environmental affairs
Department:
Environmental Affairs
REPUBLIC OF SOUTH AFRICA

(For official use only)

File Reference Number:	
Application Number:	
Date Received:	

Basic assessment report in terms of the Environmental Impact Assessment Regulations, 2010, promulgated in terms of the National Environmental Management Act, 1998 (Act No. 107 of 1998), as amended.

Kindly note that:

1. This **basic assessment report** is a standard report that may be required by a competent authority in terms of the EIA Regulations, 2010 and is meant to streamline applications. Please make sure that it is the report used by the particular competent authority for the activity that is being applied for.
2. This report format is current as of **1 September 2012**. It is the responsibility of the applicant to ascertain whether subsequent versions of the form have been published or produced by the competent authority
3. The report must 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.
4. Where applicable **tick** the boxes that are applicable in the report.
5. An incomplete report may be returned to the applicant for revision.
6. 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 the competent authority for assessing the application, it may result in the rejection of the application as provided for in the regulations.
7. This report must be handed in at offices of the relevant competent authority as determined by each authority.
8. No faxed or e-mailed reports will be accepted.
9. The signature of the EAP on the report must be an original signature.
10. The report must be compiled by an independent environmental assessment practitioner.
11. Unless protected by law, all information in the report will become public information on receipt by the competent authority. Any interested and affected party should be provided with the information contained in this report on request, during any stage of the application process.
12. A competent authority may require that for specified types of activities in defined situations only parts of this report need to be completed.
13. Should a specialist report or report on a specialised process be submitted at any stage for any part of this application, the terms of reference for such report must also be submitted.

14. Two (2) colour hard copies and one (1) electronic copy of the report must be submitted to the competent authority.
15. Shape files (.shp) for maps must be included on the electronic copy of the report submitted to the competent authority.

SECTION A: ACTIVITY INFORMATION

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

If YES, please complete the form entitled "Details of specialist and declaration of interest" for the specialist appointed and attach in Appendix I.

1. PROJECT DESCRIPTION

a) Describe the project associated with the listed activities applied for

Sakata Seed Southern Africa (Pty) Ltd focuses on the production and sale of vegetable seed for local and international vegetable producing markets. Due to the growth of the business and the demand for vegetable seed both locally and internationally, an expansion in the seed production sector is required. To this end, a new seed packing and storage warehouse is proposed. Sakata Seed currently hires premises in Brits and the Hartford industrial park for this purpose. However, there are a number of drawbacks with this arrangement including the lack of space for expansion, a lack of security of tenure and a lack of ability to consolidate business operations with attendant cost and risk implications.

Sakata Seed is therefore proposing to erect a new seed packing and storing warehouse on Lanseria Portion 65 (a Portion of Portion 1) of the Farm Rhenosterspruit 495 JQ near the Lanseria airport, Gauteng. Various other facilities are currently located on this property, including offices and admin buildings, seed testing laboratories, cultivated areas, and seed packing and storage warehouses and the business has been operating on this property since 1985. In order to develop the new warehouse, a significant capital investment is required and both short term construction jobs as well as ten new permanent jobs would be created.

The property is located 1.5km to the west of the R512 and is accessed via a little used dirt road, the turnoff to which is 400 m north of the well known landmark the 'Home of the Chicken Pie' on the R512. The dirt road is not used as a main transport route, through road or WHS visitor route and generally carries little traffic consisting mostly of neighbouring property owners or employees and it ends approximately 2km north-west of the site. According to the relevant authorities, the dirt road is a private road and not a provincial road. The property lies on the slopes of a small valley in the Secondary Zone 2 of the Cradle of Mankind World Heritage Site, but importantly it is not located on the dolomites, which start with the ridge to the north of the site.

The valley has an extremely limited view-shed with Sakata Seeds and her sister company, Sakata Vegenetics (Pty) Ltd, being located on a north-easterly facing slope with the preferred site for the proposed warehouse development being cut into the lower portion of the slope (average fall of 1:16) in a position that limits the potential visual impact it might have, being well below the skyline. It would be clustered in proximity to existing buildings, and would thus not constitute a new stand-alone feature, although it would contribute significantly to the built footprint on the site. The property is 56,507m² and the area covered by the existing buildings is 4,209m². The area covered by the proposed building would be 4,025m² and a new brick and concrete road would encircle the building. Keeping the buildings close together allows for the adjacent agricultural land to remain clear of structures and continue to be used for cultivation as a functioning part of the organizational activities.

The preferred site as well as the alternative site are currently used for seed trials and this land has been cultivated for this purpose for the past 40 years. NB Due to a lack of suitable space on the property, the alternative site that has been identified is immediately adjacent to and overlapping with

the preferred site. A small, seasonal drainage line runs roughly along the northern boundary of the site, but the preferred site (and the alternative site) are well out of the 1:100 year floodline.

Designed by Fred Spencer (Spencer Associated Architects), the warehouse would incorporate various environmentally friendly features as requested by the client. The level of the new building was selected to balance the cut to fill and to ensure that the apex of the roof of the new building will be level with the window sills of the existing buildings on site and will not interrupt their views of the valley beyond. The building will not be visible from the adjacent properties on the south east, south and western edges of the site. It will be visible from the properties to the north of the site but due to the topography, it will be well below their line of sight and will not negatively impact the visual amenity of the area.

A rectangular building envelope with a mono-pitched roof form with wide overhanging eaves has been established as a recent building form used with great success elsewhere in the adjacent areas of the Cradle of Humankind. The mono-pitched rectangular form could be considered to be an appropriate vernacular architecture and the proposed building has been modelled on this precedent.

Face brick has been used to form an exterior plinth around the building to a height of 1,2m. There is a reinforced concrete mezzanine floor structure over portion of the plan, including some ancillary office accommodation. The balance of the building and the walls of the building consist of Colomet C1S pre-coated KlipLok roof sheeting on a steel structure. The walls and roof are insulated with Isoboard insulation panels. Windows are steel windows in keeping with the windows in the existing buildings on site.

The face brick plinth visually anchors the building to the ground and the use of river stone cladding to entrance features and offices ties in with the natural stone outcrops in the area. The roof sheeting and side cladding colour is green to match the colour of the existing buildings on site and to help blend the building in to the vegetation on site.

Elevated galvanized steel corrugated water storage tanks for the harvesting of the storm water run-off from the roof is a direct design reference to a traditional agricultural aesthetic.

Modulation of scale and articulation of the bulk of the new building has been achieved by clipping ancillary accommodation onto the main rectangular plan form. This reduces the visual impact of the building. It also allows the main rectangular building plan to remain clear and uncluttered for its primary warehouse space function.

The mono-pitch form of the roof at a 5° pitch has been designed to follow the natural 1:16 (3.6°) gradient of the land at as closely as possible. This, along with the fact that the building will be shielded from most of the neighbours by the topography and trees further reduces any negative visual impact of the building.

Very long (6m) overhanging eaves on the east, north and west facades of the new building have been designed to protect and shade the extensive areas of window on these sides of the building to mitigate solar heat gain through the glazing. This passive solar control allows for penetration of natural light deep into the plan wherever possible, reducing the need for skylights and artificial lighting. As a bonus, the protected window walls allow for views of the sky and landscaping from almost anywhere within the building which enhances the working environment.

