



The Southern African Institute for Environmental Assessment

EXTERNAL REVIEW OF THE

Name of the project	
Country where the project is to be located	
Name of company which compiled the EA report	
Date that the EA report was completed	
Name of reviewer	
Address of reviewer	
Date of review	

EXTERNAL REVIEW OF THE **????**

PREAMBLE AND GUIDE TO REVIEW DOCUMENT

1 STRUCTURE OF REVIEW FORM

This standard review form allows the reviewer to assess the report in a systematic and structured way both in terms of process and content. An explanation of the grading system used in the review is provided in section 2 below and a summary of the findings of the review is presented in section 3. This is followed by the detailed review form, which is divided into the following sections:

- | | |
|---|--|
| <ol style="list-style-type: none"> 1. Methodology utilised in compiling the EIA report 2. Legal, Policy and Administrative Requirements 3. Description of the project 4. Assessment of alternatives to the project 5. Description of the environment | <ol style="list-style-type: none"> 6. Description of impacts 7. Consideration of measures to mitigate impacts 8. Non-technical summary 9. General approach |
|---|--|

2 EXPLANATION OF REVIEW NOTATION

1. For each question posed in the Review Form, the reviewer considers whether the information is relevant to the project and it is marked Y (yes) or N (no).
2. If the information is relevant, the reviewer reads the relevant sections of the EIA report and specialist studies and establishes whether the information provided is:
 - **Complete or comprehensive (C)**: all information required for decision-making is available. No additional information is required even though more information might exist.
 - **Acceptable or adequate (A)**: the information presented is incomplete, but the omissions do not prevent the decision-making process from proceeding.
 - **Inadequate (I)**: the information presented contains major omissions. Additional information is necessary before the decision-making process can proceed.

3 NARRATIVE REPORT

3.1 Introduction

3.2 Methodology for the review

3.3 Summary opinion

Summary appraisal of the EIA report

	Judgement (C/A/I)	Comments
1. EIA Process		

	Judgement (C/A/I)	Comments
2. Description of the project		
3. Assessment of alternatives to the project		
4. Description of the environment		
5. Description of impacts		
6. Consideration of measures to mitigate impacts		
7. Non-technical summary		
8. General approach and presentation		

3.4 Conclusion

The overall grading of the EIA report is as follows:

Excellent: The EIA report contains everything required for decision-making on the project. There are no gaps.

Good: The EIA report contains most of the information required as far as it is relevant in the particular circumstances of the project; any gaps are relatively minor.

Satisfactory: The information presented is not complete; there are significant omissions but in the context of the proposed project, these are not so great as to prevent a decision being made on whether the project should be allowed to proceed.

Inadequate: Some of the information has been provided, but there are major omissions; in the context of the proposed project these must be addressed before a decision on whether the project should be allowed to proceed can be taken.

Poor: The information required has not been provided or is far from complete and, in the context of the proposed project, the omissions must be addressed before a decision on whether the project should be allowed to proceed can be taken.

Key questions	Yes	No	Partially	Don't know
Does the EIA report comply with the Terms of Reference?				
Does the EIA report comply with the legal requirements for EIA in the country?				
Did the EIA process include genuine public participation?				
Were the consultants unduly influenced by the proponent or the Authorities?				
Did the EIA report focus on the most				

important issues?				
Is the EIA report of acceptable quality?				
Will the EIA report help to make a more informed decision about the project?				

3.5 Recommendations

DETAILED REVIEW FORM

		Relevant? Yes/No	Judgement (C/A/I)	Comments
1. METHODOLOGY				
1.1	Does the report set out the assumptions and limitations of the study?			
1.2	Does the report clearly explain the methodology used in the EIA, public participation process and in each specialist study?			
1.3	Does the report indicate what data are inadequate or absent?			
1.4	Did the EIA process include genuine stakeholder consultation?			
1.5	If so, were the general public and/or affected communities included in the consultation?			
1.6	Were capacity building programmes required to enable informed stakeholder involvement and are they described?			
1.7	Have the views of stakeholders been meaningfully incorporated into the findings of the EIA?			
1.8	Does the report include lists of interested and affected parties consulted, as well as their original submissions and comments?			

