

(As amended by G.N. No. 277 of 1964)Permits

6. Any person contravening the provisions of section three shall be guilty of an offence and shall be liable, on conviction, to a fine not exceeding three hundred penalty units or, in default of payment, to imprisonment with or without hard labour for a period not exceeding three months.

(As amended by Act No. 13 of 1994)Penalty

REPUBLIC OF ZAMBIA

THE ENVIRONMENTAL PROTECTION AND
POLLUTION CONTROL ACT

CHAPTER 204 OF THE LAWS OF ZAMBIA

CHAPTER 204 THE ENVIRONMENTAL PROTECTION AND POLLUTION CONTROL ACTCHAPTER 204

THE ENVIRONMENTAL PROTECTION AND
POLLUTION CONTROL ACT

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CHAPTER 204

ENVIRONMENTAL PROTECTION AND POLLUTION CONTROL

An Act to provide for the protection of the environment and the control of pollution; to establish the Environmental Council and to prescribe the functions and powers of the Council; and to provide for matters connected with or incidental to the foregoing.

[23rd July, 1990]No
12 of 1990

13 of 1994

PART I

PRELIMINARY

1. This Act may be cited as the Environmental Protection and Pollution Control Act. Short title

2. In this Act, unless the context otherwise requires— Interpretation

"abatement" means the reduction or removal of environmental pollution to permitted or prescribed levels;

"Advisory Committee" means the Standing Technical Advisory Committee constituted under section twenty-one;

"Chairman" means the Chairman of the Council, appointed under section four;

"committee" means a committee constituted by the Council under section nine;

"conservation" means the preservation of the natural resources and their protection from misuse, fire or waste;

"contaminant" means a substance or physical agent, or a combination of substances and physical agents that may contribute to or create a condition of pollution;

"Council" means the Environmental Council established by section three;

"Deputy Director" means the Deputy Director of the Council, appointed under section nineteen;

"Director" means the Director of the Council, appointed under section nineteen;

"ecological system" means a living functional system which contains all organisms including man, their environments and the relationships that exist between them;

"environment", except as otherwise defined in PART IX, means land, water, air and other external influences and conditions which affect the development and life of all organisms including man;

"Inspectorate" means the Environmental Inspectorate established under section eighty-one;

"member" means a member of the Council;

"person" means an individual, partnership, corporation or association;

"pollution" means the presence in the environment of one or more contaminants in such quantities and for such duration and under such conditions as may cause discomfort to or endanger the health, safety and welfare of persons, or which may cause injury or damage to plant or animal life or property, or which may interfere unreasonably with the normal enjoyment of life or use of property or conduct of business;

"pollutor" means a person who contributes to or creates a condition of pollution;

"Secretary" means the Secretary of the Council, appointed under section twenty;

"standards" means the limits of pollution prescribed under this Act and any regulations made under this Act; and

"Vice-Chairman" means the Vice-Chairman of the Council appointed under section four.

PART II

THE ENVIRONMENTAL COUNCIL

3. There is hereby established the Environmental Council which shall be a body corporate with perpetual succession and a common seal, capable of suing and of being sued in its corporate name, and with power, subject to this Act, to do all such acts and things as a body corporate may lawfully do or perform. Establishment of Environmental Council

4. (1) The Council shall consist of the following members: Composition of Council

- (a) the Chairman and the Vice-Chairman who shall be appointed by the Minister;
- (b) a representative from each of the following ministries or organisations:
 - (i) the Ministry responsible for water, lands and natural resources;
 - (ii) the Ministry responsible for agriculture;
 - (iii) the Ministry responsible for commerce and industry;
 - (iv) the Ministry responsible for mines;
 - (v) the Ministry responsible for health;
 - (vi) the Ministry responsible for power, transport and communications;
 - (vii) the Ministry responsible for labour, social development and culture;
 - (viii) the Ministry responsible for general education, youth and sport;
 - (ix) the Ministry responsible for higher education science and technology;
 - (x) the Ministry responsible for information;
 - (xi) the Ministry responsible for local administration;
 - (xii) the Ministry responsible for tourism;
 - (xiii) the Ministry responsible for legal affairs;
 - (xiv) the National Commission for Development Planning;

- (xv) the National Council for Scientific Research;
- (xvi) the University of Zambia;
- (xvii) the Copperbelt University;
- (xviii) the Industrial Development Company Limited;
- (xix) the Zambia Consolidated Copper Mines Limited;
- (xx) the Zambia National Farmers' Union;
- (xxi) the Chamber of Commerce;
- (xxii) the Zambia Association of Manufacturers;
- (xxiii) the Zambia Bureau of Standards;
- (xxiv) a non-governmental organisation concerned with the conservation of nature designated by the Chairman; and
- (xxv) two other persons in their personal capacities appointed by the Minister.

(2) Where any member, except the Chairman, Vice-Chairman and a member referred to in paragraph (xxv) of subsection (1) is unable to attend any meeting of the Council his ministry or organisation as the case may be, may in writing nominate another person to attend in his stead and such person shall be deemed to be a member for the purpose of that meeting.

5. (1) The Chairman, Vice-Chairman and members referred to in paragraphs (xiv) to (xxv) of subsection (1) of section four shall hold office for three years and shall be eligible for re-appointment. Tenure of office and vacancies

(2) Any member referred to in paragraph (a) of subsection (1) of section four may resign upon giving one month's notice in writing to the Minister and may be removed by the Minister at any time.

(3) The members referred to in paragraph (b) of subsection (1) of section four may resign upon giving one month's notice to the Ministry or authority which appointed him and may be removed by the Ministry or authority which appointed him at any time.

(4) The office of a member shall become vacant-

(a) if he is declared to be of unsound mind;

(b) if he is an undischarged bankrupt;

(c) if he is detained, or his freedom of movement is restricted under any law in force in Zambia for a period in excess of six months;

(d) if he is sentenced to a term of imprisonment for a period in excess of six months;

(e) if he is convicted of an offence involving dishonesty;

(f) upon resignation or removal under subsection (2) and (3); or

(g) if he is absent without reasonable cause from three consecutive meetings of the Council of which he had notice.

6. (1) Subject to the other provisions of this Act, the functions of the Council shall be to do all such things as are necessary to protect the environment and control pollution, so as to provide for the health and welfare of persons, animals, plants and the environment. Functions of Council

(2) Without prejudice to the generality of subsection (1), the Council may-

(a) advise the Government on the formulation of policies relating to good management of natural resources and the environment;

(b) recommend measures aimed at controlling pollution resulting from industrial processes or otherwise;

(c) advise on any aspect of conservation;

(d) advise on the need to conduct and promote research analysis, surveys, studies, investigations and training, of personnel, in the field of environmental conservation protection and pollution control;

(e) receive and review reports and make recommendations to the Government on environmental matters;

(f) conduct studies and make recommendations on standards relating to the improvement of the environment and the maintenance of a sound ecological system;

(g) co-ordinate the activities of all Ministries and other bodies concerned with the protection of the environment and control of pollution;

(h) advise on co-operation between national and international organisations on environmental matters;

(i) advise on the need for, and embark upon, general educational programmes for the purpose of creating an enlightened public opinion regarding the environment and an awareness of an individual and the public on their role in the protection and improvement of the environment;

(j) identify projects or types of projects, plans and policies for which environmental impact assessment are necessary and undertake or request others to undertake such assessments for consideration by the Council;

(k) consider and advise, on all major development projects at an initial stage and for that purpose the Council may request information on the major development projects;

(l) monitor trends in the use of natural resources and their impact on the environment;

(m) identify, promote and advise on projects which further or are likely to further conservation for sustainable development and the protection and improvement of the environment;

(n) hold seminars, symposia and prepare studies on matters relating to

environmental and natural resources use and protection;

(o) request for information on projects proposed, planned or in progress by any person anywhere in Zambia;

(p) request for information on the quantity, quality and management methods of natural resources and environmental conditions from any individual or organisation anywhere in Zambia;

(q) provide support for environmental conservation, protection and improvement by way of grants or loans, the provision of accommodation, equipment and the common use thereof;

(r) advise on the effects of any sociological or economic development on the environment;

(s) publicise all relevant information on any aspect of the environment;

(t) carry out any other activities relating to the protection of the environment and the control of pollution which are necessary or conducive to the better performance of its functions under this Act.

(3) The Council may, subject to such terms and conditions as it considers fit, delegate in writing any of its functions under this Act to the Director, any member, the Inspectorate or the Secretary.

(4) The Minister may give to the Council such general or specific directions with respect to the discharge of its functions as he may consider necessary and the Council shall give effect to those directions.

7. (1) Subject to the other provisions of this Act, the Council may regulate its own procedure. Proceedings of Council

(2) The Council shall meet for the transaction of business at least once in every three months at such places and at such times as the Chairman may determine.

(3) Upon giving notice of not less than fourteen days, a meeting of the Council may be called by the Chairman and shall be called if not less than seven members so request in writing:

Provided that if the urgency of any particular matter does not permit the giving of such notice a special meeting may be called upon giving a shorter notice.

(4) Half of the members shall form a quorum at a meeting of the Council.

(5) There shall preside at any meeting of the Council, the Chairman or in his absence, the Vice-Chairman or in the absence of both the Chairman and the Vice-Chairman, such member as the members present may elect for the purpose of that meeting.

(6) A decision of the Council on any question shall be by a majority of the members present and voting at the meeting and, in the event of an equality of votes, the person presiding at the meeting shall have a casting vote in addition to his deliberative vote.

(7) The Council may invite any person, whose presence is in its opinion

desirable, to attend and participate in the deliberations of a meeting but that person shall have no vote.

(8) The validity of any proceedings, act or decision of the Council shall not be affected by any vacancy in its membership or by any defect in the appointment of any member or because any person not entitled to do so took part in the proceedings.

(9) The Council shall cause to be kept minutes of the proceedings of every meeting of the Council and of every meeting of any committee constituted by the Council.

8. (1) The seal of the Council shall be such device as may be determined by the Council and shall be kept by the Secretary. Seal of Council

(2) The Council may use a wafer or rubber stamp in lieu of the seal.

(3) The affixing of the seal shall be authenticated by the Chairman or the Vice-Chairman, and the Secretary or one other person authorised in that behalf by a resolution of the Council.

(4) Any contract or instrument which, if entered into or executed by a person not being a body corporate would not be required to be under seal, may be entered into or executed without seal on behalf of the Council by the Director or any other person authorised in that behalf by a resolution of the Council.

(5) Any document purporting to be a document under the seal of the Council or issued on behalf of the Council shall be received in evidence and shall be deemed to be so executed or issued, as the case may be, without further proof, unless the contrary is proved.

9. (1) The Council may, for the purpose of performing its functions under this Act, constitute any committee the Chairman of which shall be a member of the Council and may delegate to that committee any of its functions. Committee of Council

(2) The Council may appoint as members of a committee established under subsection (1), persons who are or are not members of the Council and those persons shall hold office for such period as the Council may determine.

