

Supplement to the Republic of Zambia Government
Gazette date the 21st February, 1997

GOVERNMENT OF ZAMBIA

STATUTORY INSTRUMENT NO. 28 OF 1997

**The Environmental Protection and Pollution Control
 (Environmental Impact Assessment) Regulations, 1997**

In Exercise of the powers contained in section *six* and *ninety-six* of the Environmental Protection and Pollution Control Act, 1990, and in consultation with the Council, the following Regulations are hereby made:

**PART I
 PRELIMINARY**

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| <p>1. These Regulations may be cited as the Environmental Protection and Pollution Control (Environmental Impact Assessment) Regulations, 1997.</p> <p>2. In these Regulations, unless the context otherwise requires:-</p> <p>“authorising agency” means any Government ministry or department, public corporation, local authority or public officer in which, or whom, any law, regulation or bye-law vests the powers and functions to authorise, control or manage any aspect of a proposed or existing project;</p> <p>“Council” means the Environmental Council established by section <i>three</i> of the Act or any agent of the Council who has been duly authorised by the Council for purposes of these Regulations;</p> <p>“day” means an official working day;</p> <p>“decision letter” refers to a letter issued by the Council stating that a proposed project is not likely to cause unacceptable environmental impacts or that the expected environmental impacts are unacceptable and an authorisation license, permit or permission should not be issued;</p> <p>“developer” means any person who, or entity which, proposes to undertake a new project or to repair or extend an existing project which falls within the list of projects provided for in the First Schedule and who, or which, is responsible for obtaining the appropriate authorisation;</p> <p>“Director” means the Director of the Council appointed under section <i>fifteen</i> of the Act and includes any person who has been authorised by the Director to act on his behalf;</p> <p>“environment” has the meaning assigned to it in section <i>two</i> of the Act;</p> <p>“environmental impact assessment” means a systematic examination conducted to determine whether or not a proposed project, or alteration to an existing project, or alternatives, may have significant adverse or beneficial impacts on the environment;</p> <p>“environmental impact statement” means the statement described in Regulations 8, 11, 12 and 13;</p> <p>“environmental mitigation audit” means the systematic, documented,</p> | <p>Title Interpretation</p> |
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periodic and objective evaluation of the implementation and performance of the impact management plan included in an environmental impact statement and as included in any authorisation licence, permit or permission pertaining to a proposed project or alteration of an existing project;

“individual person” means the human person;

“inspector” means an Inspector appointed under section *eighty-one* of the Act;

“mass media” includes publicly exhibited posters, newspapers, radios, television or other electronic media used for public communication;

“mitigation measures” include engineering works, technological improvements, management measures and other ways and means of preventing, ameliorating or compensation for adverse environmental impacts and losses suffered by individuals and communities and for enhancing benefits;

“project” means any plan, operation, undertaking, development, change in the use of land, or extensions and other alterations to any of the above and which cannot be implemented without an authorisation licence, permit or permission from an authorising agency or without approval from a line ministry before entry into a project implementation programme;

“project brief” means a report made by the developer including preliminary predictions of possible impacts of a proposed project on the environment and constituting the first stage in the environmental impact assessment process;

“Proprietary information” means information relating to any manufacturing process, trade secret, trademark, patent, copyright, breeder’s right, or formula protected by law or by any international treaty to which Zambia is a party.

PART II

PROJECT BRIEFS

3. (1) A developer shall not implement a project for which a project brief or an environmental impact statement is required under these Regulations, unless the project brief or an environmental impact assessment has been concluded in accordance with these Regulations and the Council has issued a decision letter. Project brief and environmental impact assessment
- (2) The requirement for a project brief applies to:-
- (a) a developer of any project set out in the First Schedule, whether or not the developer is part of a previously approved project;
 - (b) any alterations or extensions of any existing project which is set out in the First Schedule, or;
 - (c) any project which is not specified in the First Schedule, but for which the Council determines a project brief should be prepared.
4. A developer shall prepare a project brief under regulation 3, stating in a concise manner:- Preparation of project brief
- (a) the site description of the environment;
 - (b) the objectives and nature of the project and reasonable alternatives;
 - (c) the main activities that will be undertaken during site preparation, and construction and after the development is operational;
 - (d) the raw and other materials that the project shall use;
 - (e) the products and by-products, including solid, liquid and gaseous waste generation;
 - (f) the noise level, heat and radioactive emissions, from normal and emergency operations;

