
EXTERNAL REVIEW ENVIRONMENTAL AND SOCIAL IMPACT ASSESSMENT (ESIA) REPORT

**BOTSWANA SOUTH AFRICA (BOSA)
TRANSMISSION PROJECT**

March 2018

Prepared by



GLOBAL GREEN

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EXECUTIVE SUMMARY

Global Green Environmental Consultants in association with the Environmental Assessment Research Group (EARG) from the North West University (Potchefstroom campus) was appointed by Aurecon, in accordance with GNR 982, Regulation 13(2), to conduct an external review of the Environmental and Social Impact Assessment Report for the Botswana South Africa (BOSA) Transmission Project. The review was conducted by two reviewers according to the NWU Report Quality Review Package, adapted to also include DBSA and IFC Standards. The review concludes as follows:

- The Environmental and Social Impact Assessment (ESIA) report contains sufficient information to inform decision making by the competent environmental authority and complies with minimum legal requirements in terms of the 2014 NEMA EIA Regulations (as amended 2017).
- The ESIA report successfully incorporated, and demonstrated compliance with the DBSA and IFC standard requirements.
- We are satisfied that the report addressed the shortcomings highlighted in the external review of the draft ESIA report.

We trust that you find this in order. If there are any uncertainties or additional information required please feel free to contact the undersigned.



Prof Francois Relief

Lead Reviewer
27-02-2018

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DOCUMENT CONTROL			
Project	BOSA Transmission Project – External Review		
GG reference ID	GGR-06/03/2018	Client	Aurecon
Lead reviewer	Prof Francois P Retief Tel: 083 639 2293	Client Contact	Me Diane Erasmus Tel: 083 3086750
2nd Reviewer	Me Charlotte Cilliers	Documents Reviewed	ESIAR and related Annexures
Date of the Review	01-06 March 2018	Reviewed against	NEMA, EIA Regulations 2014 (as amended 2017) and relevant Guidelines, DBSA Safeguard Standards, IFC Performance Standards

1. INTRODUCTION AND BRIEF

Global Green Environmental Consultants was appointed by Aurecon as external reviewer for the Botswana South Africa (BOSA) Transmission Project, in accordance with GNR 982, Regulation 13(2), which states that:

“In the event where the EAP or specialist does not comply with subregulation (1)(a), the proponent or applicant must prior to conducting public participation as contemplated in chapter 5 of these Regulations, appoint another EAP or specialist to externally review all work undertaken by the EAP or specialist at the applicant’s cost.”

The external review was conducted in collaboration with the Environmental Assessment Research Group (EARG) of the North West University (NWU). In this regard we confirm that Global Green and NWU act independently and has no vested interest in the development project under review. External review and specifically report quality review is a particular focus of Global Green and the EARG. Various review reports as well as peer reviewed papers have been published which include comparative report quality reviews between different EIA regimes (Kidd and Retief, 2009; Retief et al, 2011; Sandham et al, 2012); report quality within specific provinces in South Africa (Sandham et al, 2005; Sandham and Pretorius, 2008); quality related to specific industries such as mining (Sandham et al, 2008a), as well as report quality related to specific sectors such as water management (Sandham et al 2008b), biodiversity and conservation (Hallat et al, 2015), biological control (Sandham et al, 2010), manufacturing (Sandham et al, 2013), etc. More recently a paper was published on the conceptualization of quality in impact assessment (Bond et al, 2018).

As an introduction to the review this section briefly introduces the agreed scope of work as well as the individual reviewers, namely Prof Francois Retief and Me Charlotte Cilliers.

1.1 SCOPE OF WORK – REVIEW OF ESIA REPORT

The overall scope of work as specified in the signed sub-consultancy agreement dated 21st February 2017 which includes the following six deliverables. Deliverables 1 and 2 have already been successfully completed. This report relates to deliverables 3 to 6. The review of the adequacy of the stakeholder engagement and public participation process in relation to deliverable 5 was concluded after the review of the external review of the draft ESIA (deliverables 3 and 4).