Natural cross-ventilation to the entire building will be achieved by opening sections in the window

walls which will be controlled manually as required. Localized ventilation is assisted by ceiling fans powered by the solar panel array on the roof of the building. There is provision for air-conditioning split-units to all of the offices but it is not anticipated that these will be required extensively due to the passive cooling mechanisms incorporated into the building design.

The solar panel array mounted on the roof of the building is intended to provide power to run the solar geysers, ceiling mounted fans, as well as other items of equipment that could be powered from this source. The solar panel array will also power the REHAU energy efficient Thermally Activated Building Structure (TABS) system which will be used to provide heating and cooling to the work areas of the warehouse using water in an under-floor pipe reticulation circuit.

Loffelstein interlocking retaining wall blocks where retaining of the ground will be necessary will allow for the planting of these retaining structures with indigenous vegetation which will soften these structures. Indigenous landscaping will be planted around the building and in the car parking areas to soften and shade these areas.

Balancing the cut to fill on the site means that there is no necessity to cart material off site which contributes to the reduction of the carbon footprint of the building.

There are boreholes and water storage tanks on the site and rain water harvesting is carried out on site at present. The new building will also have a rain water harvesting system in place. This consists of a series of 6 x 10,000 litre storage tanks to capture the rain water from the mono-pitch roof. Overflow from this system will be captured along the paved road are and discharged at points over the existing agricultural land adjacent to the site using kerb outlet channels with energy dissipation blocks to prevent erosion.

Water conservation will be facilitated by the use of dual flush toilet cisterns, low-flow shower heads, etc., to reduce the water consumption of the building. Indigenous, water-wise landscaping will support this principle. Harvesting of rain water over the entire site and all of the existing buildings ensures that the site is self-sufficient in the provision of water and this places minimal demand on the supplementary borehole supplies.

Sub-surface water and seepage from the cut into the slope will be captured by a pre-cast concrete channel system and a sub-surface bed agricultural drain which will feed in to the balance of the storm water management reticulation system.

There is an existing Eskom electrical supply to the site with enough surplus capacity to accommodate the anticipated demands of the new building. The existing supply capacity is 275kVA. The current maximum peak demand has been recorded at 165kVA leaving a capacity of 110kVA. It should be noted that the maximum peak demand in February and is not the average capacity used.

Existing sewerage on site is dealt with by a series of septic tank systems which are further up the slope of the site and have been in operation since the first buildings were built decades ago. The new building's sewerage will be dealt with using a Biorok Biobox biofilter sewage treatment plant system. The final effluent from a Biorok sewage treatment plant is four times (4 x) as clean as the minimum international standard and exceeds the minimum general discharge standards of the Department of Water Affairs.

b) Provide a detailed description of the listed activities associated with the project as applied for

Listed activity as described in GN R.544, 545 and 546	Description of project activity
	24 The transformation of land bigger than 1000 square metres in size to residential, retail, commercial, industrial or institutional use, where at the time of the coming into effect of this Schedule such land was zoned open space, conservation or had an equivalent zoning

2. FEASIBLE AND REASONABLE ALTERNATIVES

"alternatives", in relation to a proposed activity, means different means of meeting the general purpose and requirements of the activity, which may include alternatives to—

(a) the property on which or location where it is proposed to undertake the activity;
(b) the type of activity to be undertaken;
(c) the design or layout of the activity;
(d) the technology to be used in the activity;
(e) the operational aspects of the activity; and
(f) the option of not implementing the activity.

Describe alternatives that are considered in this application as required by Regulation 22(2)(h) of GN R.543. Alternatives should include a consideration of all possible means by which the purpose and need of the proposed activity (NOT PROJECT) could be accomplished in the specific instance taking account of the interest of the applicant in the activity. 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.

The identification of alternatives should be in line with the Integrated Environmental Assessment Guideline Series 11, published by the DEA in 2004. Should the alternatives include different locations and lay-outs, the co-ordinates of the different alternatives must be provided. The co-ordinates should be in degrees, minutes and seconds. The projection that must be used in all cases is the WGS84 spheroid in a national or local projection.

a) Site alternatives

Alternative 1 (preferred alternative)		
Description	Lat (DDMMSS)	Long (DDMMSS)

	25◦54'16.61"S	**27◦52'52.32"E**
Alternative 2		
Description	Lat (DDMMSS)	Long (DDMMSS)
	25◦54'16.69"S	**27◦52'50.42"E**
Alternative 3		
Description	Lat (DDMMSS)	Long (DDMMSS)
No further possible alternatives on this property		

In the case of linear activities: **N/A**

Alternative:	**Latitude (S):**	**Longitude (E):**
Alternative S1 (preferred)		
• Starting point of the activity		
• Middle/Additional point of the activity		
• End point of the activity		
Alternative S2 (if any)		
• Starting point of the activity		
• Middle/Additional point of the activity		
• End point of the activity		
Alternative S3 (if any)		
• Starting point of the activity		
• Middle/Additional point of the activity		
• End point of the activity		

For route alternatives that are longer than 500m, please provide an addendum with co-ordinates taken every 250 meters along the route for each alternative alignment.

In the case of an area being under application, please provide the co-ordinates of the corners of the site as indicated on the lay-out map provided in Appendix A.

b) Lay-out alternatives N/A

Alternative 1 (preferred alternative)		
Description	Lat (DDMMSS)	Long (DDMMSS)
Alternative 2		
Description	Lat (DDMMSS)	Long (DDMMSS)
Alternative 3		
Description	Lat (DDMMSS)	Long (DDMMSS)

c) Technology alternatives N/A

Alternative 1 (preferred alternative)

Alternative 2
Alternative 3

d) Other alternatives (e.g. scheduling, demand, input, scale and design alternatives)

Alternative 1 (preferred alternative)		
Alternative 2		
Alternative 3		

e) No-go alternative

Do not expand production and consolidate operations, and continue to use current rented premises in Brits and Heartford industrial park.

Paragraphs 3 – 13 below should be completed for each alternative.

3. PHYSICAL SIZE OF THE ACTIVITY

a) Indicate the physical size of the preferred activity/technology as well as alternative activities/technologies (footprints):

Alternative:	**Size of the activity:**
Alternative A1[1] (preferred activity alternative)	**Warehouse 4,028 m²** **Roads and Parking 2,297 m²**
Alternative A2 (if any)	**Warehouse 4,028 m²** **Roads and Parking 2,297 m²**
Alternative A3 (if any)	m²

or, for linear activities:

Alternative:	**Length of the activity:**
Alternative A1 (preferred activity alternative)	m
Alternative A2 (if any)	m
Alternative A3 (if any)	m

[1] "Alternative A.." refer to activity, process, technology or other alternatives.

b) Indicate the size of the alternative sites or servitudes (within which the above footprints will occur):

Alternative:	**Size of the site/servitude:**
Alternative A1 (preferred activity alternative)	m^2
Alternative A2 (if any)	m^2
Alternative A3 (if any)	m^2

4. SITE ACCESS

Does ready access to the site exist?	**YES**	
If NO, what is the distance over which a new access road will be built		m

Describe the type of access road planned:

n/a

Include the position of the access road on the site plan and required map, as well as an indication of the road in relation to the site.

5. LOCALITY MAP

An A3 locality map must be attached to the back of this document, as Appendix A. The scale of the locality map must be relevant to the size of the development (at least 1:50 000. For linear activities of more than 25 kilometres, a smaller scale e.g. 1:250 000 can be used. The scale must be indicated on the map.). The map must indicate the following:

- an accurate indication of the project site position as well as the positions of the alternative sites, if any;
- indication of all the alternatives identified;
- closest town(s;)
- road access from all major roads in the area;
- road names or numbers of all major roads as well as the roads that provide access to the site(s);
- all roads within a 1km radius of the site or alternative sites; and
- a north arrow;
- a legend; and
- locality GPS co-ordinates (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).