(3) Subject to any specific or general directions of the Council, any committee established under subsection (1) may regulate its own procedure.

10. (1) If any person is present at a meeting of the Council or a committee of the Council at which any matter in which that person or his spouse is directly or indirectly interested in a private capacity is the subject of consideration he shall, as soon as practicable after the commencement of the meeting, disclose that interest and shall not, unless the Council or committee otherwise directs, take part in any consideration or discussion of, or vote on, any question touching that matter. Disclosure of interest

(2) A disclosure of interest made under this section shall be recorded in the minutes of the meeting at which it is made.

11. No action or other proceedings shall lie or be instituted against any member or any member of a committee for, or in respect of, any act or thing done or omitted to be done in good faith in the exercise or purported exercise of his

functions under this Act. Immunity of members

12. (1) No person shall, without the consent in writing given by or on behalf of the Council, publish or disclose to any person, otherwise than in the course of his duties the contents of any document, communication or information whatsoever, which relates to, and which has come to his knowledge in the course of, his duties under this Act. Prohibition of publication or disclosure of information to unauthorised persons

(2) Any person who knowingly contravenes the provisions of subsection (1) shall be guilty of an offence and shall be liable, upon conviction, to a fine not exceeding seven thousand five hundred penalty units or to imprisonment for a term not exceeding two years, or to both.

(3) If any person having information which to his knowledge has been published or disclosed in contravention of subsection (1) unlawfully publishes or communicates any such information to any other person, he shall be liable, upon conviction, to a fine not exceeding seven thousand five hundred penalty units or to imprisonment for a term not exceeding two years or to both.

(As amended by Act No. 13 of 1994)

13. A member of the Council or Committee shall be paid such remuneration or allowance as the Minister may determine. Remuneration of member of Council

14. (1) The funds of the Council shall consist of such moneys as may- Funds of Council

(a) be appropriated by Parliament for the purposes of the Council;

(b) be paid to the Council by way of fees, grants or donations; and

(c) otherwise vest in or accrue to the Council.

(2) The Council may-

(a) accept moneys by way of grants or donations from any source in Zambia and, with the approval of the Minister, from any source outside Zambia;

(b) with the approval of the Minister, raise by way of loans or otherwise, such moneys as it may require for the discharge of its functions;

(c) in accordance with regulations made under this Act, charge and collect fees in respect of consultancy and other services provided by the Council and the Standing Technical Advisory Committee; and

(d) charge and collect fees in respect of programmes, seminars and environmental impact assessments conducted by the Council.

(3) There shall be paid from the funds of the Council-

(a) the salaries and allowances and loans to the staff of the Council;

(b) such reasonable travelling and subsistence allowances for members or members of any committee of the Council when engaged on the business of the Council and at such rates as the Minister may determine;

(c) grants or loans for the support of environmental conservation, protection and improvement; and

(d) any other expenses incurred by the Council in the performance of its functions.

15. The Council may invest in such manner as it considers fit any of its funds which it does not immediately require for the performance of its functions. Investment of funds

16. The financial year of the Council shall be the period of twelve months ending on 31st December in each year. Financial year

17. The Council shall cause to be kept proper books of account and other records relating to its accounts. Accounts

18. (1) As soon as practicable but not later than six months after the expiry of each financial year, the Council shall submit to the Minister a report concerning its activities during such financial year. Annual report

(2) The report of the Council shall include information on the financial affairs of the Council and there shall be appended to it-

(a) an audited balance sheet;

(b) an audited statement of income and expenditure; and

(c) such other information as the Minister may require.

(3) The Minister shall, not later than fourteen days after the sitting of the National Assembly next after receipt of the report referred to in subsection (1), lay it before the National Assembly.

PART III

ADMINISTRATION

19. (1) Subject to the approval of the Minister, the Council shall appoint on such terms and conditions as it may determine, a Director who shall be the chief executive officer of the Council and who, subject to the control of the Council, shall be responsible for the overall management and administration of the Council. Director and Deputy Director

(2) Subject to the approval of the Minister, the Council may appoint a Deputy Director who-

(a) shall assist the Director in the performance of his duties under the Act; and

(b) shall discharge the functions of the Director whenever the office of the Director is vacant or the Director is absent or is for any other cause unable to discharge the functions of his office.

(3) The Director or in his absence the Deputy-Director, shall attend meetings of the Council and may attend meetings of any committee established by the Council and may address the meetings, but shall not vote on any matter:

Provided that the person presiding at any such meeting, may for good cause, require the Director or Deputy-Director as the case may be, to withdraw from the meeting.

(4) The provisions of sections ten and eleven shall apply with necessary modifications to the Director and Deputy-Director.

20. (1) The Council shall appoint a Secretary on such terms and conditions as the Council may determine. Secretary and other staff

(2) The Secretary shall be responsible for the administration of the day to day affairs of the Council under the general supervision of the Director.

(3) The Council may appoint, on such terms and conditions as it may determine, such other staff as it considers necessary for the performance of its functions under this Act.

21. (1) The Council shall constitute a Standing Technical Advisory Committee whose members shall be experts in fields relevant to the environment, pollution, pesticides and toxic substances, noise, ionising radiation, hazardous wastes, and waste management. Standing Technical Advisory Committee

(2) The members of the Advisory Committee shall be appointed, by the Council on such terms and conditions as it may determine.

(3) The functions of the Advisory Committee shall be to advise the Council and any Minister on-

(a) the formulation and periodic revision of standards and regulations for pollution control relating to water, air, solid wastes, hazardous wastes, pesticides and toxic substances, noise emission and ionising radiation;

(b) the methods and equipment to be used for the monitoring and control of pollution in the environment, particularly water, air, solid wastes, hazardous wastes, pesticides and toxic substances, noise and ionising radiation;

(c) sound natural resources conservation, including the creation of natural resources preserves for the propagation and maintenance of stocks of all indigenous species and their germ plasm;

(d) proper land use practices;

(e) methods and procedures of rehabilitation of derelict land; and

(f) any other matter referred to it by the Council.

PART IV

WATER

22. In this Part, unless the context otherwise requires- Interpretation

"aquatic environment" means all surface and ground waters, but does not include water in installations and facilities for industrial effluent, sewage collection and treatment;

"discharge" means spilling, leaking, pumping, pouring, emitting, emptying or

dumping;

"effluent" means waste water or other fluid of domestic, agricultural, trade or industrial origin, treated or untreated, and discharged directly or indirectly into the aquatic environment;

"licence" means a licence to discharge effluent issued under section thirty-one;

"pollutant" means any substance or energy, which if it enters or is discharged into water may cause discomfort to, or endanger the health, safety and welfare of persons, or may cause injury or damage to plant or animal life or property, or which may interfere unreasonably with the normal enjoyment of life or property or use of property or conduct of business, and those objects or substances as may inadvertently obstruct or divert the natural flow of a water course when discharged or dumped into it;

"sewage" means waste water generated by residential and commercial establishments;

"sewage system" includes sewage treatment plants;

"waste water" means water which has been used for domestic, commercial, agricultural, trading or industrial purposes and as a result of such uses may cause water pollution when discharged into the aquatic environment;

"water pollution" means the introduction, directly or indirectly of pollutants into an aquatic environment.

23. The Council shall-

(a) establish water quality and pollution control standards;

(b) determine conditions for the discharge of effluents into the aquatic environment;

(c) formulate rules for the preservation of fishing areas, aquatic areas, drinking water sources and reservoirs, recreational and other areas, where water may need special protection;

(d) identify areas of research and initiate or sponsor research in the effects of water pollution on the environment, human beings, flora and fauna;

(e) order or carry out investigations of actual or suspected water pollution including the collection of data;

(f) take steps or authorise any works to be carried out which appear to be necessary to prevent or abate water pollution from natural causes or from abandoned works or undertakings;

(g) lay down the analytical methods by which water quality and pollution control standards can be determined and establish or appoint laboratories for the analytical services required by the Inspectorate;

(h) initiate and encourage international co-operation in the control of water pollution, in particular with those neighbouring countries with which Zambia shares river basins;

(i) collect, maintain and interpret data from industries and local authorities on the pre-treatment, nature and levels of effluents;

(j) collect, maintain and interpret data on water quality and hydrology which is relevant to the granting of licences under this Part;

(k) enforce rulings made under this Part; and

(l) do all such things as appear to be necessary for the monitoring and control of water pollution. Responsibilities of Council

24. No person may discharge or apply any poisonous, toxic, erotoxic, obnoxious or obstructing matter, radiation or other pollutant or permit any person to dump or discharge such matter or pollutant into the aquatic environment in contravention of water pollution control standards established by the Council under this Part. Prohibition of water pollution

25. (1) Owners or operators of irrigation schemes, sewage system, industrial production plants, workshops or any other undertaking which may discharge effluent shall submit to the Inspectorate such information about the quantity and quality of such effluent. Duty to supply information to Inspectorate

(2) The inspectorate may require an owner or operator of irrigation schemes, sewage system, industrial production plants, workshops or any other undertaking which the Inspectorate has reasonable grounds to believe may cause or causes the discharge of effluent into the aquatic environment to submit all information relating to the quantity and quality of effluent as the Inspectorate may require.

(3) The Inspectorate may order an owner or operator referred to under this section, at his expense, to instal such metering devices, and to have such samples taken and analysed, and to keep such records, as the Inspectorate may require.

26. The owner or operator of a trade or industrial undertaking who wishes to discharge into an existing sewage system effluent from his plant shall obtain written permission to do so from the local authority operating or supervising the sewage system. Permission to discharge effluent into sewage system

27. (1) The local authority operating or supervising a sewage system may impose conditions under which any effluent can be accepted or may prescribe methods of pre-treating the effluent prior to acceptance into the system. Conditions for acceptance of effluent

(2) A local authority may vary the conditions of acceptance of an industrial or trade effluent, but a variation shall not be made unless the authority gives six months' notice.

28. Any person who discharges any effluent into a sewage system in contravention of the conditions imposed by the local authority, shall be guilty of an offence. Offence relating to effluent

29. (1) An effluent may be mixed for treatment prior to discharge or for conveying to a common point of discharge. Treatment of effluent

(2) No person shall withdraw water from a water course or any other source for the purpose of diluting any effluent to make it acceptable except under a

licence issued by the Inspectorate.

30. (1) No local authority operating a sewage system or owner or operator of any industry or trade shall discharge effluent into the aquatic environment without a licence. Licence to discharge effluent

(2) The owner or operator of an undertaking discharging an effluent before the commencement of this Act or whom the Inspectorate so requests shall apply for a licence within twelve months after the commencement of this Act.

(3) The Inspectorate may grant a licence for the discharge of effluent under this Part.