		Relevant? Yes/No	Judgement (C/A/I)	Comments
2.	LEGAL, POLICY AND ADMINISTRATIVE REQUIREMENTS			
2.1	Have the relevant international treaties, conventions and agreements been listed with reference to where and how these obligations have been met on this project?			
2.2	Have the relevant policies of the country been listed with reference to where and how the obligations have been met on this project?			
2.3	Have the relevant laws and regulations of the country been listed, with reference to project compliance?			
2.4	Have the relevant standards and guidelines for compliance been listed?			
2.5	Has the EIA administrative process been described together with project compliance?			
3.	DESCRIPTION OF THE PROJECT			
	<i>Land requirements</i>			
3.1	Has the land ownership status been described?			
3.2	Has the land required for the project and any associated services, been described and clearly shown on an appropriately scaled map?			
3.3	For a linear project, has the land corridor and need for earthworks been described and shown on an appropriately scaled map?			
3.4	Has the re-instatement after use of temporary landtake been described?			
3.5	Have local, regional and national plans e.g. SEAs, structure plans, integrated development plans, environmental action plans, zoning plans been reviewed in order to place the project into context?			

	Relevant? Yes/No	Judgement (C/A/I)	Comments
<i>Project description</i>			
3.6	Have all the project components been described, including e.g. a process flow sheet, water balance, suitable diagrams and layout plans?		
3.7	Is there a life cycle analysis?		
3.8	Have the technologies to be used been described, with a motivation as to how they comply with BATNEEC and BEO principles?		
3.9	Have the social issues related to the project been described e.g. number of employees, percent from local community, transportation, accommodation, support services, recreation facilities, employment structures, skills breakdown, training, skills transfer etc?		
<i>Waste and emissions</i>			
3.10	Have the sources, types and quantities of waste generated during different scenarios for construction and operation been estimated e.g. air emissions, process effluent, runoff, noise and vibrations, odour, liquid and solid waste?		
3.11	Have the predictions in the report been scientifically calculated, with the results clearly presented for different scenarios?		
3.12	Has a risk assessment been performed, including the identification of exposure pathways, probability and consequences?		
3.13	Does the report discuss ways in which the wastes can be reduced, recycled or re-used?		
3.14	Have the ways in which wastes will be stored, handled or treated prior to disposal been explained?		
3.15	Has the receiving environment where such waste will be disposed, been identified and described?		
<i>Project inputs</i>			
3.16	Are the nature and quantities of materials needed during construction and operation, clearly indicated e.g. water, power, lubricants, raw materials, ore, structural components, fill, etc?		
3.17	Have the sites from where these materials will be sourced, been identified and assessed in terms of impacts, in the EIA		

	Relevant? Yes/No	Judgement (C/A/I)	Comments
report?			
3.18 Have the impacts of transportation of all materials, personnel and visitors to the project site during construction and operation been assessed?			
3.19 Have the means of transporting materials, products, workers and visitors to and from the site during construction and operation, been explained?			
3.20 Has the project timetable been clearly set out for each project phase: construction, operation, decommissioning and closure.			
4 ALTERNATIVES			
4.1 Were alternatives to the project considered in the EA?			
4.2 If alternatives were considered, are the reasons for selecting the proposed alternative adequately described?			
4.3 If alternatives are described, have their main environmental impacts been compared clearly and objectively with those of the proposed project?			
4.4 Has a prediction of the likely future environmental conditions in the absence of the project been developed (no go option)?			
4.5 Does the EIA assess various “within-project” alternatives (e.g. design, location)			
5 DESCRIPTION OF THE ENVIRONMENT			
5.1 Have the areas expected to be significantly affected by the various aspects of the project been indicated with the aid of suitable maps?			
5.2 Have the land uses on the project site(s) and in the surrounding areas been described and their use and non-use values adequately assessed?			
5.3 Have the <i>biophysical</i> components of the environment likely to be affected by the project been identified and described sufficiently for the prediction of impacts? 5.3.1 <i>Climate (wind, precipitation, temperature, evaporation etc)</i> 5.3.2 <i>Geology (rock type, structure, geochemistry etc)</i>			