6. LAYOUT/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:

- the property boundaries and numbers of all the properties within 50 metres of the site;
- the current land use as well as the land use zoning of the site;
- the current land use as well as the land use zoning each of the properties adjoining the site or sites;
- the exact position of each listed activity applied for (including alternatives);
- servitude(s) indicating the purpose of the servitude;
- a legend; and
- a north arrow.

7. SENSITIVITY MAP

The layout/route plan as indicated above must be overlain with a sensitivity map that indicates all the sensitive areas associated with the site, including, but not limited to:

- watercourses;
- the 1:100 year flood line (where available or where it is required by DWA);
- ridges;
- cultural and historical features;
- areas with indigenous vegetation (even if it is degraded or infested with alien species); and
- critical biodiversity areas.

The sensitivity map must also cover areas within 100m of the site and must be attached in Appendix A.

8. SITE PHOTOGRAPHS

Colour photographs from the centre of the site must be taken in at least the eight major compass directions with a description of each photograph. Photographs must be attached under Appendix B to this report**.** It must be supplemented with additional photographs of relevant features on the site, if applicable.

9. FACILITY ILLUSTRATION

A detailed illustration of the activity must be provided at a scale of at least 1:200 as Appendix C for activities that include structures. The illustrations must be to scale and must represent a realistic image of the planned activity. The illustration must give a representative view of the activity.

10. ACTIVITY MOTIVATION

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

1. Is the activity permitted in terms of the property's existing land use rights?	YES		Please explain
The property is currently zoned as undetermined and the municipality has provided the opinion that special consent use can be granted once due process is followed cf. Appendix J. The required steps have been taken and an application for special consent use will be lodged by the end of March 2013.			
2. Will the activity be in line with the following?			
(a) Provincial Spatial Development Framework (PSDF)	YES		Please explain
An explicit objective of the Gauteng SDF is 'Protection of rural areas and enhancement of tourism and agricultural related activities'			
(b) Urban edge / Edge of Built environment for the area	YES		Please explain
The property is outside of the urban edge and is congruent with acceptable land uses for peri-urban areas being agricultural in nature.			
(c) Integrated Development Plan (IDP) and Spatial Development Framework (SDF) of the Local Municipality (e.g. would the approval of this application compromise the integrity of the existing approved and credible municipal IDP and SDF?).	YES		Please explain
The West Rand District Municipality IDP cites job creation as a key priority area: "Facilitate job creation through Local Economic development and capital projects". The WRDM strives to ensure "the conservation and sustainable management of the Cradle of Humankind World Heritage Site.", which this proposed development does not contradict or threaten. The WRDM SDF and IDP also defer to the draft COH WHS EMF.			
(d) Approved Structure Plan of the Municipality	YES		Please explain
The Muldersdrift Precinct Plan cites 'The promotion and facilitation of balanced and shared growth/economic' as a key objective. The site falls into the eco-tourism and agri-cooperation zone of the precinct plan, which attempts to manage the transition between dense urban and industrial land uses with open spaces and rural land uses including agriculture, tourism and the preservation of heritage assets. Providing the proposed development is responsibly planned, constructed and managed, it is considered to be in line with the plan, striving for sustainable development and is not in contradiction to the provisions of the plan in any respect.			

(e) An Environmental Management Framework (EMF) adopted by the Department (e.g. Would the approval of this application compromise the integrity of the existing environmental management priorities for the area and if so, can it be justified in terms of sustainability considerations?)		NO	Please explain
The proposed expansion of the existing on site operations to include a new warehouse is not seemingly supported by the EMF for the area that is to be formally adopted later this year. However, the proposed warehouse is not a greenfields development and it involves the benign activity of packing and storing vegetable seed, whilst the property is peripherally located in the WHS being 1.5km from the R512. Waste streams are made up of seed, packing material, paper and foil and pose no local or significant environmental threat through the generation of hazardous waste or bad odours. The incorporation of green design principles and technologies such as solar power and rain water harvesting further reduce any potential negative environmental impact the development might have. Of critical importance is that the existing development and the proposed expansion are located in a small valley with a very small view shed and such pose no threat to the sense of place of the COH WHS as they will be largely invisible to all but those few houses that immediately overlook the site. It is felt that the expansion of current activities will have no impact on nor detract from the outstanding universal values of the COH WHS and in accordance with the provisions of the EMF, the proposed warehouse would be clustered together with the existing buildings and would not be sprawled out across the landscape.			
(f) Any other Plans (e.g. Guide Plan)	YES	NO	Please explain
n/a			
3. Is the land use (associated with the activity being applied for) considered within the timeframe intended by the existing approved SDF agreed to by the relevant environmental authority (i.e. is the proposed development in line with the projects and programmes identified as priorities within the credible IDP)?	YES		Please explain
Yes, it meets the need for sustainable development, job creation and enhancement of agricultural activities, providing it will not impact negatively on the COH WHS, which is not foreseen given its location in the WHS, location in the local landscape and nature of the activity contemplated.			

4. Does the community/area need the activity and the associated land use concerned (is it a societal priority)? (This refers to the strategic as well as local level (e.g. development is a national priority, but within a specific local context it could be inappropriate.)	YES		Please explain
The activity in question is a local societal priority as the expansion of seed sorting and packing operations will result in an increase in related employment opportunities, i.e. the creation of nine new permanent positions, in an area that suffers from a lack of employment opportunities. Further, the proposed expansion of activities will contribute to national food security objectives.			
5. Are the necessary services with adequate capacity currently available (at the time of application), or must additional capacity be created to cater for the development? (Confirmation by the relevant Municipality in this regard must be attached to the final Basic Assessment Report as Appendix I.)	YES		Please explain
The municipality does not currently provide any services to the enterprise, and nor will it be required to. Electricity is purchased directly from Eskom and no additional supply is required to service the new warehouse. Water is sourced on the property and the proposed development will have its water needs met by rain water harvesting. Waste disposal is and will continue to be effected through a private contract.			
6. Is this development provided for in the infrastructure planning of the municipality, and if not what will the implication be on the infrastructure planning of the municipality (priority and placement of services and opportunity costs)? (Comment by the relevant Municipality in this regard must be attached to the final Basic Assessment Report as Appendix I.)		NO	Please explain
The proposed development will not require any type of service provision from the municipality.			
7. Is this project part of a national programme to address an issue of national concern or importance?		NO	Please explain
Whilst not part of an official programme to address national food security concerns it directly contributes to this objective.			

