In terms of Regulation 19(3) of GN 326 of the NEMA Environmental Impact Assessment Regulations, 2014, as amended on 07 April 2017, the impact assessment for the unlawful development and expansion of Hantam Veevoere is as follows:

Construction phase:

Potential impacts on geographical and physical aspects:	**Potential impact on freshwater ecosystems**
Nature of impact:	Contamination of freshwater ecosystems from fuel leakages and spillages, contaminated construction water and stormwater. Animal manure and waste water.
Extent and duration of impact:	Local, during construction and operation
Probability of occurrence:	Possible
Degree to which the impact can be reversed:	Medium
Degree to which the impact may cause irreplaceable loss of resources:	Medium
Cumulative impact prior to mitigation:	Medium
Significance rating of impact prior to mitigation (Low, Medium, Medium-High, High, or Very-High)	Medium - negative
Degree to which the impact can be mitigated:	High
Proposed mitigation:	• All construction and operation of the Hantam Veevoere must be done in accordance with an approved construction and operational phase Environmental Management Programme ("EMPr"), which must be developed by a suitably experienced Environmental Assessment Practitioner ("EAP"). Particular importance must be given to emergency preparedness with regards to any spillages or leakage of hydrocarbons on site. • The control of construction waste water, any contaminated water and/or stormwater must be properly controlled, as per the EMPr.
Cumulative impact post mitigation:	Negligible
Significance rating of impact after mitigation (Low, Medium, Medium-High, High, or Very-High)	Very low- Negative

Potential impact on biological aspects:	
Nature of impact:	**Loss of vegetation** Direct loss of vegetation type and associated habitat due to construction and operational activities.
Extent and duration of impact:	Local, temporary
Probability of occurrence:	Unlikely
Degree to which the impact can be reversed:	Likely
Degree to which the impact may cause irreplaceable loss of resources:	Unlikely
Cumulative impact prior to mitigation:	Low negative
Significance rating of impact prior to mitigation (Low, Medium, Medium-High, High, or Very-High)	Low negative
Degree to which the impact can be mitigated:	Medium
Proposed mitigation:	• Indiscriminate clearing of areas must be avoided (all remaining areas to remain as natural as possible). • Once the construction is completed all further movement must be confined to the access tracks to allow the vegetation to re-establish over the excavated areas.

	• Rehabilitation must be done after construction. • All construction must be done in accordance with an approved construction and operational phase • Environmental Management Programme (EMPr), which must be developed by a suitably experienced Environmental Assessment Practitioner. • A suitably qualified Environmental Control Officer must be appointed to monitor the construction phase in terms of the EMPr. • An integrated waste management system must be implemented during the construction phase. • All rubble and rubbish (if applicable) must be collected and removed from the site to a suitable registered waste disposal site. • All alien vegetation should be removed from all associated footprints within the various construction sites
Cumulative impact post mitigation:	Negligible
Significance rating of impact after mitigation (Low, Medium, Medium-High, High, or Very-High)	Negligible

Potential impacts on socio-economic aspects:	
Nature of impact:	**Temporary jobs will be created in the construction industry during the construction phase.**
Extent and duration of impact:	Local. During the construction phase of the activity
Probability of occurrence:	Definite
Degree to which the impact can be reversed:	NA. This is a positive impact
Degree to which the impact may cause irreplaceable loss of resources:	NA
Cumulative impact prior to mitigation:	Low - positive
Significance rating of impact prior to mitigation (Low, Medium, Medium-High, High, or Very-High)	Low - positive
Degree to which the impact can be mitigated:	Medium
Proposed mitigation:	No mitigation measures are required. Temporary jobs will be created during the construction phase
Cumulative impact post mitigation:	Low - positive
Significance rating of impact after mitigation (Low, Medium, Medium-High, High, or Very-High)	Low - positive