External review deliverables:

1. The peer review shall ascertain whether or not the draft version of the Scoping Report contains sufficient information to inform decision making by the competent environmental authority, and the Peer Review Report shall specify the nature of any information gaps (if any).
2. The peer review shall ascertain whether or not the draft version of the Final Scoping Report meets the minimum legal requirements for a Scoping Report in terms of the 2014 NEMA EIA Regulations (refer to Regulation 21), and the Peer Review Report shall specify the nature of any minimum requirement that has not been complied with (if any).
3. **The peer review shall ascertain whether or not the draft versions of the Final Environmental Impact Report (EIR) and Environmental Management Programme (ESMP) meet the minimum legal requirements for an EIR and ESMP in terms of the 2014 NEMA EIA Regulations (refer to Regulations 23), and the Peer Review Report shall specify the nature of any minimum requirement that has not been complied with (if any).**
4. **The peer review shall ascertain whether or not the draft versions of the EIA and ESMP contain sufficient information to inform decision making by the competent environmental authority, and the Peer Review Report shall specify the nature of any information gaps (if any).**
5. **The peer review shall ascertain whether or not the Stakeholder Engagement followed during the environmental impact assessment process were adequate in terms of the 2014 NEMA EIA Regulations (Refer to Chapter 6 of the Regulations) and the IFC Performance Standards, specifically whether issues raised have received adequate attention, and where necessary have been adequately addressed.**
6. **The peer review shall also ascertain at a high level, whether or not the Scoping Report, EIR and EMP comply with IFC Performance Standards, as based on the Equator Principles.**

1.2 REVIEWERS

The following two reviewers took part in the external review for the BOSA Transmission Project (see Annexure A for CV summaries):

- Prof Francois Retief – NWU and Global Green
- Me Charlotte Cilliers – Global Green

2. EXTERNAL REVIEW METHODOLOGY

Various international packages and guidelines have been developed for EIA report quality review. The Lee-Colley package (Lee and Colley, 1992) is probably the most well-known and widely applied. In terms of South Africa, extensive progress has been made to adapt international report review packages to the local context (see for example Retief 2007; Sandham and Pretorius 2008; Sandham et al, 2012). The review package used for this review is the so-called 'NWU Report Quality Review Package' adapted from the Lee-Colley package and continually updated as policy and legislation changes. The most recent version of the package has been adapted to the 2014 EIA Regulations and subsequent 2017 amendments. However, for the purpose of this review the package was also adapted to include DBSA and IFC standards as per the scope of work described in section 1.1. The 'NWU Report Quality Review Package' has been successfully applied to EIA quality review – the results of which have been published in various reports and peer reviewed academic journals as highlighted in section 1.

The review criteria included under section 3.2 and summarised in Table 3.2 deal specifically with the requirements for the assessment phase as per deliverables 3 to 6

2.1. CONTENT OF THE REVIEW PACKAGE

The NWU Report Quality Review Package is intended for use by competent authorities, developers and consultancies, statutory consultees and non-governmental organisations and researchers involved in environmental assessment. It is designed as a self-contained package with the following components:

- a list of criteria (grouped under Review Areas) to be used in each report review;
- an evaluation sheet/table on which to record the findings from applying the criteria.

It was decided that the criteria should, as far as possible, satisfy the following requirements:

- each should be well defined and unambiguous;
- each should be capable of reasonably consistent and objective application;
- each should serve a distinct purpose different from the purposes of other criteria;
- each should be considered sufficiently important to merit influencing the ultimate assessment of report quality;

- the number of criteria should be as few as possible, consistent with covering all topics identified as essential (judged, in this instance, by reference to the South African legislative minimum requirements and DBSA / IFC standards);

2.2 APPLYING THE REVIEW PACKAGE

EIA reports should be reviewed independently by at least two persons and any significant differences in the review results should be systematically examined by them to see whether they can be resolved. As already indicated in section 1.2, two reviewers took part in this particular review. The evaluation resulting from applying each criterion is recorded by the reviewers on the evaluation table using a standard list of assessment symbols as described in Table 2.1. 'Letters' rather than 'numbers' are used as symbols to discourage reviewers from crude aggregation to obtain assessments at the higher levels in the pyramid. The evaluation table should not only be used to record the chosen assessment symbols, but also to record, in a brief summary, the principal justification for the evaluation score. This discourages 'over-mechanical' reviews.