8. Do location factors favour this land use (associated with the activity applied for) at this place? (This relates to the contextualisation of the proposed land use on this site within its broader context.)	YES	NO	Please explain
The proposed development is not a greenfields development but rather an expansion of existing activities and it is therefore preferable and appropriate for it to be located at this place in order that business operations can be consolidated. The site is located in a peri-urban environment that is entirely suitable for this type of clean agri-industrial activity. The fact that the site is located within the core zone of COH WHS is not ideal, however, it is considered that the development will have no impact on the OUVs of the WHS and no significant impact on the surrounding natural environment.			
9. Is the development the best practicable environmental option for this land/site?	YES		Please explain
As above, the fact that the proposed development is an expansion of current activities, is agri-industrial in nature with negligible anticipated environmental impacts indicates that it is the best practicable environmental option for this land.			
10. Will the benefits of the proposed land use/development outweigh the negative impacts of it?	YES		Please explain
The proposed development will result in the increased production capacity of packed vegetable seed, a beneficiation of agricultural products, an increase in exports adding positively to the trade balance deficit as well as the creation of nine new jobs. Given that the seed sorting and packing activities are relatively benign and that the building will incorporate green design principles and technologies, it is felt that the benefits of the proposed development outweigh any negative impacts.			
11. Will the proposed land use/development set a precedent for similar activities in the area (local municipality)?		NO	Please explain
The proposed development is simply an expansion of an existing activity and should not therefore be precedent setting in this context or location.			
12. Will any person's rights be negatively affected by the proposed activity/ies?		NO	Please explain
Will on the contrary advance people's rights in respect of having access to employment opportunities.			
13. Will the proposed activity/ies compromise the "urban edge" as defined by the local municipality?		NO	Please explain
It is an agri-industrial activity located outside of the urban edge.			
14. Will the proposed activity/ies contribute to any of the 17 Strategic Integrated Projects (SIPS)?	YES		Please explain
It contributes directly to SIP 11: Agri-logistics and rural infrastructure "*Improve investment in agricultural and rural infrastructure that supports expansion of production and employment, small-scale farming and rural development, including facilities for storage (silos, fresh-produce facilities, packing houses); transport links to main networks (rural roads, branch train-line, ports), fencing of farms, irrigation schemes to poor areas, improved R&D on rural issues (including expansion of agricultural colleges), processing facilities (abattoirs, dairy infrastructure), aquaculture incubation schemes and rural tourism infrastructure."*			

15. What will the benefits be to society in general and to the local communities?	Please explain
The proposed expansion of activities will contribute to increased food security objectives and at a local level will address the dire need for employment opportunities.	
16. Any other need and desirability considerations related to the proposed activity?	Please explain
Employment opportunities will be mainly for people with a relatively low level of education who will be given opportunities to uplift themselves through the on the job training they will receive, as well as having the opportunity acquire skills such as forklift driving, first aid training and official training in seed sampling	
17. How does the project fit into the National Development Plan for 2030?	Please explain
The proposed development speaks directly to the NDP 2030 which calls for expanded agricultural production and associated value adding activities. Further, the resulting increase in domestic exports will contribute favourably to the balance of trade deficit, helping to build economic stability.	
18. Please describe how the general objectives of Integrated Environmental Management as set out in section 23 of NEMA have been taken into account.	
Planning for the proposed development and its associated activities and this process in particular (but it prescribed nature) have addressed the objectives of integrated environmental management as specified in (23)(2) (a-f)	

19. Please describe how the principles of environmental management as set out in section 2 of NEMA have been taken into account.
The proposed development and its associated planning and planned activities: • considers and advances the needs of people • is considered to be socially, environmentally and economically sustainable • has taken into account all relevant factors as detailed in (4)(a)(i–viii) • addresses the need for integrated environmental management and pursues the best practicable environmental option • does not have an undue negative impact on disadvantaged persons or discriminate in any way against people or a group of people • provides the local community with equitable access to environmental resources, benefits and services in order to ensure human well-being • adopts a life-cycle approach to managing environmental issues (cradle to grave) • has allowed for the broad participation of various stakeholders • promotes community wellbeing and empowerment in various ways • assesses a broad range of impacts, including social, economic and environmental • have taken occupational health and safety issues into account to ensure a safe working environment • have been and remain transparent • ensure that the environment is protected as the people's common heritage • internalise to the greatest possible extent the costs associated with preventing pollution and environmental degradation, and • takes into account concerns relating to sensitive ecosystems.

11. 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	Applicability to the project	Administering authority	Date
National Environmental Management Act No. 107 of 1998	Provisions for environmental management	National & Provincial	27 November 1998
National Water Act, 1998 (Act 36 of 1998)	Provisions for water use and management	National & Provincial	1998
Mogale City SDF and IDP	Municipal planning provisions	Mogale City	2011
World Heritage Convention Act, 1999	Provisions for WHS management and development	WHS Authority	1999
National Heritage Resources Act No. 25 of 1999	Conservation and preservation of heritage resources	SAHRA	1999
COH WHS EMF	Environmental framework for the management of the COH WHS	COH WHS MA	-
COH-WHS Land Use Plans, Reports and Maps	Development and management of the COH WHS	GDACE	

12. WASTE, EFFLUENT, EMISSION AND NOISE MANAGEMENT

a) Solid waste management

Will the activity produce solid construction waste during the construction/initiation phase?	**YES**	
If YES, what estimated quantity will be produced per month?	**8 m³**	

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

It will be securely stored on site as per the EMPr and disposed of at a registered landfill site by the contractor.

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

It will be disposed of at Mooiplaats registered landfill site

Will the activity produce solid waste during its operational phase?	**YES**	
If YES, what estimated quantity will be produced per month?	**32 m³**	

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

As per the current arrangements, waste will be collected by Waste Group and recycled where possible or else disposed of at a registered land fill site. Waste will consist predominantly of seeds, packing material, paper and foil.

If the solid waste will be disposed of into a municipal waste stream, indicate which registered landfill site will be used.

Mooiplaats landfill

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

n/a

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

Can any part of the solid waste be classified as hazardous in terms of the NEM:WA?		**NO**

If YES, inform the competent authority and request a change to an application for scoping and EIA. An application for a waste permit in terms of the NEM:WA must also be submitted with this application.

Is the activity that is being applied for a solid waste handling or treatment facility?		**NO**

If YES, then the applicant should consult with the competent authority to determine whether it is necessary to change to an application for scoping and EIA. An application for a waste permit in terms of the NEM:WA must also be submitted with this application.

b) Liquid effluent

Will the activity produce effluent, other than normal sewage, that will be disposed of		**NO**

in a municipal sewage system?		
If YES, what estimated quantity will be produced per month?		m^3
Will the activity produce any effluent that will be treated and/or disposed of on site?		**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?		**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:

n/a

c) Emissions into the atmosphere

Will the activity release emissions into the atmosphere other that exhaust emissions and dust associated with construction phase activities?		**NO**
If YES, is it controlled by any legislation of any sphere of government?		

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.
If NO, describe the emissions in terms of type and concentration:

d) Waste permit

Will any aspect of the activity produce waste that will require a waste permit in terms of the NEM:WA?		**NO**

If YES, please submit evidence that an application for a waste permit has been submitted to the competent authority

e) Generation of noise

Will the activity generate noise?	**YES**	
If YES, is it controlled by any legislation of any sphere of government?		**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 noise in terms of type and level:

The packing machinery operates at a low noise level that will be largely contained within the proposed warehouse and would dissipate completely within 200m of the building.

13. WATER USE

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

~~Municipal~~	~~Water board~~	~~Groundwater~~	~~River, stream, dam or lake~~	Other **Rain water**	~~The activity will not use water~~

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:	litres	
Does the activity require a water use authorisation (general authorisation or water use license) from the Department of Water Affairs?		**NO**

If YES, please provide proof that the application has been submitted to the Department of Water Affairs.

14. ENERGY EFFICIENCY

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

Very long (6m) overhanging eaves on the east, north and west facades of the new building have been designed to protect and shade the extensive areas of window on these sides of the building to mitigate solar heat gain through the glazing. This passive solar control allows for penetration of natural light deep into the plan wherever possible, reducing the need for skylights and artificial lighting. As a bonus, the protected window walls allow for views of the sky and landscaping from almost anywhere within the building which enhances the working environment.