Potential impacts on cultural-historical aspects:	
Nature of impact:	**The loss of cultural or historic aspects during construction**
Extent and duration of impact:	Local, during construction phase
Probability of occurrence:	Highly unlikely, the is completely transformed due to past development activities on the property.
Degree to which the impact can be reversed:	N/A
Degree to which the impact may cause irreplaceable loss of resources:	Highly Unlikely
Cumulative impact prior to mitigation:	Very Low – Negative
Significance rating of impact prior to mitigation (Low, Medium, Medium-High, High, or Very-High)	Very low – Negative
Degree to which the impact can be mitigated:	Limited

Proposed mitigation:	• If any archaeological remains (including but not limited to fossil bones and fossil shells, coins, indigenous and/or colonial ceramics, any articles of value or antiquity, stone artefacts and bone remains, structures and other built features, rock art and rock engravings) are discovered during construction they must immediately be reported to SAHRA and must not be disturbed further until the necessary approval has been obtained from SAHRA. • Should any human remains/burial or archaeological material be disturbed, exposed or uncovered during construction, these should immediately be reported to the South African Heritage Resources Agency. The ECO and Engineer are also to be informed.
Cumulative impact post mitigation:	Negligible
Significance rating of impact after mitigation (Low, Medium, Medium-High, High, or Very-High)	Negligible

Potential noise impacts:	
Nature of impact:	**Noise impact from machinery and plant on the neighbouring properties during construction**
Extent and duration of impact:	Local, Duration of construction phase
Probability of occurrence:	Probable
Degree to which the impact can be reversed:	Definite
Degree to which the impact may cause irreplaceable loss of resources:	Negligible
Cumulative impact prior to mitigation:	Low-negative
Significance rating of impact prior to mitigation (Low, Medium, Medium-High, High, or Very-High)	Low – negative
Degree to which the impact can be mitigated:	Medium
Proposed mitigation:	The following measures should be implemented amongst others: • The Contractor shall endeavour to keep noise generating activities to a minimum. • Construction only to take place during normal working hours. • Compliance with the appropriate legislation with respect to noise shall be mandatory.
Cumulative impact post mitigation:	Low – negative
Significance rating of impact after mitigation (Low, Medium, Medium-High, High, or Very-High)	Low – negative

Potential visual impacts:	
Nature of impact:	**Unsightly views due to construction site.**
Extent and duration of impact:	Local, during duration of construction
Probability of occurrence:	Definite
Degree to which the impact can be reversed:	Possible
Degree to which the impact may cause irreplaceable loss of resources:	Unlikely
Cumulative impact prior to mitigation:	Low - negative

Significance rating of impact prior to mitigation (Low, Medium, Medium-High, High, or Very-High)	Low - negative
Degree to which the impact can be mitigated:	Probable
Proposed mitigation:	Visual impact mitigation measures will be dealt with in the EMPr The EMPr must be enforced and monitored by the ECO. • The Contractor shall restrict all his activities, materials, equipment and personnel to within the area specified. • Construction material must be stored in areas designated by the site agent and in a neat and orderly manner. • The Contractor must ensure that all structures, equipment, materials and facilities used or created on site for or during construction activities are removed once the project has been completed. The construction site must be cleared, and cleaned to the satisfaction of the ECO. Immediately after the demolition of the camp site, the contractor shall restore the site to its original state, paying particular attention to its appearance relative to the general landscape.
Cumulative impact post mitigation:	Very low - negative
Significance rating of impact after mitigation (Low, Medium, Medium-High, High, or Very-High)	Low - negative