- (g) the expected socio-economic impacts of the project and the number of people that the project will resettle or employ, directly, during construction and operation etc;
- (h) the expected environmental impact of the project, taking into account the provisions of paragraphs (c) to (g);
- (i) the expected effects on bio-diversity, natural lands and geographical resources and the area of land and water that may be affected through time and space; and
- (j) A description of adverse mitigation measures and any monitoring programmes to be implemented.
- Submission of project Brief to Council
5. (1) A developer shall submit six copies of the project brief to the Council.
- (2) If the Council considers the project brief to be complete, the Council shall transmit the project brief to the authorising agency for comments within seven days of receiving the project brief.
- (3) The authorising agency referred to in sub-regulation (2) shall make comments and transmit them to the Council within thirty days of receiving the project brief.
- (4) Where the agency fails to make comments or transmit the project brief to the Council within the period specified in sub-regulation (2), the Council shall proceed to consider that project brief.
- Consideration of project brief and decision by Council
6. (1) The Council shall consider the project brief and the comments received.
- (2) If the Council is satisfied that the project will have no significant impact on the environment, or that the project brief discloses sufficient mitigation measures to ensure the acceptability of the anticipated impacts, the Council shall within the forty days of receiving the project brief from the developer, issue a decision letter, with conditions as appropriate, to that effect, to the authorising agency.

PART II**PROJECT BRIEFS**

- Decision that an Environmental Impact Statement be prepared
7. (1) Where the Council determines that the project is likely to have a significant impact on the environment, it shall require that an environmental impact statement be prepared in accordance with these Regulations, and shall inform the developer accordingly within forty days of receiving the project brief from the developer.
- (2) The requirement for an environmental impact statement shall apply to:-
- (a) a developer of any project specified in the Second Schedule regardless of whether they are part of a previously approved larger project;
- (b) any alterations or extensions of any existing project which is specified in the Second Schedule; or
- (c) any project which is not specified in the Second Schedule but for which the Council determines an environmental impact statement should be prepared.
- Terms of reference
- 8 (1) An environmental impact statement shall be prepared and paid for by the developer in accordance with terms of reference prepared by the developer in consultation with the Council.
- (2) To ensure that public views are taken into account during the preparation of the terms of reference, the developer shall organise a public consultation process, involving Government agencies, local authorities, non-governmental and community-based organisations and interested and affected parties, to help determine the scope of the work to be done in the conduct of the environmental impact assessment statement and in preparation of the environmental impact statement.
- (3) The developer shall prepare a draft Terms of Reference taking into account issues contained in the Third Schedule and the results of the consultations undertaken under sub-regulation (2) and submit these to the Council for approval.
- (4) On receipt of the draft terms of reference, the Council shall determine, within a period of five days from receipt of the draft, whether the terms of reference are acceptable and if the terms of reference are unacceptable, the developer shall, with the assistance of the Council, prepare the final terms of reference.

(5) a developer shall not begin work on preparing the environmental impact statement can begin until the Council has approved the terms of reference.

(6) The terms of reference shall include a direction that those responsible for preparing the environmental impact statement provide information on all matters specified in regulation 11 together with such other matters as are necessary by the Council.

Approval of persons preparing the environmental impact statement and conduct of environmental impact assessment

9. (1) The developer shall, upon the approval of the terms of reference for an environmental impact statement under regulation 8, submit to the Council the names and qualifications of the persons that shall prepare the environmental impact statement.

(2) The Council may approve or reject the name of any person submitted to it under sub-regulation (1).

(3) Where the Council rejects the name referred to in sub-regulation (2), it shall state the reasons for the rejection and request that another name be submitted within such period as it shall specify.

(4) Subject to the other provisions of these Regulations, the developer shall conduct the environmental impact assessment in accordance with the guidelines, which are set out in the Fourth Schedule, and any other guidelines, as the Council considers appropriate for the project.

10. (1) The developer shall, prior to the submission of the environmental impact statement to the Council, take all measures necessary to seek the views of the people in the communities, which will be affected by the project.

Public consultations

(2) In seeking the views of the community in accordance with sub-regulation (1), the developer shall:

(a) publicise the intended project, its effects and benefits, in the mass media, in a language understood by the community, for a period not less than fifteen days and subsequently at regular intervals through out the process; and

(b) after the expiration of the period of fifteen days, referred to in paragraph (a), hold meetings with the affected communities to present information on the project and to obtain the views of those consulted.

