

GOVERNMENT OF ZAMBIA

STATUTORY INSTRUMENT NO. 28 OF 1997

**The Environmental Protection and Pollution Control Act  
(Act No. 12 of 1990)**

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

IN EXERCISE of the powers contained in sections *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

1. These Regulations may be cited as the Environmental Protection and Pollution Control (Environmental Impact Assessment) Regulations, 1997. Title
2. In these Regulations, unless the context otherwise requires— Interpretation
  - "authorising agency" means any Government ministry or department, public corporation, local authority or public officer in which, or in whom, any law, regulation or by-law vests the powers and functions to authorise, control or manage any aspect of a proposed or existing project;
  - "Council" means the Environmental Council of Zambia established by section *three* of the Act or any agent of the Council who has been duly authorised by the Council for purposes of these regulations;
  - "day" means an official working day;
  - "decision letter" means 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 licence, a permit or permission should not be issued;

- " 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;
- " Director " means the Director appointed under section *fifteen* of the Act or any other person who has been authorised by the Director to act on his behalf;
- " environment " has the meaning assigned to it in section *two* of the Act;
- " 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;
- " environmental impact statement " means the statement described in regulations 8, 11, 12, and 13;
- " environmental mitigation audit " means the systematic, documented, 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, radio, 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 compensating 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 the environmental impact statement has been concluded in accordance with these regulations and the Council has issued a decision letter.

Project brief  
and  
environmen-  
tal impact  
statement

(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 impact of the project and the number of people that the project will resettle or employ, directly, during construction and operation;
- (h) the expected environmental impact of the project, taking into account the provisions of paragraphs (c) to (g);
- (i) the expected effect on the 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 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 III

#### ENVIRONMENTAL IMPACT STATEMENT

Decision that  
an environ-  
mental  
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) A requirement for an environmental impact statement under regulation (1) shall apply to---

- (a) a developer of any project specified in the Second Schedule regardless of whether the developer is part of a previously approved 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 that an environmental impact statement should be prepared.

8. (1) An environmental impact statement shall be prepared and paid for by the developer in accordance with the terms of reference prepared by the developer in consultation with the Council.

Terms of  
reference

(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 and in the preparation of the environmental impact statement.

(3) The developer shall prepare draft terms of reference taking into account the 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 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 considered necessary by the Council.

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.

Approval of  
persons  
preparing  
environmen-  
tal impact  
statement  
and conduct  
of environ-  
mental  
impact  
assessment

(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.

Public  
consultations

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.

(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 of not less than fifteen days and subsequently at regular intervals throughout the process; and

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

Contents of  
environmental  
impact  
statement

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

(a) a description of the project, and 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 other alternative sites;

(c) a brief description of the site and the surrounding environment 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, or cumulative, short-term and long-term effects;
- (h) the socio-economic impacts of the project, such as resettlement of 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 that 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

13. (1) The Council shall transmit a copy of an environmental impact statement to the neighbouring state, through the appropriate Ministry, whose environment may be affected, with a request for comments to be received within a specified period.

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

(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 STATEMENT

14. (1) The developer shall submit twelve copies of an environmental impact statement to the Council.

Submission  
of  
environmental  
impact  
statement

(2) The Director shall enter the environmental impact statement, submitted under sub-regulation (1), in a Register of environmental impact statements.

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.

Comments  
of the  
agency

(2) An authorising agency shall, within thirty days of receiving the environmental impact statement make comments on the statement 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 it may be consider appropriate.

Public  
consultations

16. (1) The Council shall—

- (a) distribute copies of an environmental impact statement to relevant ministries, local government units, parastals, 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 a week for two consecutive weeks, and broadcast a notification on national radio, detailing the place and time where copies of an environmental impact statement are available for inspection and the procedures for submitting comments.

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

(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.

Decision to  
hold a public  
hearing

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

(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 shall enable it to make a fair and just decision; or

(b) the Council considers it necessary for the protection of the environment.

Public  
hearing

18. (1) Whenever a public hearing is to be conducted under these Regulations—

(a) a notice of the hearing shall be published three times a week for two consecutive weeks in 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 preparations time, on the part of those wishing to make a presentation to the hearing, it may extend this period up to 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 from 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) A 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 a 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

#### Criteria for decisions

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 a 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 that—

- (a) the project is approved;
- (b) the project is rejected; or
- (c) the project is approved subject to the developer meeting certain 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 licence, permit or permission issued to the developer based on an impact management plan provided in an environmental impact statement;

including an activity schedule to govern implementation of the conditions.

(2) An Annex containing any specified condition shall be signed by the Director.

#### Communication 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 concerned is aggrieved by a 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 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 licence, 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 a 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 be 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 claim; 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) 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 member of staff of the Council who is 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

Preparation  
of an  
environmental  
audit

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

(2) Subject to sub-regulation 3, the developer 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 the earlier.