31. (1) Any person intending to erect, instal or develop a new industrial or trade plant, an agricultural scheme or an undertaking likely to discharge effluent shall inform the Inspectorate of his intention during the early planning stage. Application for licence for new undertaking etc., likely to discharge effluent

(2) The Inspectorate may, without undue delay after the receipt and consideration of the information submitted under subsection (1), require any person referred to in that subsection to apply for a licence.

(3) The application for a licence under this section shall be submitted to the Inspectorate not less than six months prior to the commencement of the discharge of effluent.

32. An extention of an existing industrial or trade plant, or agricultural scheme or other undertaking shall be deemed to be new if the extension-

(a) will increase the effluent of the existing plant either in the quantity or concentration of pollutants;

(b) will discharge its effluent into a different water course; or

(c) will introduce a new type of pollutant into the environment. Circumstances under which extension deemed new

33. (1) The Inspectorate, may or may not grant a licence after considering the details of-Grant or refusal of licences

(a) the possible effects on the quality of an affected water course or other source;

(b) the existing licences affecting the same water course or other source; and

(c) the water requirements of riparian residents, human settlements and agricultural schemes which depend on the water course.

(2) If a licence is not granted, the notice of refusal shall state the reasons for the refusal.

34. Regulations made under section ninety-six shall prescribe the contents of an application and the conditions for a licence to discharge effluent. Contents of application and conditions of licence

PART V

AIR

35. In this Part, unless the context otherwise requires-Interpretation

"air pollution" means a condition of the ambient air arising wholly or partly from the presence of one or more pollutants in the air that endangers the health, safety or welfare of persons or that interferes with the normal enjoyment of life or property or that endangers animal life or that causes damage to plant life or property;

"ambient air" means the atmosphere surrounding the earth, but does not include the atmosphere within a structure or within any underground space;

"air quality" means the concentration, prescribed under this Part, of a pollutant in the atmosphere at the point of measurement;

"emission standard" means the amount, specified under this Part, of pollutant emitted from a specific source

"licence" means a licence to emit pollutants into the ambient air;

"operator" in relation to works, industry undertaking or business, means the person having the control of the works, undertaking or business;

"pollutant" means any substance or energy which if it enters or is discharged into the ambient air is likely to render the air offensive or harmful to human, animal or plant life;

"stationary source" means any source of emission of one or more pollutants other than a motor vehicle, ship, train, aircraft or other similar vehicle or conveyance.

36. The Council shall-

(a) establish ambient air quality and emission standards and guidelines;

(b) on the advice of the Advisory Committee, specify the analytical methods for monitoring air contaminants and establish laboratories for analytical services needed by the Inspectorate;

(c) identify areas of research and initiate or sponsor research on the effects of air pollutants on human beings, the environment, flora and fauna;

(d) order or carry out investigations of actual or suspected air pollution including the collection of data;

(e) initiate and encourage international co-operation in matters of air pollution, especially with neighbouring countries;

(f) order any industry or other source of air pollution to file such returns and provide such information as the Council may require;

(g) enforce rulings made under this Part; and

(h) do all such things as appear necessary for the monitoring and control of

air pollution. Responsibilities of Council

37. (1) The Council may, with the approval of the Minister, declare by statutory instrument any area to be a controlled area for the purposes of this Part. Controlled areas

(2) The Council may, with the approval of the Minister and within a controlled area, prescribe emission standards from industrial or business activities, from burning liquids or solid fuels.

38. (1) When establishing or prescribing emission standards the Council shall consider—Emission standards

(a) the rate of emission, concentration and nature of the pollutants emitted; and

(b) the best practicable technology available in controlling pollutants during the emission process.

(2) The emission standards prescribed by the Council under this Part shall be published in the Gazette at least ninety days before the date upon which they shall come into effect.

39. No person may emit any pollutants which cause air pollution in contravention of emission standards established or prescribed by the Council under this Part. Air pollution prohibited

40. (1) In the case of an emergency involving very hazardous pollutants, the Inspectorate shall take and advise on appropriate measures to be taken for the protection of persons and the environment. Emergency situations

(2) No suit, prosecution or other legal proceedings shall lie or be instituted for or in respect of any act or thing done or omitted to be done in good faith by any inspector in the exercise or purported exercise of his duties under this section.

41. The Inspectorate may request an owner or operator of an operation of which the Inspectorate has reasonable grounds to believe results in the emission into the ambient air of any air contaminant, to submit all information relating to those emissions as the Inspectorate may require. Information regarding emissions into ambient air

42. An owner or operator who before the commencement of this Act is emitting a pollutant which is likely to cause air pollution or whom the inspectorate so requests, shall apply for a licence within twelve months after the commencement of this Act. Licensing of emissions

43. (1) A person who intends to erect or instal a new industrial plant or develop a new industrial process which is likely to cause air pollution shall inform the Inspectorate during the planning stages, and shall apply for a licence. Application for licence for new sources of emission

(2) The application for a licence shall be submitted to the Inspectorate not less than six months prior to the commencement of operations.

44. (1) A change or extension to an existing plant, undertaking or process shall be considered new if the change—Circumstances under which extension deemed

new

(a) increases the emission of the existing plant in quantity or concentration of pollutants; or

(b) introduces a new type of pollutant into the ambient air.

(2) No owner or operator or individual who operates a motor vehicle, ship, train, aircraft or other similar conveyance shall-

(a) operate in a manner that will cause air pollution in contravention of the established emission standards;

(b) import any machinery, equipment, device or similar thing that will cause emission into the ambient air in contravention of prescribed emission standards.

45. (1) The Inspectorate may or may not grant a licence after considering the details of-Grant or refusal of licences

(a) the possible effects on the quality of ambient air of the area;

(b) the existing licences affecting the same air resource;

(c) the requirements of residents, human settlements and other industrial or commercial activities; and

(d) the comments from the local authority and other concerned organisations.

(2) If a licence is not granted, the notice of refusal shall state the reasons for the refusal.

46. Regulations made under section ninety-six shall prescribe the contents of an application and the conditions for a licence issued under this Part. Contents of application and conditions for licence

PART VI

WASTES

47. In this Part, unless the context otherwise requires-Interpretation

"collection" means the act of removing waste, or materials which have been separated for the purpose of recycling, from a storage point;

"disposal" means the storing, handling, processing, treatment and utilisation and final location of waste to avoid undesirable effects on the environment;

"hazardous waste" means waste which is poisonous, corrosive, irritant, explosive, inflammable, toxic or harmful to man, animal, plant or the environment;

"licence" means a licence to operate a waste disposal site or plant issued under this Part;

"management" means a person who is, directly or through an agent, involved in waste management;

"disposal site" means the land or water area on which waste disposal facilities are physically located;

"waste" means garbage, refuse, sludges and other discarded substances resulting from industrial and commercial operations and from domestic and community activities but does not include waste water as defined in Part IV; and

"storage" means the interim containment of waste after generation and prior to collection for ultimate recovery or disposal.

48. The Council shall give specific or general directions to District Councils regarding their function relating to the collection and disposal of waste operations under the Local Government Act. Control of local authorities' Cap. 281

49. The Council shall-

(a) formulate and provide standards on the classification and analysis of wastes and formulate and advise on standard disposal methods and means;

(b) regulate the handling, storage, transportation, segregation and destruction of any hazardous waste;

(c) control the export and generation of hazardous waste;

(d) provide for the monitoring and regulation of any waste disposal sites;

(e) publicise the correct means of storage, collection and disposal of any class of wastes;

(f) monitor the contamination and degradation of the environment arising from the operation of any disposal site;

(g) monitor the safety and health of workers at disposal sites;

(h) provide for members of the public to make representations to the Council on any matter arising from this Part where the matter may have an influence on the health or aesthetic value of their surroundings;

(i) initiate and undertake research into problems relating to the collection, storage, transportation and disposal of any class of waste;

(j) maintain statistical data on the nature, quantity and volume of waste generated, and on sites and waste processing where waste disposal is taking or has taken place;

(k) provide technical and advisory services to waste operators;

(l) enforce rulings made under this Part; and

(m) do all such things as appear to be reasonably necessary for the monitoring and control of waste. Responsibilities of Council

50. (1) No person shall discharge waste so as to cause pollution in the environment. Prohibition against disposal of waste

(2) No person shall transport waste to any site other than-

(a) in accordance with a licence;

(b) to a disposal site established in accordance with a licence.

(3) No person shall operate a waste disposal site or plant or generate hazardous waste without a licence.

51. (1) The Inspectorate may, on application, grant a licence to generate hazardous waste or to operate a waste disposal site or plant subject to such conditions, if any, as it may impose. Licences

(2) If a licence is not granted the notice of refusal shall state the reasons.

52. (1) Any person intending to operate a waste disposal site or plant or generate hazardous waste or whom the Inspectorate so requests shall apply in writing to the Inspectorate for a licence. Application for licence

(2) An application for a licence to operate a waste disposal site shall only be granted where the applicant has obtained approval of the town and country planning authority.

53. Any person who owns or operates a waste disposal site or plant or generates hazardous wastes before the commencement of this Act shall apply for a licence within six months after the commencement of this Act. Application for licence for existing disposal site or plant

54. The Council shall by an order made by a court immediately stop any hazardous waste generation, handling, transportation, storage and disposal activity which presents an imminent and substantial danger to health and the environment. Cessation of activity relating to hazardous waste

55. Regulations made under section ninety-six shall prescribe the contents of an application and the conditions for a licence issued under this Part. Contents of application and conditions for licence

56. (1) No person shall import any hazardous waste into Zambia. Import, export and transportation of hazardous waste

(2) No hazardous waste shall be exported to any country without a permit from the Council and the consent of the receiving country.

(3) No hazardous waste shall be transported within or through Zambia without a permit from the Council.

PART VII

PESTICIDES AND TOXIC SUBSTANCES

57. In this Part, unless the context otherwise requires— Interpretation

"container" means a package, can, bottle, bag, barrel, drum, tank or other container, excluding spray applicator tanks, used to enclose a pesticide or toxic substance;

"label" means any legend, word, mark, symbol or design applied or attached to, included in, belonging to, or accompanying, any pesticides or toxic substances;

"manufacturer" means an establishment engaged in the mechanical or chemical transformation of materials or substances into new products, as pesticides and toxic substances;

"package" means a container, wrapping, covering or holder in which a pesticide or toxic substance is wholly or partly packed;

"pesticide" means a substance or mixture of substances or organism intended for controlling, destroying, repelling or mitigating any pest, and a substance or mixture of substances intended for use as a plant regulator, defoliant or desfoliant;

"sale" includes offering, advertising and exposing, for sale a pesticide, or toxic substance;

"toxic substance" means a poisonous substance which causes any adverse physiological effects to man, animal, plant or the environment;

"trade name" means the registered name of the manufactured pesticide or toxic substance; and

"use" means any act of handling or release of a pesticide or the exposure of human beings and animals or the environment to a pesticide.