11. Without prejudice to the generality of the issues contained in the terms of reference set out in the Third Schedule, the environmental impact statement shall include:-

Contents of
environmental
impact statement

- (a) a description of the project, reasonable alternatives, which may begin or increase operations to provide materials or services to the proposed project;
- (b) a description of the proposed site and reasons for rejecting alternative sites;
- (c) a brief description of the site and the surrounding environment including specifying any information necessary to identify and assess the environmental effects of the project;
- (d) a description of the raw material inputs into the project and their potential environmental effects;
- (e) a description of the technology and processes that shall be used;
- (f) a description of the products and by-products of the project;
- (g) the environmental effects of the project, and reasonable alternatives, including the direct, indirect cumulative, short-term and long-term effects;
- (h) the socio-economic impacts of the project such as resettlement of the affected people.
- (i) an impact management plan containing a description of measures proposed for preventing, minimising or compensating for any adverse impact, and enhancing beneficial effects, and measures to monitor effluent streams or important environmental features which may be affected by the project; and
- (j) an indication of whether the environment of any neighbouring state is likely to be affected.

12. An environmental impact statement shall contain an executive summary, stating the main findings and recommendations and shall be signed by every individual person involved in its preparation.

Executive
Summary
and
Signatures

Transmission of environmental impact statement to neighbouring state and review of comments

13. (1) The Council may transmit a copy of an environmental impact statement to the neighbouring state, through the appropriate Ministry, whose environment may be affected, with a request of comments to be received within a specified period.
- (2) The Council shall consider comments received under sub-regulation (1) and, state the review process of an environmental impact statement.

PART IV

REVIEW PROCESS OF ENVIRONMENTAL IMPACT ASSESSMENT

Submission of environmental impact statement

14. (1) The developer shall submit twelve copies of the environmental impact statement to the Council.
- (2) The Director shall enter the environmental impact statement submitted under sub-regulation (1) of this Regulation into a Register of environmental impact statements.

Comments of the agency

15. (1) The Council shall, within seven days of receipt of the environmental impact statement, transmit a single copy of the statement to the authorising agency for comments.
- (2) The authorising agency shall, within thirty days of receiving the environmental impact statement, make comments and transmit them to the Council.
- (3) An authorising agency may, in considering the environmental impact statement under this Regulation, carry out such other procedures as deemed appropriate.

16. (1) The Council shall:-
- (a) distribute copies of an environmental impact assessment statement to relevant ministries, local government units, parastatals, non-governmental and community-based organisations, interested and affected parties;
 - (b) place copies of an environmental impact statement in public buildings in the vicinity of the site of the proposed project;
 - (c) place a notification in at least two national newspapers three times per week for two consecutive weeks and broadcast a notification on national radio, detailing the place and times where copies of an environmental impact statement are available for inspection and the procedure for submitting comments.

(2) The Council may organise, or cause to be organised, public meetings in the locality of the proposed.

(3) Any person wishing to make a comment on any copy of an environmental impact statement shall send comments to the Council, within twenty days from the date of the last notification issued in accordance with paragraph (c) of sub-regulation (1).

(4) The Council may extend the period for receipt of written comments up to a maximum of fifteen days if the Council considers that:-

- (a) many contentious issues have arisen indicating the sensitive nature of the project; or
- (b) the remoteness of the project location causes logistical problems for the consultation process.

17. (1) The Council shall consider the environmental impact statement and all the comments it has received under Regulations 15 and 16 to determine whether issue a decision letter in accordance with regulation 21 or hold a public hearing in accordance with sub-regulation (2).

Decision to hold a public hearing

(2) The Council shall hold a public hearing on the environmental impact statement if:-

- (a) as a result of the comments made under regulations 15 and 16, the Council is of the opinion that a public hearing will enable it to make a fair and just decision; or
- (b) the Council considers it necessary for the protection of the environment.