Potential waste impacts:	
Nature of impact:	**Construction waste**
Extent and duration of impact:	Local, during duration of construction
Probability of occurrence:	Definite
Degree to which the impact can be reversed:	Definite
Degree to which the impact may cause irreplaceable loss of resources:	Unlikely
Cumulative impact prior to mitigation:	Low - negative
Significance rating of impact prior to mitigation (Low, Medium, Medium-High, High, or Very-High)	Low - negative
Degree to which the impact can be mitigated:	Probable
Proposed mitigation:	• Manure must be removed daily from the holding yards (pens), then washing down using low volume high-pressure sprays. This reduces odours and fly-breeding. • No waste water or manure to enter the Karee River. • Manure should be collected daily and stored in vermin-proof containers. The control of construction waste water, any contaminated water and/or stormwater must be properly controlled, as per the EMPr.
Cumulative impact post mitigation:	Very low - negative
Significance rating of impact after mitigation (Low, Medium, Medium-High, High, or Very-High)	Low - negative

Operational phase:

Potential impacts on the geographical and physical aspects:	**Potential impact on freshwater ecosystems**
Nature of impact:	Animal manure and waste water.
Extent and duration of impact:	Local, during operational phase
Probability of occurrence:	Probable
Degree to which the impact can be reversed:	High

Degree to which the impact may cause irreplaceable loss of resources:	Low
Cumulative impact prior to mitigation:	Medium
Significance rating of impact prior to mitigation (Low, Medium, Medium-High, High, or Very-High)	Medium
Degree to which the impact can be mitigated:	High
Proposed mitigation:	• All construction and operation of the Hantam Veevoere must be done in accordance with an approved construction and operational phase Environmental Management Programme ("EMPr"), which must be developed by a suitably experienced Environmental Assessment Practitioner ("EAP"). Importance must be given to that no waste water or manure enters any watercourse. The control of construction waste water, any contaminated water and/or stormwater must be properly controlled, as per the EMPr.
Cumulative impact post mitigation:	Low negative
Significance rating of impact after mitigation (Low, Medium, Medium-High, High, or Very-High)	Low

Potential impact biological aspects:	**The activity is not considered to cause any impacts on vegetation during the operational phase.**
Nature of impact:	
Extent and duration of impact:	
Probability of occurrence:	
Degree to which the impact can be reversed:	
Degree to which the impact may cause irreplaceable loss of resources:	
Cumulative impact prior to mitigation:	
Significance rating of impact prior to mitigation (Low, Medium, Medium-High, High, or Very-High)	
Degree to which the impact can be mitigated:	
Proposed mitigation:	
Cumulative impact post mitigation:	
Significance rating of impact after mitigation (Low, Medium, Medium-High, High, or Very-High)	

Potential impacts on the socio-economic aspects:	
Nature of impact:	Permanent jobs opportunities during the operation phase.
Extent and duration of impact:	Local, Permanent
Probability of occurrence:	Definite
Degree to which the impact can be reversed:	NA
Degree to which the impact may cause irreplaceable loss of resources:	NA, the impact is a positive impact
Cumulative impact prior to mitigation:	NA
Significance rating of impact prior to mitigation (Low, Medium, Medium-High, High, or Very-High)	NA
Degree to which the impact can be mitigated:	NA, the impact is a positive impact
Proposed mitigation:	No mitigation measures are required
Cumulative impact post mitigation:	Medium - Positive

Significance rating of impact after mitigation (Low, Medium, Medium-High, High, or Very-High)	Medium - Positive

Potential impacts on the cultural-historical aspects:	
Nature of impact:	**No cultural or historic impacts are expected during the operational phase of this activity.**
Extent and duration of impact:	
Probability of occurrence:	
Degree to which the impact can be reversed:	
Degree to which the impact may cause irreplaceable loss of resources:	
Cumulative impact prior to mitigation:	
Significance rating of impact prior to mitigation (Low, Medium, Medium-High, High, or Very-High)	
Degree to which the impact can be mitigated:	
Proposed mitigation:	
Cumulative impact post mitigation:	
Significance rating of impact after mitigation (Low, Medium, Medium-High, High, or Very-High)	