58. The Council shall-

(a) control the importation, exportation, manufacture, storage, distribution, sale, use, packing, transportation, disposal and advertisement of pesticides and toxic substances;

(b) regulate the registration of pesticides and toxic substances;

(c) provide for the proper labelling and packaging of pesticides and toxic substances;

(d) review the use and efficacy of pesticides and toxic substances;

(e) provide for the monitoring, in the environment, of pesticides, and toxic substances and their residues;

(f) establish or prescribe laboratories which shall operate as standard laboratories for pesticides and toxic substances;

(g) establish and enforce procedures and regulations for the storage of packages and containers of pesticides or toxic substances;

(h) collect data from industry on the production, use and health effects of pesticides and toxic substances;

(i) keep records and reports necessary for the administration of this Part; and

(j) do all such things as appear necessary for the monitoring and control of pesticides and toxic substances. Responsibilities of Council

59. (1) A person who intends to manufacture, import or process a new pesticide

or toxic substance or who intends to reprocess an existing pesticide or toxic substance for a significantly new use, must apply for registration of the pesticide or toxic substance and give the Inspectorate ninety days notice in writing before importing, manufacturing, processing or reprocessing such pesticide or toxic substance. Application for registration of new or reprocessed pesticide or toxic substance

(2) The application referred to in subsection (1) shall include the name of the trade mark of the pesticide or toxic substance, the chemical identity, molecular structure, proposed categories of use, an estimate of the amount, by-products, processing and disposal of the pesticide or toxic substance, and any test data related to health and environmental effects.

60. (1) A person who has manufactured, imported or processed a pesticide or toxic substance in use before the commencement of this Act or whom the Inspectorate so requires shall apply for registration within six months after the commencement of this Act. Application for registration of pesticide or toxic substance in use before commencement of Act

(2) Applications for registration shall be accompanied by all relevant data to enable the Inspectorate assess the suitability and efficacy of the pesticide or toxic substance.

61. (1) The Inspectorate shall publish guidelines for pesticides and toxic substances specifying the information and data which will be required to support registration. Information required for, and period of registration

(2) A pesticide or toxic substance shall be registered for three years, unless some other period is specified by the Inspectorate and may be renewed for a like period.

62. (1) The Inspectorate may on application register a pesticide or toxic substance subject to such conditions as it may determine. Registration

(2) Where the Inspectorate refuses to register any pesticide or toxic substance the notice of refusal shall state the reasons.

63. Regulations made under section ninety-six shall prescribe the contents of an application and the conditions for registration of pesticides and toxic substances under this Part. Contents of application and conditions for registration

64. (1) No person shall—Offences relating to pesticides and toxic substances

(a) detach, alter, or destroy labelling as prescribed under this Part, of a pesticide or toxic substance;

(b) change the composition of a pesticide or toxic substance contrary to the provisions of this Part; or

(c) use or dispose into the environment a pesticide, or toxic substance in contravention of this Part.

(2) No person shall distribute, sell, offer for sale, hold for sale, import, deliver for importation to, or receive from, deliver or offer to deliver, to any other person any unregistered pesticide or toxic substance.

(3) Any person who contravenes any of the provisions of this section shall be guilty of an offence and shall be liable upon conviction to a fine not exceeding thirty thousand penalty units or imprisonment for a period not exceeding five years.

(As amended by Act No. 13 of 1994)

65. (1) Any pesticide or toxic substance which an Inspector reasonably suspects to be the subject matter of an offence under this Part shall be liable to seizure. Seizure of pesticides and toxic substances

(2) Whenever any pesticide or toxic substance is seized under subsection (1) an Inspector shall serve a notice of seizure on the owner of the pesticide, or toxic substance as soon as practicably possible.

(3) Where any pesticide or toxic substance is seized under this section the pesticide or toxic substance shall be placed under the custody of such person or such authority as the Inspector may determine.

(4) Any pesticide or toxic substance placed under custody shall be released if after six months-

(a) no prosecution under this Part is instituted with regard to the pesticide or toxic substance; or

(b) no person is convicted for an offence under this Part.

PART VIII

NOISE

66. In this Part, unless the context otherwise requires- Interpretation

"noise" means any undesirable sound, that is intrinsically objectionable or that can cause adverse effects on human beings, animals or the environment;

"noise level" means the level of noise, measured in decibels or other suitable units; and

"noise emission standards" means the noise level emission standards established by the Council under section sixty-eight.

67. The Council shall-

(a) set up standard procedures for noise measurement;

(b) establish noise level and noise emission standards for construction sites, plants, machinery, motor vehicles, aircraft including sonic booms, and for industrial and commercial activities;

(c) apply appropriate measures to ensure the abatement and control of noise from the sources referred to in paragraph (b);

(d) measure the level of noise emanating from the sources referred to in paragraph (b), details of which measurement shall be given to the owner or occupier of the premises from which the measurement was taken; and

(f) advise on noise pollution abatement measures. Responsibilities of Council

68. Subject to section sixty-nine, no person shall emit noise in excess of the noise emission standards established under section sixty-seven. Noise emission in excess of established standards prohibited

69. (1) Notwithstanding section sixty-eight, the Inspectorate may grant a permit in writing allowing excessive emission of noise under such terms and conditions as it may determine. Exemption

(2) Where an exemption has been granted under subsection (1), workers exposed to excessive levels of noise shall be adequately protected in accordance with the directives of the Inspectorate.

70. The noise emission standards and guidelines as well as zones prescribed for the purposes of this Part shall be published in the Gazette at least ninety days before the date upon which they shall come into effect. Publication of noise pollution control standards and guidelines

PART IX

IONISING RADIATION

71. In this Part, unless the context otherwise requires— Interpretation

"emergency" means a sudden situation associated with an incident arising from the exposure of the public or the environment to the harmful effects of ionising radiation;

"environment" means the total terrestrial, atmospheric and aquatic environs but does not include the area within the boundaries of prescribed installations handling radioactive material or radiation sources;

"facility" means an assembly of devices, equipment, structures or natural features whether simple or complex which serves some specific purpose or performs some specific functions.

"ionising radiation" means any electro-magnetic or particle radiation capable of producing ions, directly or indirectly, in its passage through matter;

"monitoring" means the measurement of radiation or radioactivity for the assessment or control of exposure to radiation or radioactive material;

"natural background levels" means radiation levels due to cosmic rays and natural radioactivity;

"nuclide" means a species of atom characterised by the constitution of its nucleus;

"radioactive material" means any material having a specific activity greater than seventy becquerel per gram;

"radioactive contamination" means the deposition of radioactive material in any place where it is not desired, particularly where its presence may be harmful and the harm may be vitiating an experiment or procedure, or where it actually may be a source of danger to the public;

"radio nuclide" means any radioactive nuclide.

72. Without prejudice to the Ionising Radiation Act the Council shall-

(a) establish standards for the proper regulation of radioactive contamination;

(b) inspect and examine any area, place or premises, or any vehicle, vessel, boat, aircraft or any carriage of any description in or upon which the Inspectorate has reasonable cause to believe that radioactive material or any source of ionising radiation is stored, used, transported or disposed of;

(c) examine any person with respect to matters under this Part, where there is reasonable cause to believe that that person is contaminated with radioactive material or is unlawfully in possession of an ionising radiation source;

(d) provide information, warn and protect the public, in case of actual or potential public exposure to radioactive material or ionising radiation in the environment;

(e) liaise with the Radiation Protection Board established by section five of the Ionising Radiation Act or any other organisation dealing with radioactive material;

(f) conduct an ionising radiation monitoring programme and advice on ionising radiation control and protection measures;

(g) maintain records of releases of radioactive contaminants into the environment and keep records of natural background levels of radiation in the environment;

(h) request any outside authority to offer assistance required to help carry out the duties of the Inspectorate; and

(i) do all such things as appear to be necessary for the monitoring and control of pollution from radiation.

Responsibilities of Council.
Cap. 311

Cap. 311

73. An inspector at any reasonable time may-

(a) enter, inspect and examine any place, area, premises, or any vehicle, vessel, boat, aircraft or any carriage of any description in or on which he has reasonable grounds to believe that radioactive material or any source of ionising radiation is stored, used, transported or disposed of but no entry shall be made into a private dwelling house except under the authority of a court warrant; Powers of inspectors relating to ionising radiation

(b) order presentation of-

(i) a licence authorising the possession or use of radioactive material or sources of dangerous ionising radiation;

(ii) a licence authorising the mining and processing of radioactive ores; or

(iii) a register, certificate, notice or document kept under the Ionising Radiation Act;

(c) make enquiries from any person with respect to matters under this Part where there is reasonable cause to believe that such person is contaminated with radioactive material or is unlawfully in possession of an ionising radiation source; and

(d) exercise such other powers as are necessary for the carrying out of this Part. Cap. 311

74. (1) A person who imports, processes, mines, exports, possesses, transports, uses or disposes of radioactive material or other source of dangerous ionising radiation without a licence issued under the Ionising Radiation Act, shall be guilty of an offence and liable upon conviction to a fine not exceeding seventy five thousand penalty units or to imprisonment for a period not exceeding seven years or to both. Offences relating to ionising radiation
Cap. 311

(2) In addition to the penalties provided in subsection (1), the radioactive material or other source of dangerous ionising radiation shall be liable on the order of a court, to seizure, impoundment, sealing, seizure of operation, destruction or disposal in such manner as the court may consider necessary to protect the public and the environment and may only be returned to the original owner on the order of the court and under the conditions set out in a licence issued by the Ionising Radiation Protection Board established by section five of the Ionising Radiation Act.

(As amended by Act No. 13 of 1994) Cap. 311

PART X

NATURAL RESOURCES CONSERVATION

75. In this Part, unless the context otherwise requires- Interpretation

"derelict land" means land that is damaged by extractive or other industrial or agricultural activities or that is unsightly and is incapable of reasonable beneficial use;

"land use" includes an activity that has an impact on land, water, soil, air, fauna and flora;

"natural resources" shall have the meaning assigned to it in the Natural Resources Conservation Act; and

"rehabilitation" means the restoration of natural resources to their original state or to a reasonable state acceptable to the Inspectorate.