24. (1) Whenever a public hearing is to be conducted under these Regulations:-

Public hearing

- (a) notice thereof shall be published three times a week for two consecutive weeks in the national papers at least fifteen days prior to the public hearing; and all expenses of the notices shall be incurred by the project proponent;
- (b) all documents shall, from the end of the period of the public review, until the end of the public hearing remain available for public inspection accompanied by all written comments at the location specified under regulation 16;

- (c) such hearing shall begin not later than twenty-five days after the last public notification:

Provided that if the Council determines that the number and complexity of the issues, to be considered at a hearing, require additional preparation time, on the part of those wishing to make a presentation to the hearing, it can extend this period up to a maximum of ten days;

- (d) the Council shall, where it feels, necessary and appropriate request any relevant persons to be present at the public hearing to make comments or solicit in writing, for comments from other Government agencies which have expertise or regulatory power over the proposed project as well as the authorising agency.

(2) The Council shall appoint a person who, in its opinion, is suitably qualified to preside over the public hearing and who shall serve on such terms and conditions as may be agreed between the Council and the person so appointed.

(3) The public hearing shall be conducted at a venue which shall be convenient and accessible to those persons who are likely to be specifically affected by the project.

(4) On the conclusion of the public hearing the person presiding at the hearing shall, within fifteen days from the termination of the public hearing, make a report of his findings to the Council.

Persons eligible to participate in a public hearing

19. (1) Any person may attend a public hearing, either in person or through a representative, and make presentations:

Provided that the person presiding at the public hearing shall have the right to disallow frivolous and vexatious presentations, which lead to the abuse of the process.

- (2) The Council shall determine the procedure for making presentations at a public hearing.

PART V

DECISION OF THE COUNCIL

20. (1) In making a decision regarding an environmental impact statement under these Regulations, the Council shall take into account:-

- (a) the impact predictions made in the environmental impact statement;
- (b) the comments made under regulations 15 and 16;
- (c) the report of the person presiding at the public hearing, where applicable;
- (d) other factors which the Council considers crucial in the particular circumstances of the project.

(2) The Council shall make its decision in accordance with Regulation 21, within thirty days after receipt of a report from a public hearing or twenty days from the date on which an environmental impact statement was submitted under regulation 14.

Decision of Council and issue of decision letter

21. (1) The Council shall take into account the whole review process and issue a decision letter stating:

- (a) that the project is approved; or
- (b) the project is rejected;
- (c) the project is approved subject to the developer meeting the stipulated conditions.

Reasons and conditions of decision

22. (1) In issuing its decision letter the Council shall, as the case may be:-

- (a) provide reasons for any rejections; or
- (b) specify the conditions to be attached, as an Annex to any authorisation license, permit or permission issued to the developer based on an impact management plan provided in an environmental impact statement; Including an activity to schedule to govern implementation of the conditions.

(2) An Annex containing any specified conditions must be signed under the hand of the Director.

Communicati on of decision

23. A decision of the Council under this part shall be communicated to all parties concerned, within fifteen days of the decision.

24. (1) If any party is aggrieved by the decision of the Council, that party may, in writing, appeal to the Minister against the decision of the Council within a period of ten days after receipt of the decision letter from the Council. Appeals

(2) The Minister shall render his decision within fourteen (14) days of receiving an appeal.

(3) If the aggrieved party is not content with a decision of the Minister, he may appeal to the High Court.

25. An authorisation license, permit or permission, that has been issued, following preparation of an environmental impact statement, shall not be valid unless it has an Annex signed by the Director stipulating the conditions to be implemented. Validity of authorisation document

PART VI

ACCESS TO ENVIRONMENTAL IMPACT STATEMENTS AND INFORMATION

26. (1) Any project brief, environmental impact statement, terms of reference, public comments, report of the person presiding at a public hearing, decision letter or any other information submitted to the Council under these Regulations shall be public documents. Documents to the public

(2) The Council shall, on such terms and conditions as it may determine, grant any person who desires to consult any document, referred to in sub-regulation (1), access to that document.

27. (1) Where at any stage during the process of implementing these Regulations, the developer claims, in writing, that any information submitted to the Council is proprietary:- Protection of proprietary information

(a) The Council shall review the claim and may request the developer to submit such additional information as it considers necessary to support such; and

(b) no person shall copy, circulate, publish or disclose such information until the Council makes a decision on the claim.

(2) The Council shall decide within twenty days of the making of the claim under sub-regulation (1) whether to treat the information as proprietary or not.

(3) Where the Council determines that the information referred to in sub-regulation (1) above is proprietary, such information shall be excluded from the project brief or the environmental impact statement, but such information shall remain available to the Council.