The current version of NWU Report Quality Review Package has been extensively tested (see for example Sandham and Pretorius 2008; Sandham et al, 2008a, 2008b, 2010, 2012). The results show a substantial level of agreement in the assessments made by different reviewers of the same report. Subsequent experience in using the Review Package has supported earlier conclusions on its consistency.

Table 2.1. List of evaluation symbols

Symbol	Explanation
A	Relevant tasks well performed, no important tasks left incomplete.
B	Generally satisfactory and complete, only minor omissions and inadequacies.
C	Can be considered just satisfactory despite omissions and/or inadequacies.
D	Parts are well attempted but must, as a whole, be considered just unsatisfactory because of omissions or inadequacies.
E	Not satisfactory, significant omissions or inadequacies.
F	Very unsatisfactory, important task(s) poorly done or not attempted.
NA	Not applicable. The Review Topic is not applicable or it is irrelevant in the context of this Statement.

The ESIA report was evaluated against review areas and criteria derived from GNR 982 and specifically Appendices 3 and 4, which describes the purpose and content requirements. In line with the scope of work DBSA and IFC standards were also included as well as any relevant guideline documents. The ultimate aim of the review was to determine to what extent the reports

provide sufficient information for decision making and if the reports comply with minimum legal requirements.

3. REVIEW RESULTS

This section deals with results of the external review for the ESIA. In line with the methodology described in the previous section the results are presented as ‘main results’ in relation to the different Review Areas (section 3.1) and ‘detailed results’ in terms of the different Review Criteria (section 3.2).

3.1 MAIN RESULTS

Table 3.1 provides a summary of the main review results. Measured against the designed review categories it is concluded *that relevant tasks are well performed, with no important tasks left incomplete - grade A.*

Table 3.1: Summary of main review results for the draft ESIA

SUMMARY OF REVIEW AREAS		A	B	C	D	E	F
1	General Aspects	X					
2	Conformance to the Plan of Study		X				
3	Determining Significance	X					
4	Public participation and stakeholder engagement	X					
5	Dealing with Mitigation	X					
6	Environmental Management Programme (EMPr)	X					
7	Communication of Results	X					
FINAL GRADE		X					

3.2 DETAILED REVIEW RESULTS

This section presents the detailed review results per Review Area and specific criteria. Table 3.2 summarises the results and provide brief justification for the review scores. The results reflect the combined views of the two reviewers.

Table 3.2: Detailed review results for the ESIA report

Reference	Review Areas and Criteria	Evaluation Symbols						Review Comments and Justification
		A	B	C	D	E	F	
Review Area 1: General Aspects								
GNR 982 Appendix 3(3)(a)(i)(ii)	1.1 Were the details of the EAP who prepared the report; and the expertise of the EAP, including a curriculum vitae included?	X						See section 1.2 and Annexure A
GNR 982 Appendix 3(3)(b)(i)(ii)(iii)	1.2 Was the location of the activity, including the 21 digit Surveyor General code of each cadastral land parcel included, and where available, the physical address and farm name?	X						See section 4.1 and Annexure D
GNR 982 Appendix 3(3)(c)(i)(ii)	1.3 Was a plan included which locates the proposed activity or activities applied for at an appropriate scale, or, if it is a linear activity, a description and coordinates of the corridor in which the proposed activity or activities is to be undertaken; or on land where the property has not been defined, the coordinates within which the activity is to be undertaken?	X						See section 4.1 and annexure D
GNR 982 Appendix 3(3)(d)	1.4 Was a description of the scope of the proposed activity provided, including a description of all listed and specified activities triggered; and/or a description of the activities to be undertaken, including associated structures and infrastructure?	X						See section 2.7.2
GNR 982 Appendix 3(3)(e)	1.5 Was a description provided of the policy and legislative context within which the development is proposed, and an explanation provided of how the proposed development complies with and responds to the legislation and policy context?	X						See section 2
GNR 982 Appendix 3(3)(f)	1.6 Was the need and desirability of the proposed activity motivated, including the need and desirability of the activity in the context of the preferred location?	X						See section 4.5
GNR 982 Appendix 3(3)(s)	1.7 Is there evidence of an undertaking under oath or affirmation by the EAP in relation to: (i) the correctness of the information provided in the reports; (ii) the inclusion of comments and inputs from stakeholders and I&APs; (iii) the inclusion of inputs and recommendations from the specialist reports where relevant; and (iv) any information provided by the EAP to interested and affected parties and any responses by the EAP to comments or inputs made by interested or affected parties?	X						See Annexure B