Potential noise impacts:	
Nature of impact:	**No significant noise impacts are expected during the operational phase for this activity.**
Extent and duration of impact:	Local (Site-specific), permanent
Probability of occurrence:	Probable
Degree to which the impact can be reversed:	Likely
Degree to which the impact may cause irreplaceable loss of resources:	Negligible
Cumulative impact prior to mitigation:	Low negative
Significance rating of impact prior to mitigation (Low, Medium, Medium-High, High, or Very-High)	Low negative
Degree to which the impact can be mitigated:	Medium
Proposed mitigation:	The following measures should be implemented amongst others: • The Contractor shall endeavour to keep noise generating activities to a minimum. • Construction only to take place during normal working hours. • Compliance with the appropriate legislation with respect to noise shall be mandatory. • The EMPr will be implemented.
Cumulative impact post mitigation:	Low negative
Significance rating of impact after mitigation (Low, Medium, Medium-High, High, or Very-High)	Low negative

Potential visual impacts:	
Nature of impact:	**The visual impact on site because of the concentration of livestock.**
Extent and duration of impact:	Local, permanent
Probability of occurrence:	Unlikely
Degree to which the impact can be reversed:	Low
Degree to which the impact may cause irreplaceable loss of resources:	Unlikely
Cumulative impact prior to mitigation:	Low - Negative
Significance rating of impact prior to mitigation	Low - Negative

(Low, Medium, Medium-High, High, or Very-High)	
Degree to which the impact can be mitigated:	High
Proposed mitigation:	No mitigation measures are proposed. However, the design and placement of the structure must take the surrounding community into account. Areas of disturbance, existing roads etc, should be used to place the structure.
Cumulative impact post mitigation:	Negligible
Significance rating of impact after mitigation (Low, Medium, Medium-High, High, or Very-High)	Negligible

Potential waste impacts:	
Nature of impact:	**Waste emanating from the pens and manure**
Extent and duration of impact:	Local, permanent
Probability of occurrence:	Probable
Degree to which the impact can be reversed:	High
Degree to which the impact may cause irreplaceable loss of resources:	Medium
Cumulative impact prior to mitigation:	Low - negative
Significance rating of impact prior to mitigation (Low, Medium, Medium-High, High, or Very-High)	Low - negative
Degree to which the impact can be mitigated:	Probable
Proposed mitigation:	• Manure must be removed daily from the holding yards (pens), then washing down using low volume high-pressure sprays. This reduces odours and fly-breeding. • No waste water or manure to enter the Karee River. • Manure should be collected daily and stored in vermin-proof containers. The control of construction waste water, any contaminated water and/or stormwater must be properly controlled, as per the EMPr.
Cumulative impact post mitigation:	Very low - negative
Significance rating of impact after mitigation (Low, Medium, Medium-High, High, or Very-High)	Low - negative

Potential odour impacts:	
Nature of impact:	**Odours emanating from the animal pens and waste.**
Extent and duration of impact:	Local, permanent
Probability of occurrence:	Definite
Degree to which the impact can be reversed:	Likely
Degree to which the impact may cause irreplaceable loss of resources:	Unlikely
Cumulative impact prior to mitigation:	Low - negative
Significance rating of impact prior to mitigation (Low, Medium, Medium-High, High, or Very-High)	Medium - negative
Degree to which the impact can be mitigated:	Highly likely
Proposed mitigation:	• Manure must be removed daily from the holding yards (pens), then washing down using low volume high-pressure sprays. This reduces odours and fly-breeding. • No waste water or manure to enter the Karee River. • Manure should be collected daily and stored in vermin-proof containers. The control of construction waste water, any contaminated water and/or stormwater must be properly controlled, as per the EMPr.
Cumulative impact post mitigation:	low - negative
Significance rating of impact after mitigation (Low, Medium, Medium-High, High, or Very-High)	Low - negative

Decommissioning:

The project as proposed does not require ‘decommissioning’ or ‘closure’, as such the potential impacts thereof is considered irrelevant.