(4) Any members of staff of the Council handling any information which the Council has determined to be proprietary, shall not disclose or communicate such information to any unauthorised person.

(5) Where the Council reject a claim that any information is proprietary, the Council shall request the developer to communicate, in writing, to the Council, whether the developer intends to:-

- (a) waive the claim and continue with the assessment process under these Regulations; or
- (b) withdraw the information submitted under these Regulations from the assessment process under these Regulations.

PART VII POST-ASSESSMENT ENVIRONMENTAL AUDITS

28. (1) In executing a project, the developer shall take all practicable measures to ensure that the conditions attached to an authorisation document are complied with.

Preparation of
an environmen-
tal audit

(2) Subject to sub-regulation 3, the development shall undertake an environmental audit of the project within a period of not less than twelve months and not more than thirty six months after the completion of the project or the commencement of its operations, whichever is earlier.

(3) Notwithstanding sub-regulation (2), the Council may ask the developer to undertake an environmental audit at any time for short term spraying and any other.

(4) The environmental audit under sub-regulation (2) shall be carried out by at least two appropriately qualified persons from those who prepared the environmental impact statement and where this is not possible, by persons whose names and qualifications have been approved by the Council for the purpose.

(5) The audit referred to in sub-regulation (2) shall focus on the implementation of the conditions attached to the authorisation document and shall include conclusions on the extent to which:-

- (a) the measures specified in the conditions have been implemented according to the schedule; and
- (b) the measures are achieving the expected results and, where deficiencies exist, suggest measures to deal with them.

(6) The Council may, after the environmental audit referred to in sub-regulation (2), require the developer to carry out specified remedial actions and further audits at such times as the Council considers necessary.

(7) An environmental audit report shall be prepared after each audit and shall be submitted to the Council by the developer within such time as the Council may determine.

29. (1) An inspector appointed under the Act may at all reasonable times enter upon any land, premises or other facility related to a project for which a project brief or an environmental impact statement has been made under these Regulations to undertake investigations relating to the implementation of any condition or measure to be taken following an environmental audit.

Role of an
inspector

(2) An inspector acting pursuant to this Regulation may examine and copy record and exercise all or any of powers provided for under section *eighty-four* of the Act.

PART VIII

PERIOD OF VALIDITY

30. If, following the preparation of a project brief or environmental impact assessment, an authorisation licence, permit or permission has been issued but no land preparation or construction work has started within three years, then the developer must re-register with the authorising agency any intention to develop,

Expiry of
authorisation
document

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| Developer to inform authorising agent of changes | 31. The developer shall inform the authorising agency of any changes to the development and the authorising agency shall inform the Council accordingly. |
| Need for additional environmental information | <p>32. (1) The Council shall decide whether:-</p> <p>(a) an additional environmental impact statement is required to be prepared; or</p> <p>(b) any extra work is needed to supplement the existing environmental impact statement.</p> <p>(2) If an additional environmental impact statement is required, a developer shall follow the procedures set out under Regulations 8 to 28.</p> <p>(3) Where a supplement to the environmental impact statement is required, the Council shall advise the developer, as to the nature of the additional information required and the developer shall submit the supplement to the Council.</p> <p>(4) The Council shall circulate any information for review to relevant Government agency and local government authority which shall send their comments to the Council within twenty days of receipt of the information.</p> |
| Issue of decision letter | 33. On receipt of the comment under sub-regulation (4) of regulation 32, the Council shall issue a decision letter within ten days of the close of the period set for receipt of comments. |

PART IX

PENALTIES

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| Offences and penalties | <p>34. (1) Any person who:-</p> <p>(a) fails to prepare and submit a project brief to the Council under Regulation 7;</p> <p>(b) fails to prepare and submit an environmental impact statement under Regulations 11, 12 and 13;</p> <p>(c) fraudulently makes a false statement in a project brief or environmental impact statement contrary to these Regulations;</p> |
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- (d) fraudulently alters an environmental impact statement or project brief contrary to these Regulations;
- (e) in the development of a project, fails to abide by the conditions attached to an authorisation permit or licence under Regulations 21, and 28;
- (f) fraudulently makes a false statement in an environmental audit contrary to these Regulations; or
- (g) otherwise fails to comply with these Regulations; shall be guilty of an offence and shall be liable, upon conviction, to a fine not exceeding one hundred thousand Kwacha or to imprisonment for a period not exceeding three years or to both.