Review Area 2: Conformance to the Plan of Study								
GNR 982 Appendix 3(1)(1)	2.1 Was the environmental impact assessment process undertaken in line with the approved plan of study for environmental impact assessment?		X					In general the ESIA conforms to the requirements as set out in the Plan of Study. There is however minor instances of misalignment which are highlighted under the review results below.
Plan of Study: Sec 8.2 and 8.8 GNR 982 Appendix 2(2)(i)(i)	2.2 Is there conformance to the environmental impact assessment process described in the Plan of Study, including the consideration of alternatives to be considered and assessed within the preferred site?	X						The ESIA report did address the alternatives set out in the Plan of Study – see section 4.4. According to the Plan of Study only one preferred corridor is included in the assessment phase (i.e option C).
Plan of Study: Sec 8.3 GNR 982 Appendix 2(2)(i)(ii)	2.3 Were the aspects to be assessed as indicted in the Plan of Study, ultimately addressed in the environmental impact assessment process?		X					As already indicated in the review of the Scoping Report, the use of the term ‘aspects’ remains problematic – if understood in ISO 14001 terms. Identifying aspects during the scoping phase would require an assessment already during scoping. Aspects are only identified as part of the assessment phase. But this is not something the consultants can do anything about. To correct this would require an amendment of the Regulations. The external review understood ‘aspects’ to refer to ‘key issues’ to be assessed – see section 2, Table 2 in the Plan of Study and section 5 in the ESIA report.
Plan of Study: Sec 8.3 GNR 982 Appendix 2(2)(i)(iii)	2.4 Were aspects to be assessed by specialists included?		X					See point 2.3 above
Plan of Study: Sec 8.4 and 8.5 GNR 982 Appendix 2(2)(i)(iv)	2.5 Was the proposed method (described in the Plan of Study) of assessing the environmental aspects been used by specialists?		X					The method described in the Plan of Study was consistently applied throughout the specialist studies and ESIA report. However, the external review of the draft ESIA report highlighted some detailed methodological specifications included in the Plan of Study that are not addressed in the specialist studies. The final ESIA did highlight and acknowledge these.

GNR 982 Appendix 3(3)(u)	2.6 Was an indication provided of any deviation from the approved scoping report, including the plan of study, including- (i) any deviation from the methodology used in determining the significance of potential environmental impacts and risks; and (ii) a motivation for the deviation?		X						Additional issues not raised in the Plan of Study were assessed i.e air quality, noise, soil and traffic.
Review Area 3: Determination of Significance									
Plan of Study: Sec 8.5 GNR 982 Appendix 2(2)(i)(v)	3.1 Was a description of the proposed method of assessing duration and significance provided?	X							The method for determining significance is clearly defined and consistently applied across the specialist studies. See section 6 of the Plan of Study for Scoping for a description of the methodology.
GNR 982 Appendix 3(3)(g)	3.2 Is a motivation provided for the preferred development footprint within the approved site?		X						The assessment deals with a preferred corridor. It seems that the detailed location of the line within the corridor is not specified in the assessment, although various requirements are stipulated in relation to for example aquatic habitats that should be avoided, etc. See section 4.5
GNR 982 Appendix 3(3)(h)	3.3 Is a full description provided of the process followed to reach the proposed development footprint within the approved site?			X					An extensive multi-criteria analysis was conducted to identify the corridor, but the footprint within the approved corridor is not defined. See sections 4.2 and Annexures 1.2 and 1.3
GNR 982 Appendix 3(3)(i)	3.4 Is a full description provided of the process undertaken to identify, assess and rank the impacts the activity and associated structures and infrastructure will impose on the preferred location through the life of the activity?	X							See section 5 and Annexure F
GNR 982 Appendix 3(3)(i)(i)	3.5 Is a description provided of all environmental issues and risks identified during the environmental impact assessment process?	X							See section 5 and Annexure F
GNR 982 Appendix 3(3)(i)(ii)	3.6 Was an assessment conducted of the significance of each issue and risk and an indication provided of the extent to which the issue and risk could be avoided or addressed by the adoption of mitigation measures?	X							See section 5 and Annexure F Also see results of Review Area 4
GNR 982 Appendix 3(3)(j)(i)	3.7 Was an assessment conducted of each identified potentially significant impact and risk, including cumulative impacts?		X						Cumulative impacts were explicitly dealt with by all relevant specialists and the EAP in general.