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

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

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

(a) the measures specified in the conditions have been implemented according to the activity 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 may consider 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 under this Regulation may examine and copy any record and exercise all or any of the 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, a permit or permission has been issued but no land preparation or construction work has started within three years, the developer shall re-register with the authorising agency any intention to develop.

Expiry of authorisation document

31. A developer shall inform the authorising agency of any changes to the development and the authorising agency shall inform the Council accordingly.

Developer to inform authorising agent of changes

32. (1) The Council shall decide whether—

(a) an additional environmental impact statement is required to be prepared; or

(b) any extra work is needed to be done to supplement the existing environmental impact statement.

Need for additional environmental information

(2) If an additional environmental impact statement is required, a developer shall follow the procedures set out under regulations 8 to 28.

(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 such information to the Council.

(4) The Council shall circulate any information for review to any relevant Government agency and local government authority which shall send their comments to the Council within twenty days of receipt of the information.

33. On receipt of any 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.

Issue of decision letter

**PART IX****PENALTIES**

Offences and penalties

34. (1) Any person who—
- (a) fails to prepare and submit a project brief to the Council under regulation 7;
  - (b) fails to prepare and submit an environmental impact statement under regulations 11, 12 and 13;
  - (c) fraudulently makes a false statement in a project brief or environmental impact statement contrary to these Regulations;
  - (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 five hundred and fifty-six penalty units or to imprisonment for a period not exceeding one year or to both.
- (2) A person who commits an offence under sub-regulation (1) shall, have the authorisation, permit or licence suspended or cancelled.

Remedial costs

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.

(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**

Fees

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

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

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 processes prescribed under these Regulations.

Projects  
authorised  
prior to the  
commence-  
ment of  
these  
Regulations

## FIRST SCHEDULE

(Regulation 3 (2))

### PROJECTS WHICH REQUIRE PROJECT BRIEFS

#### 1. *Urban Development*

- (a) Designation of new townships which are more than 5Ha or more or sites covering 7(H) 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—10,000m<sup>2</sup> 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 or 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 seriously polluted or a water abstraction area.
- (e) Establishment or expansion of harbours or pontoon 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 m<sup>3</sup>/s.
- (c) Water supply—reservoir surface area 50 m<sup>2</sup> or more.

#### 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 (silvers, 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 agrochemicals new to 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—industrial scale.

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—1,000 skins a week.
- (d) Abattoirs and meat processing plants—20,000 carcasses and above a month.
- (e) Fish processing plant—more than 100 tonnes 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 output a year.

8. *Electrical Infrastructure*

- (a) Electricity generation stations.
- (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.

## SECOND SCHEDULE

*(Regulation 7 (2))*

## PROJECTS WHICH REQUIRE ENVIRONMENTAL IMPACT ASSESSMENT

11. *Projects*

- (a) Urban area rehabilitation.
- (b) Water transport.
- (c) Flood 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) Breweries and malting plants.
- (m) Plants for the 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) Tourism 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).

### THIRD SCHEDULE

(Regulation 8 (3) )

#### ISSUES TO BE CONSIDERED IN 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) Effect on the gene pools of domesticated and wild sustainable yield.
  - (b) *Sustainable use including*
    - (i) Effect of soil fertility;
    - (ii) Breeding populations of fish and game; and
    - (iii) natural regeneration of woodland and sustainable yield.
  - (c) *Ecosystem maintenance including*
    - (i) Effects of proposal on food chains;
    - (ii) Nutrient cycles;
    - (iii) Aquifer recharge, water run-off rates etc;
    - (iv) Aerial extent of habitats; and
    - (v) Biogeographical 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 Scape*
  - (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 on surface water quality and quantity.
- (2) Effects on underground water quality and quantity.
- (3) Effect 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)

**FIFTH SCHEDULE**

*(Regulation 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 8).
- (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) Qualitative 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 communities 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 the elimination (where possible), or reduction, of environmental impact for the 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 the areas of natural resources, reforestation, control of soil erosion, desalination, desilting.
- (2) The team includes the cost mitigation measures into the impact evaluation.
- (3) Where necessary the team will create a new alternative based on the mitigation.

**STAGE 7: ASSESSMENT (OR COMPARISON OF ALTERNATIVES)**

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

**STAGE 8: DECISION MAKING BY THE DEVELOPER**

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

**STAGE 9: SUBMISSION OF THE REPORT TO COUNCIL**

- (1) The team completes the environmental impact statement (see regulations 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—

- (1) review of project briefs (regulation 5) 100,000.00 Kwacha
- (2) review of environmental impact statements (regulation 13) five percent of total cost of implementing the project.
- (3) search fee for access to information on environmental impact statements (regulation 26) 50,000.00 Kwacha

LUSAKA  
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[MENR.64/9/5]

W. HARRINGTON,  
*Minister of Environment and  
Natural Resources*