(2) A person who commits an offence under sub-regulation (1) shall, have an authorisation, permit or licence suspended or cancelled.

35. (1) The remedial costs of any environmental damage caused through the violation of any provision of these Regulations or any conditions or requirements made as part of the approval of any project under these Regulations, shall be the responsibility of the person responsible for the violation. Remedial costs

(2) If remedial measures cannot be undertaken immediately by a developer, the Council shall undertake the remedial measures and shall charge the costs to the developer to pay within a specified reasonable time.

PART X

MISCELLANEOUS PROVISIONS

36. The Council shall charge the fees set out in the Fifth Schedule for operational costs in respect of reviewing project briefs, environmental impact statement, and reports and for access to any document declared to be public documents under regulation 26. Fees

37. The Council may, delegate any of its functions under these Regulations to the Director or any other officer of the Council, a local authority or any other appropriate agency. Delegation of functions

Projects authorised
prior to the
commencement of
these Regulations

38. Where, prior to the commencement of these Regulations, an authorising agency authorised any project to which these Regulations apply, the developer shall, within twelve months of the commencement of these Regulations, be required to undertake the process prescribed under these Regulations.

**FIRST SCHEDULE
(Regulations 3(2))**

PROTECTS WHICH REQUIRE PROJECT BRIEFS

11. Projects

- (a) Urban area rehabilitation.
- (b) Water transport.
- (c) Road control schemes.
- (d) Exploration for and production of hydrocarbons including refining and transport.
- (e) Timber harvesting and processing in forestry.
- (f) Land consolidation schemes.
- (g) Mining and mineral processing, reduction of ores, minerals, cement and lime kilns.
- (h) Smelting and refining of ores and minerals.
- (i) Foundries.
- (j) Brick and earthen manufacture.
- (k) Glass works.
- (l) Brewing and malting plants.
- (m) Plants for manufacture of coal briquettes.
- (n) Pumped storage schemes.
- (o) Bulk grain processing plants.
- (p) Hydro power schemes and electrification.
- (q) Chemical processing and manufacturing.

12. Others

- (a) Resettlement schemes.
- (b) Storage of hydrocarbons.
- (c) Hospitals, clinics and health centres.
- (d) Cemetery designation.
- (e) Touring and recreational development in national parks or similar reserves.
- (f) Projects located in or near environmental sensitive areas such as:-
 - (i) indigenous forests;
 - (ii) wetlands;
 - (iii) zones of high biological diversity;

- (iv) areas supporting populations of rare and endangered species;
- (v) zones prone to erosion or desertification;
- (vi) areas of historical and archaeological interest;
- (vii) areas of cultural or religious significance;
- (viii) areas used extensively for recreation and aesthetic reasons;
- (ix) areas prone to flooding and natural hazards;
- (x) water catchments containing major sources for public, industrial or agricultural uses; and
- (xi) areas of human settlements (particularly those with schools and hospitals).

SECOND SCHEDULE
(Regulation 7 (2))

PROJECTS WHICH REQUIRE ENVIRONMENTAL IMPACT ASSESSMENT

1. Urban Development

- (a) Designing of new townships, which are more than 5Ha or more, or sites covering 700 dwellings and above.
- (b) Establishment of industrial estates.
- (c) Establishment or expansion of recreational areas such as golf course, which would attract 200 or more vehicles
- (d) Shopping centres and complexes - 10, 000 m² and above, floor area.

2. Transportation

- (a) All major roads outside urban areas, the construction of new roads and major improvements over 10 Km in length or over 1 Km in length if the road passes through a national park, Game Management Area.
- (b) Railway lines: 10 Km from built up area.
- (c) Airport and airfields; runway 1, 800 m or more.
- (d) Pipelines: for water, diameter 0.5 m and above and length 10 Km outside built up area, for oil 15 Km or more of which 5 Km or more of their length will be situated in a protected area, a serious polluted water abstraction area.
- (e) Establishment of harbours or pontoons areas.

3. Dams, Rivers and Water Resources

- (a) Dams and barrages: covering a total of 25 Ha or more.
- (b) Exploration for, and use of, ground water resources including production of geothermal energy: water to be extracted to be more than 2 million cumecs m³/s.