GNR 982 Appendix 3(3)(j)(ii)	3.8 Was an assessment conducted of each identified potentially significant impact and risk, including the nature, significance and consequences of the impact and risk?	X							Significance is well covered by all the specialists. The assessment methodology relies on a probability ranking in-stead of a risk ranking.
GNR 982 Appendix 3(3)(j)(iii)	3.9 Was an assessment conducted of each identified potentially significant impact and risk, including the extent and duration of the impact and risk?	X							Extent and duration is covered in the significance ratings.
GNR 982 Appendix 3(3)(j)(iv)	3.10 Was an assessment conducted of each identified potentially significant impact and risk, including the probability of the impact and risk occurring?	X							Probability is covered in the significance ratings.
GNR 982 Appendix 3(3)(j)(v)	3.11 Was an assessment conducted of each identified potentially significant impact and risk, including the degree to which the impact and risk can be reversed?							NA	The reversibility of impacts are not explicitly dealt with. The thinking was more around avoiding and mitigating impacts than reversing impact in future. Closure plans are not applicable.
GNR 982 Appendix 3(3)(j)(vi)	3.12 Was an assessment conducted of each identified potentially significant impact and risk, including the degree to which the impact and risk may cause irreplaceable loss of resources?		X						The irreplaceability is indirectly dealt with as part of the status of for example flora and fauna in the form of red data species. Also certain landscapes and habitats were considered from an irreplaceability perspective.
GNR 982 Appendix 3(3)(j)(vii)	3.13 Was an assessment conducted of each identified potentially significant impact and risk, including the degree to which the impact and risk can be mitigated?	X							See results for Review Area 5
DBSA SS1	3.14 Have impacts in relation to environmental and social risks been identified?	X							See section 5.8
DBSA SS2	3.15 Have impacts in relation to protection of biodiversity and sustainable management and use of natural resources been identified?	X							See sections 5.3 to 5.6
DBSA SS3	3.16 Have impacts in relation to involuntary resettlement as well as economic and/or physical displacement been identified?		X						See section 5.8 Although resettlement has been flagged and assessed there still remain meaningful uncertainty as to the potential extent of resettlement that might be required.
DBSA SS4	3.17 Have impacts in relation to community engagement, especially with vulnerable communities, been identified?		X						See section 5.8
DBSA SS5	3.18 Have impacts in relation to the use of pesticides been identified?				X				Pesticides was not explicitly dealt with by the specialists or in the impact identification and assessment process. The need to consider pesticides in included and described in relation to the safeguard policies.

DBSA SS6	3.19 Have impacts in relation to protection of heritage resources been identified?	X							See section 5.10
IFC PS2	3.20 Have impacts in relation to labour and working conditions been identified?		X						See section 5.8
IFC PS3	3.21 Have impacts in relation to resource efficiency and pollution prevention been identified?			X					It is reasonable to conclude that resource efficiency and pollution prevention are cross cutting issues dealt with indirectly in the ESIA.
IFC PS4	3.22 Have impacts in community health, safety and security been identified?		X						See section 5.8
Review Area 4: Public Participation									
GNR 982 Appendix 2(2)(i)(vi) Plan of Study: Sec 8.6	4.1 Was an indication provided of the stages at which the competent authority will be consulted?	X							See section 7 and Annexure E
GNR 982 Appendix 2(2)(i)(vii) Plan of Study: Sec 8.7	4.2 Were particulars of the public participation process that will be conducted during the environmental impact assessment process provided?	X							See section 7 and Annexure E
GNR 982 Appendix 2(2)(i)(viii) Plan of Study: Sec 8.4	4.3 Was a description of the tasks that will be undertaken as part of the environmental impact assessment process provided?	X							See section 7 and Annexure E
IFC 2007 Stakeholder Engagement Manual	4.4 Was the IFC Stakeholder Engagement Manual considered?	X							See section 7 and Annexure E