76. The Council shall-

(a) conduct or sponsor research on land use practices and their impact on natural resources, and such other studies which shall be the basis for better conservation and protection of natural resources;

(b) establish and review land use guidelines;

(c) with the approval of the Minister, make regulations for the conservation

and protection of natural resources;

(d) monitor dereliction of land and where derelict land exists, assess the nature of rehabilitation works required;

(e) monitor land contamination and where such contamination exists, assess the nature of any rehabilitation works required;

(f) carry out campaigns to increase public awareness about natural resources conservation;

(g) take stock of the nation's natural resources and their utilisation in liaison with other relevant agencies and experts dealing with natural resources conservation; and

(h) do all such other acts and things as are necessary to carry out the purposes of this Part. Responsibilities of Council

77. (1) The Council may direct any person responsible for land dereliction or contamination to carry out rehabilitation works, within a reasonable specified time, to the satisfaction of the Inspectorate. Rehabilitation works

(2) Where the Inspectorate believes that land contamination warrants immediate correction, it may carry out rehabilitation works and may charge all or part of the costs of those works to the person responsible for causing the dereliction or contamination who shall pay such costs within a specified reasonable time.

(3) (a) Any person who fails to comply with a directive made by the Inspectorate under this section shall be guilty of an offence.

(b) A court, in addition to any other penalty which it may impose, may make an order requiring that person to comply with the directive within a specified reasonable time.

78. An inspector may-

(a) make such inquiries and examinations as are necessary to ascertain whether this Part is being complied with;

(b) carry out surveys and interviews which will assist in the proper management and conservation of natural resources;

(c) inspect land uses to determine their impact on the quality and quantity of natural resources; and

(d) publicise land use guidelines and natural resources conservation regulations. Powers of inspectors relating to natural resources

79. Subject to section eighty, Parts I, II, III and VIII of the Natural Resources Conservation Act are hereby repealed. Repeal of certain Parts of Cap. 156 of old edition

80. Notwithstanding section seventy-nine ministerial orders, conservation plans, and regulations made by statutory instrument under the Parts I, II, III and VIII of the Natural Resources Conservation Act shall remain in full force and effect until they are amended, rescinded or replaced by orders, conservation plans, or regulations under this Act. Savings

PART XI

INSPECTORATE

81. The Council shall establish an Environmental Inspectorate with the necessary technical staff and facilities required to administer, monitor and enforce measures for the protection of the environment and the prevention of pollution in the environment. Establishment of Inspectorate

82. The Council may delegate all or any of the duties of the Inspectorate to a local authority in such area as it may designate. Delegation of duties to Inspectorate

83. (1) In order to ensure compliance with the provisions of this Act the Council shall appoint such number of inspectors as it may consider necessary. Appointment of inspectors

(2) Every inspector shall be provided with a certificate of appointment which shall be prima-facie evidence of the inspector's appointment as such.

(3) An inspector shall, on demand by a person affected by the exercise of the powers of the inspectors under this Act, produce for inspection the certificate referred to in subsection (2).

84. (1) An inspector, at any reasonable time may enter any area, place or premises that is or forms part of any industry, works, undertaking or business, in which he reasonably believes there is being, or has been carried on an activity that may contribute or has contributed to pollution, and examine and take samples or materials used in or resulting from the activity carried on there and inspect any vehicle or other conveyance but there shall be no entry into a private dwelling except with the consent of the occupant or under the authority of a court warrant. Powers of inspectors

(2) An inspector who enters an area, place or premises or inspects a vehicle under subsection (1) may order the person in charge to produce for inspection or for the purpose of obtaining copies or extracts, any books, documents or papers concerning any matter relevant to the administration of this Act or regulations made for the purposes of this Act.

(3) The owner or person in charge of-

(a) any area, place, premises or vehicle referred to in subsection (1);

(b) any waste disposal site referred to in Part VI;

(c) the manufacture, distribution or use of pesticides or toxic substances referred to in Part VII;

(d) any radioactive material or any source of dangerous ionising radiation, or a radioactive ore mining or processing facility referred to in Part IX;

and any person found there shall give an inspector reasonable assistance, for the purpose of examination, enquiry collection of samples or otherwise.

(4) An inspector may-

(a) inspect and examine any vehicle, railway carriage or other conveyance in or upon which he had reasonable cause to believe that a pesticide, toxic substance, hazardous waste or radioactive material, or other pollutant is being or has been transported;

(b) order the production of any documents pertaining to the transportation of any such substance;

(c) obtain any samples he considers necessary of any substance so transported; or

(d) request information from any person who appears to have custody or control of those substances so transported.

85. (1) A person shall be guilty of an offence if he-Obstruction of Inspector

(a) wilfully delays or obstructs an inspector in the carrying out of his duties; or

(b) knowingly or negligently gives an inspector false or misleading information orally, in writing or otherwise.

(2) Any person guilty of an offence under subsection (1) shall be liable upon conviction to a fine not exceeding seven thousand five hundred penalty units or to imprisonment for a term not exceeding six months or to both.

(As amended by Act No. 13 of 1994)

PART XII

GENERAL

86. (1) A person who inadvertently or accidentally causes or witnesses an act causing pollution of any aspect of the environment shall without delay report to the inspectorate, the police or to a local authority. Duty to report pollution

(2) The police or local authority shall submit a report to the Inspectorate on any report received under subsection (1) and take reasonable steps to protect the public.

(3) Any person who wilfully fails to make a report required under this section shall be guilty of an offence and liable upon conviction to a fine not exceeding one thousand five hundred penalty units or imprisonment for a period not exceeding six months or to both.

(As amended by Act No. 13 of 1994)

87. An inspector shall treat as confidential the source of any complaint bringing to his notice any contravention of this Act and shall give no intimation to the owner of the place inspected or his representative that a complaint was made, or any information that might identify the complainant. Secrecy

88. (1) The Inspectorate may renew any licence issued under this Act. Renewal of licence

(2) In renewing a licence, the Inspectorate shall consider whether the

applicant has complied with the provisions of the Act and any regulations made hereunder.

89. Where an inspector considers that an industry, works, undertaking, business or any person is discharging, emitting, or disposing a contaminant or substance which may cause pollution he may require the owner or operator to apply to the Inspectorate for a licence to authorise that discharge, emission, or disposal. Inspector may request application for licence

90. (1) Where the Inspectorate establishes that pollution or despoliation is occurring or has occurred, the Inspectorate shall inform the pollutor and order him to take appropriate abatement and control measures specified by the Inspectorate under this Act. Pollutor obligations

(2) Where the pollutor is unable or unwilling to take the abatement and control measures required under subsection (1), the Council may take the measures and in such case, the cost incurred by the Council, shall be paid by the pollutor.

91. (1) A person who pollutes the environment or contravenes any provision of this Act for which no penalty is provided shall be guilty of an offence and liable upon conviction to a fine not exceeding fifteen thousand penalty units or to imprisonment for a term not exceeding three years or to both. Offences and penalties

(2) For a continuing violation, a court may order a daily fine not exceeding seven thousand five hundred penalty units.

(3) Where an offence under this Act is committed by a body of persons-

(a) in the case of a body corporate, every director or similar officer of the body shall be guilty of the offence; or

(b) in the case of a partnership, every partner shall be guilty of an offence.

(4) A person shall not be guilty of an offence under subsection (3), if he proves to the satisfaction of the court that the act constituting the offence was done without his knowledge, consent or connivance and that he did his part to prevent the commission of the offence having regard to all the circumstances of the case.

(As amended by Act No. 13 of 1994)

92. (1) An application for a licence, registration or permit under this Act shall be made to the Inspectorate or to a local authority to whom the Council has delegated power under section eighty-three. Applications for licences to be made to Inspectorate or local authority

(2) Any application referred to in subsection (1) shall be made in such form and in such manner as the Council may prescribe.

93. No licence or permit shall be issued under this act unless the Inspectorate has, twenty-eight days before granting the licence or permit published its intention in the Gazette inviting representation from any interested person affected by the grant of the licence or permit. Grant of licence permit subject to public representation

94. Where any licence granted under this Act is for a duration of five years or more and after five years from the date of the issue of a licence such discharge, emission or disposal authorised by the licence has not taken place or where such discharge, emission or disposal has ceased for a period of three years, the licence shall cease to be in force. Cessation of licences

95. (1) A person aggrieved with any decision or ruling made by an Inspectorate under this Act, may appeal to the Council within forty-five days after the date of receipt of the ruling or decision. Appeals

(2) The Council within thirty days after the receiving an appeal, shall make and convey its decision to the appellant.

96. The Minister in consultation with the Council, may, by statutory instrument make regulations for anything which has to be prescribed under this Act, for the protection of any aspect of the environment and for the control of pollution in the environment. Regulations

SUBSIDIARY LEGISLATION

SECTIONS 58, 63 AND 96-THE PESTICIDES AND TOXIC SUBSTANCES REGULATIONS

Regulations by the Minister Statutory Instrument

20 of 1994

Act No.

13 of 1994

PART I

PRELIMINARY

1. These Regulations may be cited as the Pesticides and Toxic Substances Regulations. Title

2. In these Regulations unless the context otherwise requires- Interpretation

"application" means the way and means of using the pesticide or toxic substance on its intended target as prescribed by the manufacturer;

"banned pesticide or toxic substance" means a pesticide or toxic substance for which all registered uses are prohibited or for which requests for registration have not been granted;

"bundling" means an upraised area surrounding the floor of a warehouse to contain any spillages and washings from pesticides or toxic substances and from cleaning water of the pesticides and toxic substances;

"chemical treatment" means the reaction of a pesticide or toxic substance with another under optimum conditions of pH, temperature and others;

"dangerous poison" shall mean highly hazardous in accordance with the World Health Organisation Classification;

"disposal" means the final location of pesticides or toxic substances, their wastes or contaminated packaging materials by burial, chemical or thermal destruction;

"experimental pesticides or toxic substances" means a pesticide or toxic substance to be assessed in Zambia for primary biological activity, and not available to the public for sale or use;

"incineration" means the subjection of a pesticide or toxic substance to an appropriate high temperature for a specified period of time to achieve complete destruction;

"inspectorate" means the Environmental Inspectorate established under section eighty-one of the Act;

"label" means the written, printed or graphic matter on, or attached to, the pesticide and toxic substance or the immediate container thereof and the outside container or wrapper of the retail package of the pesticide or toxic substance;

"packaging" means the containers together with the protective wrapping used to carry and or store pesticides and toxic substances or their products for wholesale and retail distribution to users;

"packaging material" means the material which the container is made of;

"pesticide" means a substance or mixture of substances or organisms intended for controlling, repelling or mitigating any pest, and substance or mixture of substances intended for use as a plant regulator, defoliant or desfoliant;

"protective clothing" means any cloth, material or device designed to provide protection from pesticides or toxic substance when they are handled or applied;

"recognised research institution" means a research institution recognised by the Minister as competent to carry out research into pesticide or toxic substance use;

"repackaging" means the transfer of pesticide from any commercial package into any other, usually smaller container, for subsequent sale;

"residue" means any substance in food, soil agricultural commodities or animal feed resulting from the use of pesticides and toxic substances and includes any derivatives or a pesticide or toxic substance considered to be of toxicological significance;

"severely restricted" means a pesticide or toxic substance whose general registered uses are prohibited but whose certain registered uses are permitted under these regulations;

"toxic substance" means a poisonous substance which causes significant adverse physiological effects to man, animal or the environment;

"toxicity" means a physiological or biological property which determines the capacity of a substance to injure or harm living organism by being absorbed in the body;

"trader" means any person engaged in the trade of pesticides or toxic substances and includes any person exporting, importing, or selling small substances; and

"withholding period" means the period between the last application for the product and the harvest of plant products; grazing of treated areas and slaughter of treated animals for food.