Natural cross-ventilation to the entire building will be achieved by opening sections in the window walls which will be controlled manually as required. Localized ventilation is assisted by ceiling fans powered by the solar panel array on the roof of the building. There is provision for air-conditioning split-units to all of the offices but it is not anticipated that these will be required extensively due to the passive cooling mechanisms incorporated into the building design.

The solar panel array mounted on the roof of the building is intended to provide power to run the solar geysers, ceiling mounted fans, as well as other items of equipment that could be powered from this source. The solar panel array will also power the REHAU energy efficient Thermally Activated Building Structure (TABS) system which will be used to provide heating and cooling to the work areas of the warehouse using water in an under-floor pipe reticulation circuit.

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

The solar panel array will be a Soventix (Pty.) Ltd., Solarworld Africa (Pty.) Ltd. or Earthpower Energy Solutions installation as these companies appear to be the leaders in these sorts of installations.

SECTION B: SITE/AREA/PROPERTY DESCRIPTION

Important notes:

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

Section B Copy No. (e.g. A): [ ]

2. Paragraphs 1 - 6 below must be completed for each alternative.

3. Has a specialist been consulted to assist with the completion of this section? [ ] **NO**

If YES, please complete the form entitled "Details of specialist and declaration of interest" for each specialist thus appointed and attach it in Appendix I. All specialist reports must be contained in Appendix D.

Property description/physical address:

Province	Gauteng
District Municipality	Mogale City
Local Municipality	Mogale City
Ward Number(s)	
Farm name and number	Rhenosterspruit 495 JQ
Portion number	Lanseria Portion 65 (a Portion of Portion 1)
SG Code	7618/70

Where a large number of properties are involved (e.g. linear activities), please attach a full list to this application including the same information as indicated above.

Current land-use zoning as per local municipality IDP/records:

undetermined

In instances where there is more than one current land-use zoning, please attach a list of current land use zonings that also indicate which portions each use pertains to, to this application.

Is a change of land-use or a consent use application required? **YES** [ ]

See Appendix J for opinion on consent use and copy of application for such

1. GRADIENT OF THE SITE

Indicate the general gradient of the site.

Alternative S1:

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~~

Alternative S2 (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~~

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

2. LOCATION IN LANDSCAPE

Indicate the landform(s) that best describes the site:

2.1 Ridgeline		2.4 Closed valley		2.7 Undulating plain / low hills	
2.2 Plateau		2.5 Open valley	**X**	2.8 Dune	
2.3 Side slope of hill/mountain		2.6 Plain		2.9 Seafront	

3. GROUNDWATER, SOIL AND GEOLOGICAL STABILITY OF THE SITE

Is the site(s) located on any of the following?

	Alternative S1:		**Alternative S2 (if any):**		**Alternative S3 (if any):**	
Shallow water table (less than 1.5m deep)		**NO**		**NO**	YES	NO
Dolomite, sinkhole or doline areas		**NO**		**NO**	YES	NO
Seasonally wet soils (often close to water bodies)		**NO**		**NO**	YES	NO
Unstable rocky slopes or steep slopes with loose soil		**NO**		**NO**	YES	NO
Dispersive soils (soils that dissolve in water)		**NO**		**NO**	YES	NO
Soils with high clay content (clay fraction more than 40%)		**NO**		**NO**	YES	NO
Any other unstable soil or geological feature		**NO**		**NO**	YES	NO
An area sensitive to erosion		**NO**		**NO**	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 it exists, the 1:50 000 scale Regional Geotechnical Maps prepared by the Council for Geo Science may also be consulted.

4. GROUNDCOVER

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

~~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] "is ticked, please consult an appropriate specialist to assist in the completion of this section if the environmental assessment practitioner doesn't have the necessary expertise.

5. SURFACE WATER

Indicate the surface water present on and or adjacent to the site and alternative sites?

Perennial River		**NO**	
Non-Perennial River		**NO**	
Permanent Wetland		**NO**	
Seasonal Wetland		**NO**	
Artificial Wetland		**NO**	
Estuarine / Lagoonal wetland		**NO**	

If any of the boxes marked YES or UNSURE is ticked, please provide a description of the relevant watercourse.

A small seasonal drainage line runs at the base of the property in the valley bottom, about 100m from edge of the proposed warehouse site. The drainage line runs in an easterly direction.

6. LAND USE CHARACTER OF SURROUNDING AREA

Indicate land uses and/or prominent features that currently occur within a 500m radius of the site and give description of how this influences the application or may be impacted upon by the application:

Natural area	~~Dam or reservoir~~	~~Polo fields~~
Low density residential	~~Hospital/medical centre~~	~~Filling station~~ [H]
~~Medium density residential~~	~~School~~	~~Landfill or waste treatment site~~
~~High density residential~~	~~Tertiary education facility~~	~~Plantation~~
~~Informal residential~~[A]	~~Church~~	**Agriculture**
~~Retail commercial & warehousing~~	~~Old age home~~	**River, stream or wetland**
~~Light industrial~~	~~Sewage treatment plant~~[A]	~~Nature conservation area~~

~~Medium industrial~~ ~~AN~~	~~Train station or shunting yard~~ ~~N~~	**Mountain, koppie or ridge**
~~Heavy industrial~~ ~~AN~~	~~Railway line~~ ~~N~~	~~Museum~~
~~Power station~~	~~Major road (4 lanes or more)~~ ~~N~~	~~Historical building~~
~~Office/consulting room~~	~~Airport~~ ~~N~~	~~Protected Area~~
~~Military or police base/station/compound~~	~~Harbour~~	~~Graveyard~~
~~Spoil heap or slimes dam~~ ~~A~~	~~Sport facilities~~	~~Archaeological site~~
~~Quarry, sand or borrow pit~~	~~Golf course~~	~~Other land uses (describe)~~

If any of the boxes marked with an "N "are ticked, how will this impact / be impacted upon by the proposed activity?

n/a

If any of the boxes marked with an "An" are ticked, how will this impact / be impacted upon by the proposed activity? Specify and explain:

n/a

If any of the boxes marked with an "H" are ticked, how will this impact / be impacted upon by the proposed activity? Specify and explain:

n/a

Does the proposed site (including any alternative sites) fall within any of the following:

Critical Biodiversity Area (as per provincial conservation plan)		**NO**
Core area of a protected area?		**NO**
Buffer area of a protected area?		**NO**
Planned expansion area of an existing protected area?		**NO**
Existing offset area associated with a previous Environmental Authorisation?		**NO**
Buffer area of the SKA?		**NO**

If the answer to any of these questions was YES, a map indicating the affected area must be included in Appendix A.

7. CULTURAL/HISTORICAL FEATURES

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 paleontological sites, on or close (within 20m) to the site? If YES, explain:		**NO**

If uncertain, conduct a specialist investigation by a recognised specialist in the field (archaeology or palaeontology) to establish whether there is such a feature(s) present on or close to the site. Briefly explain the findings of the specialist:

Please see Appendix D for specialist archaeology report

Will any building or structure older than 60 years be affected in any way? Is it necessary to apply for a permit in terms of the National Heritage Resources Act, 1999 (Act 25 of 1999)?		**NO**
	YES	

If YES, please provide proof that this permit application has been submitted to SAHRA or the relevant provincial authority.