	Relevant? Yes/No	Judgement (C/A/I)	Comments
<p>5.3.3 <i>Soils (agricultural and rehabilitation potential)</i></p> <p>5.3.4 <i>Topography (slopes, sight lines)</i></p> <p>5.3.5 <i>Surface hydrology (flood lines, runoff, flows, supply, users, wetlands, dams, lakes)</i></p> <p>5.3.6 <i>Groundwater (aquifers, yields, permeability, users, gradients etc)</i></p> <p>5.3.7 <i>Hydrochemistry (organic, inorganic, physical)</i></p> <p>5.3.8 <i>Air quality (ambient and seasonal)</i></p> <p>5.3.9 <i>Flora (vegetation types, diversity, endemic, endangered, alien and invasive spp)</i></p> <p>5.3.10 <i>Terrestrial fauna (populations, diversity, endemic, endangered, alien and invasive spp)</i></p> <p>5.3.11 <i>Aquatic ecology (populations, diversity, endemic, endangered, alien and invasive spp)</i></p>			
<p>5.4 Have the <i>social</i> components of the environment likely to be affected by the project been identified and described sufficiently for the prediction of impacts?</p> <p>5.4.1 <i>Social structure of local community</i></p> <p>5.4.2 <i>Demographics</i></p> <p>5.4.3 <i>Skills</i></p> <p>5.4.4 <i>Employment</i></p> <p>5.4.5 <i>Community facilities and services re water supply</i></p> <p>5.4.6 <i>Amenities</i></p> <p>5.4.7 <i>Settlement patterns</i></p> <p>5.4.8 <i>Aesthetics (visual, noise, odour, sense of place, air quality, quality of life etc)</i></p> <p>5.4.9 <i>Health</i></p>			

	Relevant? Yes/No	Judgement (C/A/I)	Comments
5.4.10 <i>Willingness and ability to pay for water</i>			
5.5 Have the <i>cultural</i> components of the environment likely to be affected by the project been identified and described sufficiently for the prediction of impacts? 5.5.1 <i>Sites of spiritual and/or religious significance</i> 5.5.2 <i>Sites of cultural significance</i> 5.5.3 <i>Sites of historical significance</i> 5.5.4 <i>Archaeological sites</i>			
5.6 Have the <i>economic</i> components of the environment likely to be affected by the project been identified and described sufficiently for the prediction of impacts? 5.6.1 <i>Local, regional and national economic indicators</i> 5.6.2 <i>Multiplier effect</i> 5.6.3 <i>Forward and backward linkages</i> 5.6.4 <i>Local spending</i> 5.6.5 <i>Sectoral strengthening</i> 5.6.6 <i>Import and export potential</i> 5.6.7 <i>Tax base and revenue generation</i> 5.6.8 <i>Resource economics</i> 5.6.9 <i>Cost-benefit analysis</i>			
5.7 Have the authors of the EIA Report adequately consulted the latest literature and/or unpublished reports and/or data relevant to the study and cited their sources?			
5.8 Have the specialist studies been peer reviewed?			
6 DESCRIPTION OF IMPACTS			
<i>Impact Identification</i>			
6.1 Have direct and indirect/ secondary effects of constructing, operating and, where relevant, after use or decommissioning of the project been clearly explained (including both positive and negative effects)?			
6.2 Have the above types of impacts been investigated in so far as			

	Relevant? Yes/No	Judgement (C/A/I)	Comments
they affect the following:			
6.2.1 <i>Air quality</i>			
6.2.2 <i>Surface Water</i>			
6.2.3 <i>Ground water</i>			
6.2.4 <i>Soils</i>			
6.2.5 <i>Noise</i>			
6.2.6 <i>Landscape</i>			
6.2.7 <i>Vegetation</i>			
6.2.8 <i>Terrestrial Ecology and biodiversity</i>			
6.2.9 <i>Aquatic ecology</i>			
6.2.10 <i>Historic and cultural heritage</i>			
6.2.11 <i>Land use</i>			
6.2.12 <i>People and communities</i>			
6.2.13 <i>Health</i>			
6.2.14 <i>Sense of place</i>			
6.2.15 <i>Transportation and traffic</i>			
6.2.16 <i>A neighbouring country (transboundary impacts)</i>			
6.2.17 <i>Local, regional and national economic indicators</i>			
6.3 Is the investigation of each type of impact appropriate to its importance for the decision, avoiding unnecessary information and concentrating mainly on the 5 key issues?			
6.4 Are cumulative impacts considered?			
6.5 Has consideration been given to impacts which might arise from non-standard operating conditions, (i.e. equipment failure or unusual environmental conditions such as flooding), accidents and emergencies? (i.e. risk assessment)			
<i>Magnitude of Impacts</i>			
6.6 Are impacts described in terms of the nature and magnitude of the change occurring and the nature (location, number, value, sensitivity) of the affected receptors?			
6.7 Has the timescale over which the effects will occur been predicted such that it is clear whether impacts are short, medium or long term, temporary or permanent, reversible or irreversible?			
6.8 Where possible, have predictions of impacts been expressed in quantitative terms? Otherwise, have qualitative			