PART II

REGISTRATION

3. (1) A person intending to manufacture, import, export, improve, or process a new pesticide or toxic substance shall apply for registration to the Inspectorate in Form PTS 1 of the First Schedule and shall pay the appropriate application fee set out in the Second Schedule. Application for registration of pesticide or toxic substance

(2) The application referred to in sub-regulation (1) shall-

(a) indicate the categories of use of proposed pesticide or toxic substance;

(b) indicate the trade mark, chemical identity, molecular structure, an estimate of the amounts, by-products, processing, disposal of the pesticide or toxic substance and any test data relating to health and environmental effects; and

(c) be accompanied by a copy of the approved label or a facsimile thereof.

(3) The application under this regulation shall be made at least ninety days before importing, exporting, or the commencement of manufacturing, processing or reprocessing activities, of the pesticide or toxic substance.

(4) A person who has manufactured, imported or processed a pesticide or toxic substance in use before the commencement of these Regulations shall apply for registration within thirty days from the commencement of these Regulations.

(5) The proprietary rights in the data and information referred to in paragraphs (3) of sub-regulation (2) (a) and (b) shall be duly protected.

4. (1) The Inspectorate shall register a pesticide or a toxic substance and issue a certificate of registration in Form PTS 2 in the First Schedule, if satisfied that the pesticide or toxic substance which is the subject of the application is suitable and effective for the purposes for which it is intended without causing damage to the environment.

(2) A certificate of registration shall be-

(a) valid for a period of thirty-six months and may be renewed for a like period:

Provided that the Inspectorate may limit the validity of registration for any period less than thirty-six months but not less than six months; and

(b) subject to the conditions which shall be determined by the Inspectorate.

(3) A pesticide or toxic substance registered under this regulation shall not be altered in any way without approval of the Inspectorate so as to change its formulation, composition or usage or in any other manner.

5. (1) No person, except a recognised research or educational institution, shall import into Zambia, any experimental pesticide or toxic substance which is

not registered under these regulations without authority from the Inspectorate on Form PTS 4 set out in the First Schedule. Import of experimental pesticide or toxic substance

(2) An application to import any experimental pesticide and toxic substance shall be made in Form PTS 3 set out in the First Schedule and shall be accompanied by the appropriate fee.

(3) Any recognised research or education institution which imports an experimental pesticide or toxic substance shall not later than seven days after the arrival of the pesticide or toxic substance in Zambia, complete in triplicate and forward to the Inspectorate Form PTS 5 set out in the Second Schedule.

(4) No experimental pesticide or toxic substance shall be offered to any person other than a person approved by the Inspectorate to participate in the experimentation.

(5) No plants or products treated with experimental pesticide or toxic substance shall be sold or disposed of or consumed without the prior written authority of the Inspectorate.

(6) The label affixed to a container in which a pesticide or toxic substance is imported for purposes of experiment, shall be clearly marked with the words "FOR EXPERIMENTAL USES ONLY- NOT FOR SALE."

6. (1) No person shall transport pesticides or toxic substances unless they are registered under these Regulations. Transportation of registered pesticides or toxic substances

(2) Any person who transports pesticides or toxic substances shall use vehicles with clear warning signs with symbols set out in the Third Schedule.

(3) A person who transports pesticides or toxic substances shall only transport pesticides and toxic substances which are-

(a) clearly labelled in accordance with these Regulations;

(b) in packaging that will not allow leakage or spillage of product during loading, transportation and offloading;

(c) not loaded in the same space with foodstuff or goods intended for human or animal consumption or a container for human and animal use or clothing;

(d) conveyed by drivers who carry First Aid equipment and have necessary basic handling and poisoning information on pesticides and toxic substances; and

(e) in accordance with the guidelines set out in the Fourth Schedule.

(4) No person shall transport severely restricted pesticides or toxic substances-

(a) without the consent in writing of the Inspectorate;

(b) which are not labelled in accordance with these Regulations; or

(c) which results in deliberate disposal, or spillage into the environment.

PART III

LABELLING AND PACKAGING

7. (1) No person shall sell any pesticide or toxic substance without a label which has been approved by the Inspectorate and which is securely fixed to the container. Labelling

(2) The Inspectorate shall not approve a label for a pesticide or toxic substance unless it states-

- (a) the name and address of the company producing and distributing the pesticide or toxic substance;
 - (b) the trade name and formulation of the pesticide or toxic substance;
 - (c) the common name of pesticide or toxic substance;
 - (d) the quantity by mass or volume of the pesticide or toxic substance;
 - (e) the use for which the pesticide or toxic substance is registered;
 - (f) the directions for use;
 - (g) the withholding period;
 - (h) in pictograms in accordance with the schedule of instructions set out in the Fifth Schedule and warnings on safe use of the pesticide or toxic substance;
 - (i) the hazard warnings of the contents of the pesticide or toxic substance in accordance with the warnings set out in Part I and II of the Third Schedule;
 - (j) the warning against the re-use of containers and instructions for safe disposal of surplus or expired pesticide or toxic substance or decontamination of empty containers in accordance with the Ninth Schedule;
 - (k) the first aid instructions and medical advice treatment;
 - (l) the date of manufacture and the date of expiry;
 - (m) the net contents of the pesticide or toxic substance; and
 - (n) any other information the Inspectorate may require.
- (3) The label on a pesticide or toxic substance shall be large enough to be read easily and shall be of durable quality.
- (4) No pesticide or toxic substance shall be transported within Zambia to a destination where it will be further processed, packed or re-packed for retail trade without the label affixed in accordance with sub-regulation (1), (2) and (3).
- (5) No person shall use a label which contains inaccurate or untrue claims relating to the safety, non-toxicity or harmlessness or composition of the pesticide or toxic substance.

8. (1) No person shall pack a pesticide or toxic substance in a container which-Packaging

(a) will react chemically or physically with the substance it is to contain; and

(b) is not of sufficient strength for handling and transportation to prevent the escape of the pesticide or toxic substance.

(2) No person shall re-pack, decant or dispense any pesticide or toxic substance into food or beverage containers.

(3) No person shall load for transportation any packages which are damaged, severely corroded or which show evidence of leakage.

(4) No person shall use very dangerous or dangerous pesticide or toxic substance which are set out in Part III of the Seventh Schedule or open the container and repack such a substance in any other container, unless there is adequate provision for-

(a) all the persons involved to be made aware of the hazardous nature of the pesticide or toxic substance and take all the necessary precautions in the handling of that substance, including the wearing of appropriate protective clothing;

(b) appropriate measures for the safety of any other person who may be at risk from exposure to that substance; and

(c) the immediate availability of facilities for the administration of the appropriate First Aid treatment, and the right personnel to deal with emergency situations.

(5) No person other than that person in whose name a pesticide or toxic substance is registered in terms of these regulations may open the container of that pesticide or toxic substance and repack it for sale.

(6) The Inspectorate may direct any person in whose name a pesticide or toxic substance is registered in terms of these regulations to submit for inspection and approval the container of that pesticide or toxic substance.

PART IV

GENERAL HANDLING, USE AND SAFETY

9. (1) A person who uses a pesticide or toxic substance, in the form of dust, vapours or very small spray droplets, the container of which bears or is required to bear a label with a warning "very dangerous poison" or "poison" or where application of the pesticide or toxic substance is in confined places, shall use suitable and effective cartridge type respirators, or masks with special canisters, in accordance with the Eighth Schedule, whichever is appropriate.

(2) A person who fumigates or applies a pesticide or toxic substance, the container of which bears or is required to bear a label with a warning "very dangerous poison" or "poison" shall use a suitable respiratory so that none of the contaminated ambient air is inhaled.

(3) No person shall authorise or order the wearing of a respirator when the canister or cartridge has exceeded the service life specified by the manufacturer.

(4) No woman who is pregnant or child who is under 16 years of age shall be employed in the handling of pesticides or toxic substances.

(5) All employees shall display or make available a copy of this regulation to all the employees who are involved in the handling of a pesticide or toxic substance.

(6) All employers of persons handling pesticides and toxic substances shall cause their employees to undergo medical checkups every six (6) months to assess the pesticides or toxic substance levels and effects.

(7) All manufacturers, formulators and those involved in repackaging of pesticides or toxic substances shall install dust and vapour extractors.

(8) All employers shall provide washing facilities for persons handling pesticides or toxic substances.

(9) No person shall be allowed to eat, drink or smoke whilst handling pesticides or toxic substances.

(10) All employers shall ensure availability of adequate, suitable and accessible fire extinguishers in the handling area.

PART V

STORAGE AND DISPOSAL

10. (1) Pesticides and toxic substances shall be stored in a warehouse which-Conditions of storage of pesticide or toxic substance

- (a) can be securely locked;
- (b) has walls and frames made of material that is non-combustible;
- (c) has floors made of concrete and is impervious to liquids;
- (d) has a roof designed to prevent smoke accumulating in it in case of fire;
- (e) contains two clearly labelled and accessible emergency exits;
- (f) is separated from office accommodation;
- (g) contains a handling area where the floor is at the height of a vehicle bed;
- (h) is adequately lit and ventilated on the lower and upper parts of the walls and roof;
- (i) has a separate drainage system for rain water drainage;
- (j) has floor surrounded by bunding and has hazard and safety signs displayed at appropriate places;

(k) has compartments for separating pesticides or toxic substances according to uses, classes and other appropriate categories;

(l) has adequate, suitable and accessible fire extinguishers; and

(m) meets the conditions set out in the Seventh Schedule.

(2) Pesticides and toxic substances shall be stored out of doors only if-

(a) they are fenced and locked in;

(b) the floor of the storage area is made of concrete and is bunded; and

(c) hazard and safety signs are displayed at appropriate places.

11. Pesticides and toxic substances shall be disposed of in accordance with-

(a) the scheme of disposal submitted with the application to register the pesticide or toxic substance;

(b) the instructions on the label and accompanying leaflet of a pesticide or toxic substance; and

(c) the requirements and conditions set out in the Ninth Schedule. Disposal of pesticides or toxic substances

PART V

MISCELLANEOUS

12. (1) The Minister may, by statutory order and in consultation with the Council, ban or severely restrict the use of any pesticide or toxic substance specified in such notice. Banned or severely restricted pesticides or toxic substances

(2) The pesticide or toxic substance which is banned under this regulation shall-

(a) be withdrawn from sale and all other uses within six months from the date of publication of the statutory order; and

(b) be exported only with the approval of the Inspectorate and on such conditions as it may determine.