8. SOCIO-ECONOMIC CHARACTER

a) Local Municipality

Please provide details on the socio-economic character of the local municipality in which the proposed site(s) are situated.

Level of unemployment:

22% in 2009 (according to the Mogale City Local Municipality LED Strategy). Trade provides most jobs at 19.9% (formal and informal) and Agriculture provides 2.2% of jobs.

Economic profile of local municipality:

According to Mogale City's Economic Review for 2010, the key contributers to Mogale City's GVA (Gross Value Addition- which is the GDP excluding subsidies and taxes) are the following: Manufacturing 20%; General Government 18.7%; Trade 13.7% Business services 11.2%; Finance, and Insurance & Real Estate 10.5%. These five sectors account for nearly three quarters (74.1%) of Mogale City's GVA, while Mining 92.3% and Agriculture(0.6%) are the worst contributors.

Level of education:

According to the Mogale City Local Municipality LED Strategy (2009) 7.6% of the population has no schooling, 1.85 has Grade 0; 29.2% has some high schooling, while 22% of the population have completed high school. Only 4% of the population has a tertiary degree.

b) Socio-economic value of the activity

What is the expected capital value of the activity on completion?	**R 25 000 000**	
What is the expected yearly income that will be generated by or as a result of the activity?	**R 1 440 000 (cost saving)**	
Will the activity contribute to service infrastructure?	**YES**	
Is the activity a public amenity?		**NO**
How many new employment opportunities will be created in the development and construction phase of the activity/ies?	**50**	

What is the expected value of the employment opportunities during the development and construction phase?	**R5 000 000**
What percentage of this will accrue to previously disadvantaged individuals?	**80%**
How many permanent new employment opportunities will be created during the operational phase of the activity?	**9**
What is the expected current value of the employment opportunities during the first 10 years?	**R9,047,298**
What percentage of this will accrue to previously disadvantaged individuals?	**90%**

9. BIODIVERSITY

Please note: The Department may request specialist input/studies depending on the nature of the biodiversity occurring on the site and potential impact(s) of the proposed activity/ies. To assist with the identification of the biodiversity occurring on site and the ecosystem status consult http://bgis.sanbi.org or BGIShelp@sanbi.org. Information is also available on compact disc (cd) from the Biodiversity-GIS Unit, Ph (021) 799 8698. This information may be updated from time to time and it is the applicant/ EAP's responsibility to ensure that the latest version is used. A map of the relevant biodiversity information (including an indication of the habitat conditions as per (b) below) and must be provided as an overlay map to the property/site plan as Appendix D to this report.

a) Indicate the applicable biodiversity planning categories of all areas on site and indicate the reason(s) provided in the biodiversity plan for the selection of the specific area as part of the specific category)

Systematic Biodiversity Planning Category				**If CBA or ESA, indicate the reason(s) for its selection in biodiversity plan**
~~Critical Biodiversity Area (CBA)~~	~~Ecological Support Area (ESA)~~	~~Other Natural Area (ONA)~~	**No Natural Area Remaining (NNR)**	

b) Indicate and describe the habitat condition on site

Habitat Condition	**Percentage of habitat condition class (adding up to 100%)**	**Description and additional Comments and Observations (including additional insight into condition, e.g. poor land management practises, presence of quarries, grazing, harvesting regimes etc).**
Natural	**10 %**	**The remaining fraction of the site that is still in a natural state is extremely limited, consisting of degraded Egoli Granite Grasslands**
Near Natural (includes areas with low to moderate level of alien invasive plants)	%	
Degraded (includes areas	%	

heavily invaded by alien plants)		
Transformed (includes cultivation, dams, urban, plantation, roads, etc)	**90 %**	**The site has been used for agricultural and agri-industrial activities for four decades and has either been developed on (buildings, roads, gardens) or is cultivated for seed trials**

c) Complete the table to indicate:

(i) the type of vegetation, including its ecosystem status, present on the site; and

(ii) whether an aquatic ecosystem is present on site.

Terrestrial Ecosystems		**Aquatic Ecosystems**						
Ecosystem threat status as per the National Environmental Management: Biodiversity Act (Act No. 10 of 2004)	~~Critical~~	Wetland (including rivers, depressions, channelled and unchanneled wetlands, flats, seeps pans, and artificial wetlands)			Estuary		Coastline	
	Endangered							
	~~Vulnerable~~							
	~~Least Threatened~~	YES	~~NO~~	~~UNSURE~~	~~YES~~	~~NO~~	~~YES~~	~~NO~~

d) Please provide a description of the vegetation type and/or aquatic ecosystem present on site, including any important biodiversity features/information identified on site (e.g. threatened species and special habitats)

The site is largely transformed, with either buildings, gardens, roads or cultivated fields where seed trials are conducted. The small patches of remaining vegetation (approximately 10% of the property) consist of degraded Egoli Granite Grassland. A small drainage line runs along the northern boundary of the property, about 100m from the edge of the preferred and alternate sites. Neither the remaining natural vegetation nor the drainage line will be impacted by the proposed development, providing the EMPr is effectively implemented.

SECTION C: PUBLIC PARTICIPATION

1. ADVERTISEMENT AND NOTICE

Publication name	**The Star**	
Date published	**27/2/2013**	
Publication name	**Die Beeld**	
Date published	**27/2/2013**	
Site notice position	**Latitude**	**Longitude**
	25∘54'24.72"S	27∘52'53.39"E
	25∘54'19.19"S	27∘52'53.82"E
Date placed	**27/2/2013**	

Include proof of the placement of the relevant advertisements and notices in Appendix E1.

2. DETERMINATION OF APPROPRIATE MEASURES

Provide details of the measures taken to include all potential I&APs as required by Regulation 54(2)(e) and 54(7) of GN R.543.

Key stakeholders (other than organs of state) identified in terms of Regulation 54(2)(b) of GN R.543:

Title, Name and Surname	Affiliation/ key stakeholder status	Contact details (tel number or e-mail address)
Rhenosterspruit Nature Conservancy	Local stakeholder – CEO: Anthony Duigan	+27 83 263 0433 anthony@jcp.co.za
Mr Peter Nagel	Neighbour	+27 83 263 0433 peter.nagel@scriptorium.co.za
Rodney Zingel	Neighbour	011 469 0719 rzingel@icon.co.za
Mr E Nevhongoni	Cradle CPA - Neighbour	011 548 2800 (work)
Mr T Meintjies	Neigbour	082 801 6320 Eoymeintjes@ymail.com
Mr L Potter	Responded to newspaper advert	LeighP@L2B.co.za

Include proof that the key stakeholder received written notification of the proposed activities as Appendix E2. This proof may include any of the following:

- e-mail delivery reports;
- registered mail receipts;
- courier waybills;
- signed acknowledgements of receipt; and/or
- or any other proof as agreed upon by the competent authority.

3. ISSUES RAISED BY INTERESTED AND AFFECTED PARTIES

Summary of main issues raised by I&APs	Summary of response from EAP

What visual impact is anticipated	Position in landscape reduces visual impact. Will be cut into slope to lower profile. Colours, design and screening trees will all work to reduce potential visual impact
How will rainwater and stormwater be managed	Rainwater will be captured in 10,000 litre tanks and storm water attenuation measures will be taken, with energy dissipating blocks at outflows
What will be additional impact of trucks be on the road during the operation phase	Two additional pantechnicons per week, between January and July, considered to be insignificant
Who is the EAP and is due process being followed	Phillipa Holden is EAP and process as prescribed in the regulations is being followed, including PP process

4. COMMENTS AND RESPONSE REPORT

The practitioner must record all comments received from I&APs and respond to each comment before the Draft BAR 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 the Final BAR as Appendix E3.