4. Mining: Including Quarrying and Open Cast Extraction

- (a) Copper mining, coal site.
- (b) Limestone, sand, dolomite, phosphate and clay extraction's of 2Ha or more.
- (c) Precious metals (silver, zinc, cobalt, nickel).
- (d) Industrial metals.
- (e) Gemstones.
- (f) Radioactive metals.

5. Forestry Related Activities

- (a) Clearance of forestry in sensitive areas such as watershed areas or for industrial use 50Ha or more.
- (b) Reforestation and afforestation.
- (c) Wood processing plants - 1, 000 tonnes or more.

6. Agriculture

- (a) Land clearance for large scale agriculture.
- (b) Introduction and use of agrochemical new in Zambia.
- (c) Introduction of new crops and animals especially exotic ones new to Zambia.
- (d) Irrigation schemes covering an area of 50 Ha or more.
- (e) Fish farms: production of 100 tonnes or more a year.
- (f) Aerial and ground spraying

7. Processing and Manufacturing Industry

- (a) Cement works and lime processing - 1, 000 tonnes or more a year.
- (b) Fertilizer manufacturing or processing - 1, 000 tonnes or more a year.
- (c) Tanning and dressing of hides and skins - 1, 00 skins a week.
- (d) Abattoirs and meat processing plants - 20, 000 carcasses and above a month.
- (e) fish processing plant - more than 100 tons a year.
- (f) Pulp and paper mills - daily out put 50 air dried tonnes and above a day.
- (g) Food processing plants - 400 tonnes or more out put a year.

8. Electrical Infrastructure

- (a) Electricity generation station.
- (b) Electrical transmission lines - 220 Kv and more than 1 Km long.
- (c) Surface roads for electrical and transmission lines for more than 1 Km long.

9. Waste Disposal

- (a) Sites for solid disposal: construction of permanent disposal site with 1, 000 tonnes and above a day.
- (b) Sites for hazardous disposal 100 tonnes or more a year.
- (c) Sewage disposal works - with capacity of 15, 000 litres or more a day.

10. Nature Conservation Areas

- (a) Creation of national parks, game management areas and buffer zones.
- (b) Commercial exploitation of natural fauna and flora.
- (c) Introduction of alien species of flora and fauna to local ecosystems.

**THIRD SCHEDULE
(Regulations 8 (3))**

ISSUES TO BE CONSIDERED WHEN PREPARING THE TERMS OF REFERENCE

The following impacts and issues may, among others, be considered for inclusion, as appropriate, in the preparation of the terms of reference.

1. Ecological consideration, including

- (a) Biological diversity
 - (i) Effect on number, diversity, breeding sites, etc. of flora and fauna
 - (ii) Breeding populations of fish and game; and
 - (iii) Effects on the gene pools of domesticated and wild sustainable yield.
- (b) Sustainable use including
 - (i) Effects of soil fertility;
 - (ii) Nutrient cycles;
 - (iii) Aquifer recharge, water run-off rates, etc;
 - (iv) Aerial extent of habitats; and
 - (v) Bio-geographical processes.

2. Social, economic and cultural considerations including:

- (i) Effects on generation or reduction of employment in the area;
- (ii) Social cohesion or disruption (resettlement);
- (iii) Immigration (including induced development when people are attracted to a development site because of possible enhanced economic opportunities);
- (iv) Communication - roads opened up, closed, re-routed; and

- (v) Local economic impacts.

3. *Land Scope*

- (i) Views opened up or closed.
- (ii) Visual impacts (features, removal of vegetation, etc.).
- (iii) Compatibility with surrounding areas.
- (iv) Amenity opened up or closed e.g. recreation facilities.

4. *Land Use*

- (i) Effects on land uses and land potential in the project area and in the surroundings areas.
- (ii) Possibility of multiple use.

5. *Water*

- (1) Effects of surface water quality and quantity.
- (2) Effects on underground water quality and quantity.
- (3) Effects on the flow regime the water course.

6. *Air Quality*

- (i) Effects on the quality of the ambient air of the area.
- (ii) Type and amount of possible emissions (pollutants).

FOURTH SCHEDULE (Regulations 9 (3))

GUIDELINES FOR DEVELOPERS IN CONDUCTING ENVIRONMENTAL IMPACT ASSESSMENT

STAGE 1: PRELIMINARY ACTIONS.