Review Area 5: Dealing with Mitigation								
GNR 982 Appendix 3(1)(2)	5.1	Were the environmental impacts, mitigation and closure outcomes as well as the residual risks of the proposed activity set out in the environmental impact assessment report?		X				The ESIA deals explicitly with mitigation in relation to each impact. However, due to the large scale and extent of the project / corridor, significant uncertainty underpin many of the impact predictions and related mitigation measures.
Plan of Study: Sec 8.5 GNR 982 Appendix 2(2)(i)(ix)	5.2	Were suitable measures to avoid, reverse, mitigate or manage identified impacts identified and the extent of the residual risks that need to be managed and monitored determined?		X				See results of Review Area 6 below
GNR 982 Appendix 3(3)(n)	5.3	Were the final proposed alternatives, which respond to the impact management measures, avoidance, and mitigation measures identified through the assessment?	X					See section 4.4
GNR 982 Appendix 3(3)(p)	5.4	Was a description provided of any assumptions, uncertainties and gaps in knowledge which relate to the assessment and mitigation measures?	X					See section 5
DBSA SS1	5.5	Have mitigation measures been considered in relation to environmental and social risks?	X					See section 5.8
DBSA SS2	5.6	Have mitigation measures been considered in relation to protection of biodiversity and sustainable management and use of natural resources?	X					See sections 5.3 to 5.6
DBSA SS3	5.7	Have mitigation measures been considered in relation to involuntary resettlement as well as economic and/or physical displacement?		X				See section 5.8 Although resettlement has been flagged and assessed there still remain meaningful uncertainty as to the potential extent of resettlement that might be required.
DBSA SS4	5.8	Have mitigation measures been considered in relation to community engagement, especially with vulnerable communities?		X				See section 5.8
DBSA SS5	5.9	Have mitigation measures been considered in relation to the use of pesticides?				X		Pesticides was not explicitly dealt with by the specialists or in the impact identification and assessment process. The need to consider pesticides in included and described in relation to the safeguard policies.

DBSA SS6	5.10 Have mitigation measures been considered in relation to protection of heritage resources?	X							See section 5.10
IFC PS2	5.11 Have mitigation measures been considered in relation to labour and working conditions?		X						See section 5.8
IFC PS3	5.12 Have mitigation measures been considered in relation to resource efficiency and pollution prevention?		X						It is reasonable to conclude that resource efficiency and pollution prevention are cross cutting issues dealt with indirectly in the ESIA.
IFC PS4	5.13 Have mitigation measures been considered in community health, safety and security?	X							See section 5.8
Review Area 6: Environmental Management Programme (EMPr)									
GNR 982 Appendix 3(3)(m)	6.1 Based on the assessment, and where applicable, were the recommendations from specialist reports, the recording of proposed impact management objectives, and the impact management outcomes for the development included in the EMPr and as conditions of authorisation?	X							See Annexure H
GNR 982 Appendix 3(3)(t)	6.2 Were details included of any financial provisions for the rehabilitation, closure, and ongoing post decommissioning management of negative environmental impacts?						NA		The management plan does deal with actions for decommissioning but no financial provisions are applicable.
GNR 982 Appendix 4(1)(1)(a)	6.3 Does the EMPr include details of (i) the EAP who prepared the EMPr; and (ii) the expertise of that EAP to prepare an EMPr, including a curriculum vitae?	X							See section 1.3 and Table 1 of the ESMPr
GNR 982 Appendix 4(1)(1)(b)	6.4 Is a detailed description provided of the aspects of the activity that are covered by the EMPr as identified by the project description?	X							See section 3.2 of the ESMPr
GNR 982 Appendix 4(1)(1)(c)	6.5 Is a map provided at an appropriate scale which superimposes the proposed activity, its associated structures, and infrastructure on the environmental sensitivities of the preferred site, indicating any areas that that should be avoided, including buffers?	X							See section 1.2 and Appendix 1
GNR 982 Appendix 4(1)(1)(d)	6.6 Is a description provided of the impact management outcomes, including management statements, identifying the impacts and risks that need to be avoided, managed and mitigated as identified through the environmental impact assessment process for all	X							See section 3 and Appendix 2-12