5. AUTHORITY PARTICIPATION

Authorities and organs of state identified as key stakeholders:

Authority/Organ of State	**Contact person (Title, Name and Surname)**	**Tel No**	**Fax No**	**e-mail**	**Postal address**
COH WHS MA	Mr Hein Pienaar	011 085 2486	086 267 5160	hein@gauteng.net	
	Mr Peter Mills	011 085 2500	086 267 5138	peter@gauteng.net	
GDARD	Ms Boniswa Belot	011 355 1212	011 355 1000	Boniswa.belot@gauteng.gov.za	PO Box 8769 Johannesburg 2000
Provincial Heritage Authority(PHRA-G):	Mr Themba Monnye	011 355 2878	-	Themba.Monnye@gauteng.gov.za	
SAHRA	Mr Andrew Salomon	021 462 4502	021 462 4509	asalomon@sahra.org.za	
Mogale City Council	Mr Koogan Naidoo	011 951 2113	011 660 1570	Koogan.naidoo@mogalecity.gove.za	Coronation Park
Ward Councillor	Mr	0730420135		osbornramadi@gmail.com	

	Osborn Ramadi				

Include proof that the Authorities and Organs of State received written notification of the proposed activities as appendix E4.

In the case of renewable energy projects, Eskom and the SKA Project Office must be included in the list of Organs of State.

6. CONSULTATION WITH OTHER STAKEHOLDERS

Note that, for any activities (linear or other) where deviation from the public participation requirements may be appropriate, the person conducting the public participation process may deviate from the requirements of that sub-regulation to the extent and in the manner as may be agreed to by the competent authority.

Proof of any such agreement must be provided, where applicable. Application for any deviation from the regulations relating to the public participation process must be submitted prior to the commencement of the public participation process.

A list of registered I&APs must be included as appendix E5.

Copies of any correspondence and minutes of any meetings held must be included in Appendix E6.

SECTION D: IMPACT ASSESSMENT

The assessment of impacts must adhere to the minimum requirements in the EIA Regulations, 2010, 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.

1. IMPACTS THAT MAY RESULT FROM THE PLANNING AND DESIGN, CONSTRUCTION, OPERATIONAL, DECOMMISSIONING AND CLOSURE PHASES AS WELL AS PROPOSED MANAGEMENT OF IDENTIFIED IMPACTS AND PROPOSED MITIGATION MEASURES

Provide a summary and anticipated significance of the potential direct, indirect and cumulative impacts that are likely to occur as a result of the planning and design phase, construction phase, operational phase, decommissioning and closure phase, including impacts relating to the choice of site/activity/technology alternatives as well as the mitigation measures that may eliminate or reduce the potential impacts listed. This impact assessment must be applied to all the identified alternatives to the activities identified in Section A(2) of this report.

Impact summary	**Significance (after mitigation)**	**Proposed mitigation**
Alternative 1 (preferred alternative)		
Direct impacts:		
Minor change to sub-surface water flow	L-	Any seepage to be directed into storm water attenuation system
Possible erosion of site cleared and left for significant period during rainy season	L-	No break between clearing and construction. Construct earth berm to stop soil loss.
Erosion from runoff after heavy rain events	L-	Once rain water tanks full, overflow to be directed to storm water attenuation system
Contamination of soil and ground water by cement or other building material	L-	Cement to be mixed off site, any other mixing to take place in sealed and bunded area
Development not in keeping with EMF for the COH WHS though not anticipated to impact on sense of place or OUVs given isolated location and position in the landscape	L-	Limit visual impact to greatest possible extent through appropriate screening, choice of colours, lighting etc.
Alien and invasive vegetation may inadvertently be introduced	L-	Ongoing checks for and clearing of any alien and/or invasive vegetation
Poaching of small animals on neighbouring farms	L-	Environmental awareness, penalties and fines, suspension, checks for snares along drainage line
Pollution of ground water from sewage	L-	Sewage to be treated in BioRock system to meet DWA General Standards for Discharge, regular maintenance and checks for leaks
Noise during the construction phase	L-	Equipment to be in good working order,

Impact summary	Significance (after mitigation)	Proposed mitigation
		working hours to be observed
Noise during operation	L-	Warehouse design should suitably muffle sound, which is unlikely to carry more than 50 to 100m from the warehouse
Specialist study has indicated no significant findings and no anticipated impact	L-	Halt operations and call in expert if any artefacts found or suspected during construction
Visual impact anticipated due to size of warehouse, however, position in landscape and isolated valley with extremely small viewshed reduces its significance	L-	Cut into slope to lower profile, suitable colours and lighting, screen with indigenous trees (trees >1.5m to be planted)
Construction vehicles may cause damage to roads, but limited number of vehicles anticipated reduces the potential impact	L-	Rationalise vehicle movement, effect repairs to the road as/if required
Dust from vehicles	L-	Observe 40km per hour speed limit on the dirt road
Hindrance to traffic flow on R512 during peak traffic hours	L-	Heavy vehicles to turn onto and off of R512 between 09h00 and 16h00 only
Environmental contamination from waste that is not properly disposed of	L-	Disposal only at registered land fill site or facility
Building materials impact environment	L-	Responsible and certified legal building materials only to be used. Materials to be suitably transported and stockpiled on site.
No undue threat of fire anticipated	L-	No open fires allowed during construction. All relevant SABS regulations to be followed in this regard during construction and operation with fire fighting equipment to be located on site.
Decommissioning may have a variety of impacts	L-	EMPr to be implemented. Responsible and legal disposal of all waste materials critical.
A variety of positive socio-economic impacts anticipated	M+	
Safety and security risks exist, particularly with respect to wellbeing of construction crew	L-	Implement EMPr and all relevant SABS regulations
HIV/AIDS poses a risk to all sectors of society and risk of transmission may increase during construction period due to presence of construction crew on site	M-	Ongoing education and awareness of both construction crew and permanent employees
Indirect impacts:		
Cumulative impacts:		

Impact summary	Significance (after mitigation)	Proposed mitigation
Alternative 2		
Direct impacts:		
Minor change to sub-surface water flow	L-	Any seepage to be directed into storm water attenuation system
Possible erosion of site cleared and left for significant period during rainy season	L-	No break between clearing and construction. Construct earth berm to stop soil loss.
Erosion from runoff after heavy rain events	L-	Once rain water tanks full, overflow to be directed to storm water attenuation system
Contamination of soil and ground water by cement or other building material	L-	Cement to be mixed off site, any other mixing to take place in sealed and bunded area
Development not in keeping with EMF for the COH WHS though not anticipated to impact on sense of place or OUVs given isolated location and position in the landscape	L-	Limit visual impact to greatest possible extent through appropriate screening, choice of colours, lighting etc.
Alien and invasive vegetation may inadvertently be introduced	L-	Ongoing checks for and clearing of any alien and/or invasive vegetation
Poaching of small animals on neighbouring farms	L-	Environmental awareness, penalties and fines, suspension, checks for snares along drainage line
Pollution of ground water from sewage	L-	Sewage to be treated in BioRock system to meet DWA General Standards for Discharge, regular maintenance and checks for leaks
Noise during the construction phase	L-	Equipment to be in good working order, working hours to be observed
Noise during operation	L-	Warehouse design should suitably muffle sound, which is unlikely to carry more than 50 to 100m from the warehouse
Specialist study has indicated no significant findings and no anticipated impact	L-	Halt operations and call in expert if any artefacts found or suspected during construction
Visual impact anticipated due to size of warehouse, however, position in landscape and isolated valley with extremely small view-shed reduces its significance, though this position offers less opportunity to cut into the slope and lower the profile of the warehouse, save on fill required	L-	Cut into slope to lower profile, suitable colours and lighting, screen with indigenous trees (trees >1.5m to be planted)
Construction vehicles may cause damage to roads, but limited number of vehicles	L-	Rationalise vehicle movement, effect repairs to the road as/if required