	Relevant? Yes/No	Judgement (C/A/I)	Comments
descriptions been defined?			
6.9 Where quantitative predictions have been provided is the level of uncertainty attached to the results described?			
<i>Data and Methods</i>			
6.10 Have the methods to predict the nature, size and scale of impacts been described and are they appropriate to the importance of each projected impact?			
6.11 Have the impacts of the environment on the construction and operation of the project been considered?			
<i>Evaluation of Impact Significance</i>			
6.12 Does the information include a clear indication of which impacts may be significant and which may not?			
6.13 Has the significance of effects been discussed taking account of appropriate national and international standards or norms, where these are available?			
6.14 Where there are no generally accepted standards or criteria for the evaluation of significance, is a clear distinction made between fact, assumption and professional judgement?			
6.15 Have the magnitude, location and duration of the impacts been discussed in the context of the value, sensitivity and rarity of the resource or environment?			
7 MITIGATION			
<i>Description of mitigation measures (in EIA)</i>			
7.1 Has the mitigation of negative impacts been considered and, where feasible, have specific measures been proposed to address each impact?			
7.2 Where mitigating measures are proposed, has the significance of any impact remaining after mitigation been described?			
7.3 Where appropriate, do mitigation methods considered include modification of project design, construction and operation, the replacement of facilities/ resources, and the creation of new resources?			
7.4 Is it clear to what extent the mitigation methods are likely to be effective?			
7.5 Has the EIA report clearly explained what the costs of			

	Relevant? Yes/No	Judgement (C/A/I)	Comments
mitigation are likely to be, and compared these to the benefits (including the costs of non-mitigation)?			
<i>Commitment to Mitigation</i>			
7.6 Have details of how the mitigation will be implemented and function over the time span for which they are necessary, been presented i.e. in an Environmental Management Plan?			
<i>Monitoring Proposals</i>			
7.7 Has the EIA proposed practical monitoring arrangements to check the environmental impacts resulting from the implementation of the project and their conformity with the predictions made?			
7.8 Has the EIA proposed Limits of Acceptable Change that the developer can use to track impacts and trigger management intervention?			
7.9 Does the scale of any proposed monitoring arrangements correspond to the potential scale and significance of deviations from expected impacts?			
<i>Environmental Effects of Mitigation</i>			
7.10 Have any adverse environmental effects of mitigation measures been investigated and described?			
7.11 Has the potential for conflict between the benefits of mitigating measures and their adverse impacts been considered?			
8. NON-TECHNICAL SUMMARY			
8.1 Is there a non-technical summary that will easily be understood by a lay-person?			
8.2 Does the summary contain a brief but concise description of the project and the environment, an account of the main issues and mitigation measures to be undertaken, and a description of any remaining or residual impacts?			
8.3 Does the summary include a brief explanation of the overall approach to the assessment?			
8.4 Does the summary provide an indication of the confidence which can be placed in the results?			

		Relevant? Yes/No	Judgement (C/A/I)	Comments
8.5	Does the summary indicate whether the project is or is not environmentally acceptable			
9. GENERAL APPROACH				
<i>Organisation of the information</i>				
9.1	Is the information logically arranged in sections?			
9.2	Is the location of the information identified in an index or table of contents?			
9.3	When information from external sources has been introduced, has a full reference to the source been included?			
9.4	Does the report or appendices contain the Terms of Reference for the EA?			
9.5	Are the credentials of the report authors and specialists presented, with a clear indication of their respective contributions?			
<i>Presentation of the information</i>				
9.6	Has information and analysis been offered to support all conclusions drawn?			
9.7	Has information and analysis been presented so as to be comprehensible to the non-specialist, using maps, tables and graphical material as appropriate?			
9.8	Are the maps at an appropriate scale, show co-ordinates, north sign, contours, drainage, settlement, landmarks, administrative boundaries etc in relation to the proposed project site?			
9.9	Has superfluous information (i.e. information not needed for the decision) been avoided?			
9.10	Have prominence and emphasis been given to severe adverse impacts, to substantial environmental benefits, and to controversial issues?			
9.11	Is the information objective?			
9.12	Are all the specialist studies and appendices present?			