13. The Inspectorate shall maintain a register of the registered pesticides and toxic substances and of banned and severely restricted pesticides and toxic substances. Register of pesticides and toxic substances

14. (1) Any person who has in his possession surplus expired pesticides or toxic substances shall within three months of the expiry inform the Inspectorate in Form PTS 6 set out in the Second Schedule. Duty to report possession and supply information about expired pesticide or toxic substances

(2) Any person who manufactures imports or processes pesticides or toxic substances registered under these Regulations shall submit a record of quantities used and not used and associated storage or other problems relating to the pesticides or toxic substances to the Inspectorate every six months from

the date of registration.

15. (1) If the Inspectorate has reasonable cause to believe that a person is contravening any of the provisions of these Regulations or a condition of registration the Inspectorate shall serve an enforcement notice on that person. Enforcement notice

(2) An enforcement notice shall-

(a) state the belief regarding the contravention or the likely contravention of the provisions of these Regulations or a condition of the registration and specify the matters constituting the contravention or making it likely that the contravention will arise, as the case may be;

(b) specify the steps that have to be taken to remedy the contravention or avoid the contravention, as the case may be; and

(c) specify the time limit within which the steps described under paragraph (d) have to be taken.

16. Any person who contravenes any of the provisions of these Regulations or a condition of registration after an enforcement notice has been issued under regulation 15-

(a) shall have the registration cancelled; and

(b) shall be guilty of an offence and shall be liable upon conviction to a fine provided in section sixty-four of the Act. Offences and penalties

FIRST SCHEDULE

(PRESCRIBED FORMS)

(Regulations 3, 4, 5 and 14)

Form PTS 1

REPUBLIC OF ZAMBIA

ENVIRONMENTAL COUNCIL

Pollution (Pesticides and Toxic Substances) Regulations

(To be completed in triplicate)

To: The Chief Inspector (Pollution Control)

Environmental Council

P.O. Box 35131

LUSAKA

1. Name of Applicant:

2. Address of applicant:

(a) Postal..

(b) Business

3. Type of pesticide (insecticide, herbicide, fungicide, etc) or toxic substances (e.g. cyanide, benzene);

A. Information to be submitted with this application for all pesticides, toxic substances and for which registration is sought.

1. Trade name:.....

2. Full chemical name of each ingredient:.....

3. Common name of each active ingredient:.....

4. The empirical and structural formula for each active ingredient:

5. Formulation (type of formulation: wettable powder, emulsifiable

concentrate,
etc.)

6. Percentage of purity on a mass-by-mass or mass by volume basis (specify) of each active ingredient and other ingredients (including inert matter) in the pesticide/toxic substance stating which percentage applies to each ingredient:

7. Physical and chemical properties of each ingredient with specific reference to type of formulation:

7.1. Appearance:.....

7.2 Density (for liquids only)

7.3 Flammability: liquids flash point

solids; statement to be made as to whether product is flammable

7.4 Wettability (for dispersible powders)

7.5 Suspensibility (for dispersible powders, suspension concentrates)

7.6 Emulsion stability (for emulsifiable concentrates).

7.7 Corrosiveness.....

7.8 Known incompatibilities with other products (specify)

8. Size of containers in which pesticides or toxic substance is to be sold and the net weight or volume:.....

9. Nature of containers in which pesticide or toxic substance is to be sold:.....

10. Stability of formulation:

(a) on storage (at temperature of 25 degree C+-3 degree C):

(b) on dilution:..

(c) Shelf life in general..

11. Corrosiveness of equipment:..

12. Phytotoxicity:.....

13. Safety precautions to be observed in handling, use and storage:.....

14. Hazard to wildlife:.....

15. Residue data:.....

16. Proposed use:.....

17. Directions of use:.....

18. Directions for safe disposal of expired pesticide or toxic substance:

19. Directions for safe disposal of used container

20. Biological effectiveness and benefit in use:

I hereby apply for registration, under the Pesticides and Toxic Substances Regulations, of the Pesticide/Toxic Substance of which particulars are given above, and I certify that these particulars are to the best of my knowledge, true and correct.

.....
.....

Date Signature of applicant and

Official stamp

REPUBLIC OF ZAMBIA

Form PTS 2

ENVIRONMENTAL COUNCIL

Pollution Control (Pesticides and Toxic Substances) Regulations

CERTIFICATE OF REGISTRATION

(Regulation 4(1))

Number:

To:

of:.....

is hereby registered as a

Registration is from

.....
.....19

Registration is subject to the following conditions:

It is hereby:

(a) Certified that the pesticide/toxic substance referred to in Form PTS 1 has been registered; and

(b) Approval has been granted of the labels and advertisements copies of which are attached hereto, and which are to be used in connection with the said pesticide/toxic substance.

.....
.....

Date and Official stamp Chief Inspector

(Pollution Control)

REPUBLIC OF ZAMBIA

ENVIRONMENTAL COUNCIL

Pollution Control (Pesticides and Toxic Substances) Regulations

Form PTS 3

APPLICATION TO IMPORT EXPERIMENTAL PESTICIDE OR TOXIC SUBSTANCE TO BE USED ONLY
FOR EXPERIMENTATION

(Regulation 5 (2))

(To be completed in triplicate)

To: The Chief Inspector (Pollution Control)

Environmental Council

P.O. Box 35131

Lusaka

1. Name of applicant:

2. Address of applicant:

(a) Postal:

(b) Business:.

3. Types of pesticide or toxic substance (insecticide, herbicide, cyanide
etc):

4. Active ingredient:

5. Toxicological data; and animals (state type of animal)

(a) Oral LD 50:

(b) Dermal LD 50:

(c) Inhalation LD 50.

6. Trade name

- 7. Common name:
- 8. Approximate quantity:
- 9. Intended use:
- 10. Proposed duration of experiment (commencing date and finishing date):
- 11. Person conducting trials and academic qualification:
- 12. Name of manufacturer:
- 13. Address of manufacturer:

I hereby apply to import, under the Pollution Control (Pesticide and Toxic Substances) Regulations, the Pesticide/Toxic Substance for experimental purposes particulars of which are given above.

.....

Date Signature of applicant and

Official stamp

For Official use only:

Date application received

Experimental Registration Number:

The Application to import: has/has not been approved.

Reasons for non-approval.

.....

Date and Official stamp Chief Inspector

(Pollution Control)

REPUBLIC OF ZAMBIA

Form PTS 4

ENVIRONMENTAL COUNCIL

Pollution Control (Pesticides and Toxic Substances) Regulations

AUTHORITY TO IMPORT EXPERIMENTAL PESTICIDES FOR TOXIC SUBSTANCES

(Regulation 5)

Number:

To:

of

Date application received

I hereby certify that authority to import pesticide/toxic substance
for experimental purposes only has been granted.

The experimental registration number is:

The registration expires on:

and is subject to the following conditions: .

The application to import

has/has not been approved.

Reasons for non-approval

.....
.....

Date and Official stamp Chief Inspector

(Pollution Control)

SECOND SCHEDULE

(Regulation 3)

PRESCRIBED FEES

Application of or registration of	Fee units
pesticide or toxic substance	78,750
(1,000 US Dollars)	

LUSAKA

[MENR]
.....
.....

Minister of Environment and
Natural Resources

(As amended by Act No. 13 of 1994)

REPUBLIC OF ZAMBIA

ENVIRONMENTAL COUNCIL

Form PTS 5

Pollution Control (Pesticides and Toxic Substances) Regulations

NOTICE OF IMPORT OF EXPERIMENTAL, PESTICIDE OR TOXIC SUBSTANCES

(Regulation 5(3))

(To be submitted in triplicate)

1. Name of Research Institute

2. Address of the Research Institute:

(a) Postal

(b) Business

Telephone Telex

Telefax

3. Type of pesticide/toxic substances (insecticide, herbicide, rodenticide, cyanide, benzene, etc)

4. Registration number

5. Trade name

6. Common name

7. Approximate quantity

8. Expiry date

9. Proposed use

.....

.....
.....

Date Signature of Scientist and

Official stamp

REPUBLIC OF ZAMBIA

ENVIRONMENTAL COUNCIL

Form PTS 6

Pollution Control (Pesticides and Toxic Substances) Regulations

NOTICE OF POSSESSION OF EXPIRED PESTICIDES OR TOXIC SUBSTANCES

(Regulation 14)

(To be submitted in triplicate)

To: The Chief Inspector (Pollution Control)

Environmental Council

P.O. Box 31531

LUSAKA

1. Name of owner of expired pesticide or toxic substance

2. Address
 - (a) Postal
 - (b) Business

3. Type of pesticide or toxic substance

4. Trade name
5. Full chemical name
6. Common name of each active ingredient

7. Formulation

8. Toxicology Data on Humans and laboratory animals (specify)
 - (a) Oral LD 50
 - (b) Dermal LD 50
 - (c) Inhalation LD 50

- 9. Phyto-toxicity
- 10. Quantity of expired pesticide or toxic substance
- 11. Instructions on handling precautions
- 12. Directions for safe disposal
- 13. Pesticide or toxic substance registration number

I hereby notify you of the above expired pesticide/toxic substance in my possession. The pesticides/toxic substance expired before use because

.....
.....

Date Signature of applicant and
Official stamp

For official use only:

Date notification received:

Date Registration number checked

Your notification has been received and the inspectorate (state action)

.....
.....

Date Chief Inspector (Pollution Control)
Environmental Council

THIRD SCHEDULE

(Regulations 6(2) and 7)

SYMBOLS FOR WARNING SIGNS FOR VEHICLES

TRANSPORTING PESTICIDE OR TOXIC SUBSTANCES

PART I

B

1. The hazardous-warning signs that shall be used on hazard-warning panels and compartment labels during transportation of toxic substances are set out in part II.

2. The hazard-warning signs that shall be used when transporting pesticides are set out in Part III.

3. Each hazard-warning panel for pesticides and toxic substances shall be in form of an equilateral triangle and a square set with its side at an angle of 45 degrees to the verticle respectively and the length of the sides shall be-

(a) in the case of signs on hazard-warning panels, 200 millimetres or

(b) in the case of signs on compartments labels 95 millimetres.

4. Signs for hazard-warning panels shall, for any part of the sign that is not black, have a black border at least 5 millimetre wide.