- (1). The description of the project which is done in the project brief submitted to the Council under regulation 5.
- (2). The developer appoints a co-ordinator for the environmental impact study. The qualification of the co-ordinator depend on the nature of the project.
- (3). Together with the co-ordinator, the developer selects the experts that will comprise the team that will undertake the study. Preference should be given to experts with specific knowledge of local or similar conditions. The team shall include at least one person resident in the potentially affected area.
- (4). The co-ordinator allocates work to the team member of the purpose of carrying out the scoping exercise.
- (5). The team reviews and determines the applicable laws, regulations and standards.
- (6). The developer, the co-ordinator and the team identify the various alternatives for the development of the project (sites, technology and design).

STAGE 2: SCOPING (OR IDENTIFICATION OF IMPACTS)

- (1) The team under the guidance of the co-ordinator identifies all the possible environmental impacts of the project.
- (2) The co-ordinator, the team and the Council determines which of the impacts shall be the subject of the study based on the following criteria:
 - (a) magnitude, including the impact of the project on environmental resources;
 - (b) extent, including the geographical extent of the impact;
 - (c) significance, including the actual effects of the impacts on the environmental resource; and
 - (d) special sensitivity, including impacts which are significant in the specific local economic, social and ecological setting (see Regulation 9).
- (3) The developer submits the names and qualifications of all persons to carry out the study to the Council for approval.

STAGE 3: BASELINE STUDY

The team undertakes a detailed description of the existing environment including the social and economic activities of the population resident in the potentially affected area.

STAGE 4: IMPACT EVALUATION

The team predicts and evaluates the various predicted impacts and ranks them in order of importance on the basis of two criteria:

- (1) Quantitative change where change can be quantified.
- (2) Quantitative change where change cannot be quantified, but instead the impact of the project depends on the environmental acceptability of the project.

STAGE 5: PUBLIC PARTICIPATION IN ENVIRONMENTAL IMPACT STUDY

- (1) The team seeks the view of the community which are likely to be affected by the project.
- (2) The views sought in (1) are considered in the development of mitigation measures (regulation 11).

STAGE 6: IDENTIFICATION OF MITIGATION MEASURES

- (1) The team identifies measures for elimination (where possible), or reduction, of environmental impacts for various alternatives identified in the study such as:
 - (a) engineering works in noise reduction, prior treatment of effluent air pollution reduction measures and solid waste minimisation through reclamation, recycling and any other appropriate measures.
 - (b) management measures especially in areas of natural resources, reforestation, control of soil erosion, desalinisation, desilting.
- (2) The team includes the cost mitigation measures into impact evaluation.
- (3) Where necessary, the team will create an alternative based on the mitigation.

STAGE 7: ASSESSMENT (OR COMPARISON OF ALTERNATIVES)

- (1) The team compares all the alternatives from the basis of economic, socio-cultural and environmental gains and costs.
- (2) The team ranks and recommends all alternatives to the developer on the basis of sound environmental and economic analysis.

STAGE 8: DECISION MAKING BY THE DIRECTOR

The developer makes a decision choosing one alternative and giving reasons for the rejecting the other alternatives.

STAGE 9: SUBMISSION OF THE REPORT TO THE COUNCIL

- (1) The team completes the environmental impact statement (under regulation 11 and 12)
- (2) The developer submits the report to the Council.

STAGE 10: IMPLEMENTATION OF THE PROJECT AND POST ASSESSMENT AUDITS

- (1) If the Council approves the environmental impact statement (under regulation 21) the developer may implement the project.

- (2) The team shall carry out a post assessment environmental audit between 12-36 months of the commencement of the project (see regulation 28).

FIFTH SCHEDULE
(Regulation 37)

Fees

Based on operational experience and costs, fees shall be determined according to the amount of work, project and service done by the Council such as:-

		Fee Units
1	Review of Project Brief	43,333
2	Environmental Impact Assessment will be related to project cost as follows	
	Less than US\$ 100,000	43,333
	US\$ 100,000 - US\$ 500,000	216,665
	US\$ 500,000 - US\$ 1,000,000	541,662
	US\$ 1,000,000 - US\$ 10,000,000	1,083,324
	US\$ 10,000,000 – US\$ 50,000,000	2,166,650
	US\$ 50,000,000 or more	3,249,975

LUSAKA
13th February, 2001
[MENR. 64/9/5]

S. MIYANDA,
Minister of Environment and
Natural Resources

Note: Each Fee Unit is currently valued at K180