	<p>phases of the development including:</p> <ul style="list-style-type: none"> (i) planning and design; (ii) pre-construction activities; (iii) construction activities; (iv) rehabilitation of the environment after construction and where applicable post closure; and (v) where relevant, operation activities; 							
GNR 982 Appendix 4(1)(1)(e)	6.7 Is a description provided of proposed impact management actions, identifying the manner in which the impact management objectives and outcomes contemplated in paragraphs (d) will be achieved?	X						See section 3, 7 and Appendix 2-12
GNR 982 Appendix 4(1)(1)(f)	6.8 Is the method of monitoring the implementation of the impact management actions contemplated in paragraph (f) included?		X					See section 3, 7 and Appendix 2-12 The monitoring arrangements are still quite generic, which is understandable considering the extent and scale of the project. These aspects will be further refined as the project plans for implementation.
GNR 982 Appendix 4(1)(1)(g)	6.9 Is the frequency of monitoring the implementation of the impact management actions contemplated in paragraph (f) included?		X					See section 7 and Appendix 2-12 See previous point.
GNR 982 Appendix 4(1)(1)(h)	6.10 Is an indication of the persons who will be responsible for the implementation of the impact management actions included?		X					See section 4 and Appendix 2-12 Reference is made in the ESMP to specific functions, although the detailed tasks would require further refinement.
GNR 982 Appendix 4(1)(1)(i)	6.11 Is the time periods specified within which the impact management actions contemplated in paragraph (f) must be implemented?		X					Appendix 2-12 The level of uncertainty and lack of detail that surrounds the project means that detailed timeframes are not forthcoming.
GNR 982 Appendix 4(1)(1)(j)	6.12 Is the mechanism for monitoring compliance with the impact management actions contemplated in paragraph (f) included?	X						See section 7 and Appendix 2-12
GNR 982 Appendix 4(1)(1)(k)	6.13 Is a program for reporting on compliance, taking into account the requirements as prescribed by the Regulations, included?		X					See section 7 and Appendix 2-12
GNR 982 Appendix 4(1)(1)(l)	6.14 Is an environmental awareness plan describing the manner in which- (i) the applicant intends to inform his or her employees of any environmental risk which may result from their work; and (ii) risks must be dealt with in order to avoid pollution or the degradation of the	X						See section 5

	environment, included?								
Draft Generic EMPr Guideline (not yet published)	6.15 Has the draft EMPr guideline for Distribution and Transmission Powerlines incorporated?	X							Although the draft EMPr guideline for Distribution and Transmission Powerlines has not yet been published, the content thereof has been considered in the ESMPr.
Review Area 7: Communication of Results									
GNR 982 Appendix 3(3)(k)	7.1 Is a summary provided of the findings and recommendations of the specialist reports, as well as an indication of how these findings and recommendations have been included in the final assessment report?	X							See sections 5 and 6
GNR 982 Appendix 3(3)(l)(i)	7.2 Is an environmental impact statement provided which contains a summary of the key findings of the environmental impact assessment?	X							See section 6
GNR 982 Appendix 3(3)(l)(ii)	7.3 Is an environmental impact statement provided which contains a map at an appropriate scale which superimposes the proposed activity and its associated structures and infrastructure on the environmental sensitivities of the preferred site indicating any areas that should be avoided, including buffers?	X							See section 6
GNR 982 Appendix 3(3)(l)(iii)	7.4 Is an environmental impact statement provided which contain a summary of the positive and negative impacts and risks of the proposed activity and identified alternatives?	X							See section 6
GNR 982 Appendix 3(3)(o)	7.5 Are any aspects included which were conditional to the findings of the assessment either by the EAP or specialist which are to be included as conditions of authorisation?	X							See section 6
GNR 982 Appendix 3(3)(q)	7.6 Is a reasoned opinion provided as to whether the proposed activity should or should not be authorised, and if the opinion is that it should be authorised, any conditions that should be made in respect of that authorisation?	X							See section 6
GNR 982 Appendix 3(3)(r)	7.7 Where the proposed activity does not include operational aspects, is the period stipulated for which the environmental authorisation is required and the date on which the activity will be concluded and the post construction monitoring requirements finalised?							NA	