Impact summary	Significance (after mitigation)	Proposed mitigation
anticipated reduces the potential impact		
Dust from vehicles	L-	Observe 40km per hour speed limit on the dirt road
Hindrance to traffic flow on R512 during peak traffic hours	L-	Heavy vehicles to turn onto and off of R512 between 09h00 and 16h00 only
Environmental contamination from waste that is not properly disposed of	L-	Disposal only at registered land fill site or facility
Building materials impact environment	L-	Responsible and certified legal building materials only to be used. Materials to be suitably transported and stockpiled on site.
No undue threat of fire anticipated	L-	No open fires allowed during construction. All relevant SABS regulations to be followed in this regard during construction and operation with fire fighting equipment to be located on site.
Decommissioning may have a variety of impacts	L-	EMPr to be implemented. Responsible and legal disposal of all waste materials critical.
A variety of positive socio-economic impacts anticipated	M+	
Safety and security risks exist, particularly with respect to wellbeing of construction crew	L-	Implement EMPr and all relevant SABS regulations
HIV/AIDS poses a risk to all sectors of society and risk of transmission may increase during construction period due to presence of construction crew on site	M-	Ongoing education and awareness of both construction crew and permanent employees
Indirect impacts:		
Cumulative impacts:		
No-go option		
Direct impacts:		
The business will not be able to expand as required with subsequent loss of attendant benefits, including capital investment, job creation, increased production of vegetable seed to meet local and international demand, increased exports and foreign exchange earnings, increased tax contributions and revenue generation	M –	

Impact summary	Significance (after mitigation)	Proposed mitigation
Continued lack of security of tenure as business is forced to continue at current premises	M-	
Inability to consolidate and grow business in one location	M-	
Increased risk of seed getting mixed up due to lack of space for effective operations, leading to loss of credibility and loss of sales	L -	
Indirect impacts:		
Cumulative impacts:		
No increase in building footprint and no possible impact on the environment from new development on site	L+	
No further possible impact on COH WHS sense of place or OUVs, though impact on these anticipated be extremely low in any event	L+	

A complete impact assessment in terms of Regulation 22(2)(i) of GN R.543 must be included as Appendix F.

2. ENVIRONMENTAL IMPACT STATEMENT

Taking the assessment of potential impacts into account, please provide an environmental impact statement that summarises 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 types of impact, duration of impacts, likelihood of potential impacts actually occurring and the significance of impacts.

Alternative A (preferred alternative)

It is anticipated that the development of a seed packing and storing warehouse on the Sakata Seed property in Lanseria will have a relatively limited local environmental impact given the benign nature of the activity. Most potential negative impacts are associated with the construction phase, and all are relatively easy to manage and mitigate through the effective implementation of the EMPr. Whilst the warehouse is relatively large, because of its position in the landscape and the small viewshed of the valley within which it is located, its potential visual impact is not anticipated to be significant. Furthermore, the property has been developed over a number of decades and the proposed site has been cultivated for three decades, so what is being considered is not a greenfields development in a pristine location. Plant would be electrically powered i.e. no diesel required (other than diesel powered forklift), and waste streams would consist primarily of paper and packing materials, and a relatively

small sewage load. No significant historical or heritage attributes have been identified in relation to the site. The location of the property within the core zone of the COH WHS potentially militates against any further development taking place. However, given its peripheral location (1.5km from eastern boundary of WHS) and isolated nature in an area where it is highly unlikely there will be any impact on OUV's and an extremely limited visual impact, it is felt that the proposed development will not impact negatively on the COH WHS. Traffic flows to and from the site are limited and will remain so, with only an additional two pantechnicons to visit the site weekly if the development proceeds. The positive benefits of proceeding with the development include job creation, expansion of production, and the consolidation of business activities with increased security of tenure.

Alternative B

It is anticipated that the development of a seed packing and storing warehouse on the Sakata Seed property in Lanseria will have a relatively limited local environmental impact given the benign nature of the activity. Most potential negative impacts are associated with the construction phase, and all are relatively easy to manage and mitigate through the effective implementation of the EMPr. Whilst the warehouse is relatively large, because of its position in the landscape and the small viewshed of the valley within which it is located, its potential visual impact is not anticipated to be significant – though this site offers a little less opportunity than the preferred site to cut into the slope thereby lowering the profile of the warehouse. Furthermore, the property has been developed over a number of decades and the proposed site has been cultivated for three decades, so what is being considered is not a greenfields development in a pristine location. Plant would be electrically powered i.e. no diesel required, and waste streams would consist primarily of paper and packing materials, and a relatively small sewage load. No significant historical or heritage attributes have been identified in relation to the site. The location of the property within the core zone of the COH WHS potentially militates against any further development taking place. However, given its peripheral location (1.5km from eastern boundary of WHS) and isolated nature in an area where it is highly unlikely there will be any impact on OUV's and an extremely limited visual impact (slightly less so than the preferred site), it is felt that the proposed development will not impact negatively on the COH WHS. Traffic flows to and from the site are limited and will remain so, with only an additional two pantechnicons to visit the site weekly if the development proceeds. The positive benefits of proceeding with the development include job creation, expansion of production, and the consolidation of business activities with increased security of tenure.

Alternative C

No-go alternative (compulsory)

The no-go alternative will result in a continued lack of security of tenure as Sakata Seeds will have to continue to hire premises to operate from, a lack of room for necessary expansion of operations and production capacity for local sale and for export, and ongoing unconsolidated activities leading to additional costs and business risks. Further jobs will not be created (short term construction and nine long term jobs) and capital investment into the country will be prevented.

SECTION E. 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**	

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).

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.

Appointment of an independent ECO and monthly site visits.

Full implementation of the EMPr with an annual environmental audit of operations to assess impacts and possible improvements.

Is an EMPr attached?	**YES**	

The EMPr must be attached as Appendix G.

The details of the EAP who compiled the BAR and the expertise of the EAP to perform the Basic Assessment process must be included as Appendix H.

If any specialist reports were used during the compilation of this BAR, please attach the declaration of interest for each specialist in Appendix I.

Any other information relevant to this application and not previously included must be attached in Appendix J.

Phillipa Holden

NAME OF EAP

4th April 2012

SIGNATURE OF EAP

DATE

SECTION F: APPENDIXES

The following appendixes must be attached:

Appendix A: Maps

Appendix B: Photographs

Appendix C: Facility illustration(s)

Appendix D: Specialist reports (including terms of reference)

Appendix E: Public Participation

Appendix F: Impact Assessment

Appendix G: Environmental Management Programme (EMPr)

Appendix H: Details of EAP and expertise

Appendix I: Specialist's declaration of interest

Appendix J: Additional Information