal arrangement and undertaking with neighbouring or surrounding farmers who collect the chicken litter that they will spread it on delivery to the farm to dry out rapidly and minimize the potential for odours and fly infestation. • All solid waste to be disposed of at the New Geldeland landfill site. • No burning of solid waste. • Storm water to be attenuated on site to minimize the impact on down stream wetlands. • Any spills of chicken feed, chicken litter, diesel or any other environmental risk factor to be cleared up immediately, the polluted soil and material to be placed in a waste skip to be disposed of at the New Gelderland land fill site. • Traffic calming signage and rumble strips to be arranged with Department of Transport KZN to minimize the impact on traffic. |
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APPENDICES

The following appendixes must be attached as appropriate:

Appendix A: Site plan(s)

Appendix B: Photographs

Appendix C: Facility illustration(s)

Appendix D: Specialist reports

Appendix E: Details of the public participation process including the comments and responses report

Appendix F: Details of the impact assessment

Appendix G: Other information