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ANNEXURE A: CV SUMMARIES OF REVIEWERS

CURRICULUM VITAE



Personal Details:

Name: Prof Francois P Retief
Date of birth: 8 Nov 1974
Nationality: RSA
Experience: 20 years

Position:

Professor in Environmental Management with specialisation in Environmental Assessment

Director: Global Green Environmental Consultants

Highest Academic Qualification:

PhD – University of Manchester, UK



NORTH-WEST UNIVERSITY
YUNIBESITI YA BOKONE-BOPHIRIMA
NOORDWES-UNIVERSITEIT
POTCHEFSTROOM CAMPUS

Main Qualifications:

- **2005: Doctor of Philosophy (Ph.D), School of Environment and Development, University of Manchester, United Kingdom**
- 2001: Masters in Environmental Management (M.EM), University of the Free State (UFS), South Africa
- 1998: Masters in Town and Regional Planning (M.TRP), University of the Free State (UFS), South Africa
- 1996: Baccalaureus Artium, Geography and Economics, University of the Free State (UFS), South Africa

EXPERIENCE

Prof Retief completed his PhD at the University of Manchester on the quality and effectiveness of environmental assessment. After completion of his PhD he joined the North West University as senior lecturer and in 2008 he was promoted to Associate Professor. Between 2009 and 2011 he served as Subject Chair for Geography and Environmental Management and between 2012 and 2015 as the first School Director of the newly formed School of Geo and Spatial Sciences. In March 2015, he was promoted to Professor and took up a new position within the Research Unit for Environmental Science and Management responsible for managing taught master's programmes.

He has contributed to more than 50 research papers in peer-reviewed journals, 11 book chapters and 80 conference contributions (47 South African and 33 international). He has a 'C1' research rating from the NRF and a Scopus *h-index* of 15. To date he has successfully supervised 40 Masters (M.Env.Man and MSc) and four PhDs. His students have won a number of awards most notably from the South African Geographic Society (SAGS) and the South African chapter of the International Association for Impact Assessment (IAIASa). Prof Retief serves on the editorial boards of all three leading international environmental assessment journals (EIA Review, JEAPM and IAPA) and between 2009 and 2014 he also acted as co-editor of one of these journals namely, Impact Assessment and Project Appraisal (IAPA). As co-editor off IAPA Francois was involved in successfully processing more than 240 paper submissions. At the 2015 annual international IAIA conference in Florence, Italy, Francois shared the '*Outstanding Service to IAIA Award*' with Prof Angus Morrison-Saunders in recognition of their excellent work as co-editors of IAPA. He has also been invited to present as key note speaker, most recently at the IAIASa conference in 2015. Francois is continually recognised as a top 10% researcher within the research unit and has in the past received awards for best overall paper presentation at the annual IAIASa conference, as well as the NWU Vice Chancellors Award for Community Service. Overall, Francois is acknowledged as a leading scholar and researcher in the field of environmental assessment.

CURRICULUM VITAE



Personal Details:

Name: Me Charlotte Cilliers
Date of birth: 14 Oct 1987
Nationality: RSA
Experience: 5 years

Position with Global Green:

Director

Highest Academic Qualification:

Masters in Environmental
Management – *cum laude*



GLOBAL GREEN
Environmental Consultants

P.O. Box 2629, Potchefstroom, 2520
Tel: 072 573 8962 - Fax: 086 402 2610

Main Qualifications:

- **2016: Masters in Environmental Management, North West University, Potchefstroom campus – *cum laude***
- 2012: BSc Town and Regional Planning, North West University, Potchefstroom campus

EXPERIENCE

Me Cilliers started her professional career as a town and regional planner. She has been working in the field of environmental assessment since joining Global Green in 2012. Under the supervision of Prof Retief, she completed her Masters in Environmental Management (*cum laude*) at the North West University (NWU) focussing on the capacity of local government to deliver on their environmental management mandate.

Over the past five years she has been involved in a wide range of impact assessments in the following sectors:

- Housing,
- Agriculture,
- Energy,
- Bulk services infrastructure,
- Waste management,
- Tourism.

She has also been involved in EIA external review projects and therefore is experienced in EIA evaluation and review methodologies.