Toxic Part II

Description of sign	Symbol	Lettering	Background
Flammable liquids	Black	Black	Red
Flammable gases	Black	Black	Red
Flammable solid	Black	Black	White with verticle red stripes
Corrosive substances	Black	White	White upper half black lower half
Toxic gases	Black	Black	White
Organic peroxides	Black	Black	Yellow
Oxidising substances	Black	Black	Yellow
Substances emitting flammable gases when in contact with water	Black	Black	Blue
Spontaneously half combustible	Black	Black	White upper half

Harmful substances Black Black Red lower half white upper half

PART III

Symbol
colour code

Pesticide Toxicity	Warning	Additional
(i) Acute oral LD 50 up to 50mg/kg:	Red poison	Very dangerous cross bones Skull and
(ii) Acute dermal LD50 up to 200mg/kg	Red poison	Very dangerous cross bones Skull and
(iii) Acute inhalation LC50 up to 200mg/m ³ /4h	Red poison	Very dangerous cross bones Skull and
(iv) Acute oral LD50 51-500mg/kg	Purple poison	Dangerous cross bones Skull and
(v) Acute dermal LD50 201-2,000mg/kg	Purple poison	Dangerous cross bones Skull and
(vi) Acute inhalation LD50 201-2,000mg/m ³ /4h	Purple poison	Dangerous cross bones Skull and
(vii) Acute oral LD50 2,001mg/kg	501 Amber	Poison
(viii) Acute dermal LD50 2,001mg/kg	Amber	Poison
(ix) Acute inhalation LC50 2,001-20,000mg/m ³ /4h	Amber	Poison
(x) Acute oral LD50 greater than 20,000mg/kg	Green	Harmful if swallowed
(xi) Acute dermal LD 50	Green	Harmful
(xii) Acute inhalation LC50 greater than 20,000mg/m ³	Green	Harmful
(xiii) Acute inhalation LC50 greater than 20,000mg/m ³	Green	Harmful

Pesticide shall be classified according to colour, symbol and warning it carries;

Symbol	Warning
Colour code	
Red	Very dangerous poison
Purple	Dangerous poison
Amber	Poison
Green	Harmful

FOURTH SCHEDULE

(Regulation 6)

GUIDELINES FOR TRANSPORTATION OF PESTICIDES AND TOXIC SUBSTANCES

1. Ensure that the emergency procedure information relating to the pesticide(s) or toxic substances card is in the vehicle.
2. Ensure that all hazard warnings are displayed, not obstructed and that they are kept clean at all times.
3. Follow the route as advised by the transporter or operator.
4. Ensure that the vehicle is not left unattended at any time.
5. Ensure that the vehicle has certificate of fitness.
6. Ensure that the First Aid Equipment is in the vehicle.

FIFTH SCHEDULE

(Regulation 7)

PICTOGRAMS (FAO, WHO and GIFAP)

The following pictograms shall be put on labels to complete labelling; they will be put on labels either as singly or in combination with appropriate one stop give complete instructions:

A pictogram showing	Pictogram showing	Pictogram to show
a product kept in instruction on	that product is	
safety by key and lock	washing	dangerous to animals
Dangerous to aquatic	Instructions to	Instructions to
life	wear safety goggles	wear protective gloves
Instructions on type	Instructions to use	Instructions to

of wear complete face shield use respirators

SEVENTH SCHEDULE

(Regulation 10)

1. Warehousing and Storage

(a) The pesticide and toxic substances warehouse should be located away from homes, highly populated areas, drinking water sources and areas liable to flooding.

(b) The floors in the building should be of concrete with a load bearing capacity sufficient to withstand the weight of the stock, racking and any mechanical handling equipment to be used. Floors should be impervious to liquids, free from cracks and smooth to facilitate cleaning.

(c) The building should be designed such that escape in case of emergency should be possible from any enclosed area in at least two directions. Emergency exits should be clearly marked.

(d) The warehouse should have access from at least two sides to facilitate fire fighting, regardless of wind directions and also facilitate easy escape from an enclosed area.

(e) All warehouses constructed above ground level should have special provision for bunding. This can be achieved, for example by constructing ramps across external doorways of existing warehouses.

(f) The building should permit reasonable movement of materials and enough space to allow hygienic working conditions and clear access to fire-fighting equipment.

(g) The walls of the warehouse should be of non-flammable type and all pipings and electrical wiring should be sealed.

(h) The roof of the warehouse should be able to effectively keep out rain, be able to provide both ventilation to allow fumes and heat to escape in case of fire and at the same time provide protection against direct sunlight.

(i) The warehouse should have drains which should not be directly linked to waterways or public sewers. They should instead be linked by a closed system, to an evaporation tank.

(j) The evaporation tank should be emptied from time to time depending on the accumulation of solid waste. It should be covered during the rainy season to avoid filling by rain water.

2. (a) All products should be stored under lock and key with proper warning signs displayed clearly to keep away unauthorised persons. Pesticides and toxic substances must be stored in a separate warehouse, away from any other goods especially foods and stockfeeds.

(b) Before storing any pesticides ensure that they are properly labelled and are of good quality and acceptable condition. If any of the products are not in good condition, do not store them together with other products but take

appropriate action.

(c) If pesticides and toxic substances are to be stacked inside the warehouse, stacking heights should not exceed three metres unless the use of racking prevents overloading of the lower tiers.

(d) Persons loading pesticides and toxic substances in the warehouse should pay special attention to "THIS SIDE UP" signs on cartoned packs.

(e) Pesticides and toxic substances should be stored separately, preferably according to their use in the field e.g. herbicides, insecticides etc. The objective of this is to prevent cross contamination as well as minimise the risk of fire and consequent environmental contamination often presented by mixed storage arrangements.

3. (a) All stocks in the warehouse should be frequently inspected for leakages, caking of powders, pulverisation of granules, sedimentation or gelling of liquids, change in colour due to oxidation, dampness of packages and corrosion or deterioration of containers. All leakages must be treated as being extremely toxic.

(b) Spillages should not be cleaned out with water. They must be swept up and kept in a special labelled container awaiting safe disposal. Liquids should first be absorbed by saw dust, earth or any other absorbent before being swept out.

(c) Every warehouse must have an emergency spills treatment kit consisting of a PVC apron, neoprene gloves, a gas mask, a brush or broom, a dust pan, an empty clearly labelled container (for collecting wastes) a container of sawdust and a spade.

(d) Always strictly follow the rule "First-in First-out" i.e. new stocks should be moved to the rear.

EIGHTH SCHEDULE

(Regulation 9)

PROTECTIVE CLOTHING AND EQUIPMENT

A. Any person involved in the manufacture and formulation of pesticides or toxic substances must ensure that the following protective clothing is available to the employees:

(i) acid resistant or chemical resistant overalls or dust coats with buttons to the neck;

(ii) acid resistant or chemical resistant trousers and coat or suit;

(iii) PVC gloves;

(iv) PVC aprons;

(v) rubber boots;

(vi) respirator canisters with filters specific for dust, mist, fumes, gases and vapour;

(vii) face shields covering eyes and face;

B. To clean-up spills the following should be available:

(i) absorbent material (saw dust, sand, earth or powdered lime);

(ii) washing detergent;

(iii) brooms

(iv) shovels, spades; and

(v) funnels.

When self contained breathing apparatus is to be used only persons properly trained and experienced in the correct procedure should be allowed to use them.

NINTH SCHEDULE

(Regulation 11)

Disposal Options

Pesticides, toxic substances, wastes, those which are expired, spillage and left over diluted product and packaging material can be disposed of in the following manner:

1. Product use by Recycling

If an alternative use exists the product may be reused or may be reformulated for the purpose for which it is intended to be used.

2.High Temperature Incineration (High Temperature Thermal Oxidation)

Should be considered when disposing of most pesticides and toxic substances, but should NOT be used when disposing-

(a) inorganic materials;

(b) organic products containing heavy metals such as mercury and lead;

3. Chemical Treatment

To be used as a disposal technology for a few specific unformulated pesticides and some other toxic substances. The products of decomposition from such treatment should not present toxic or environmental hazard.

4. Long Term Storage

Certain compounds cannot be disposed of safely using existing technology. Such compounds include those containing heavy metals and in particular, organomercury compounds.

The only available option is to contain and store these products safely until a suitably acceptable disposal technology is developed.

A full risk analysis should be made for all materials stored to ensure maximum safety over the longest foreseeable period of time.

5. Landfill (for Incinerator Ash and SLG Only)

Landfilling is not an acceptable disposal option for pesticides and toxic wastes which can be leached. Incinerator ash and slag can be disposed of at approved landfill sites.

6. Waste Solidifications/Fixation

The process involves the mixing of chemical and other waste with building materials such as cement, silicates and polymers, causing the mixtures to solidify into an impervious mass. Waste treated in this way can be disposed of at a landfill. This should be applicable to inorganic wastes. Organic wastes could easily leach into ground water with time, and should therefore not be used in disposing organic pesticides or toxic substances.

7. Packaging Materials Disposal

Contaminated packaging material shall be disposed of as follows:

(a) Contaminated Packaging material-Cartons, boxes and bags should be cut and rendered non-usable. The waste should be overpacked in plastic bags to minimise the risk for exposure during handling:

(i) Burning in a simple incinerator, or on a hot fire in isolated area downwind of the nearest habitation.

(ii) Burial in an approved landfill

(b) Small Packs

Small packaging shall be drained well to reduce residues to a minimum by triple-rinsing with water or an appropriate solvent such as diesel fuel. The triple rinsed packaging material should be made unusable by shredding or crushing. Combustible packaging material should be incinerated.

Non-combustible crushed containers should be buried in a landfill site.

Small packs which cannot be or have not been triple rinsed should be over-packed in strong polyethylene bags or preferably 200 litre steel drums for disposal as toxic wastes.

(c) Large containers

Effort must be made to drain the maximum amount of residue from each container prior to triple rinsing with water or suitable solvent and disposed of as follows:

(i) Steel Drums

Triple-rinsed and drained drums should be crushed, to render them unusable and disposed of by either:

-STEEL SMELTING-This is the preferred option. Where the drums are processed

at high temperature for metal recovery

-BURIAL-Burial in an approved landfill site at least one metre below ground level.

(ii) Plastic Drums

After triple rinsing, plastic drums must be punctured and shredded to avoid any form of reuse and packed for disposal by burial at approved landfill sites. Large quantities of plastic wastes must not be burned except in approved incinerator with the flue-gas scrubbing facilities.

9. Export -Where no "safe disposal" facilities exist in Zambia, export of pesticide and toxic wastes to another country with facilities can be done.

10. Return to Manufacturer-Where a manufacturer is willing to accept pesticides or toxic substances wastes or expired obsolete stocks, this will be accepted as a disposal option.

SECTIONS 55 AND 96-THE WASTE MANAGEMENT (LICENSING OF TRANSPORTERS OF WASTES AND WASTE DISPOSAL SITES) REGULATIONS

Regulations by the Minister Statutory Instrument
71 of 1993
134 of 1996

1. These Regulations may be cited as the Waste Management (Licensing of Transporters of Wastes and Waste Disposal Sites) Regulations. Title

2. In these Regulations unless the context otherwise requires- Interpretation

"disposal site" means the land or water area on which waste disposal facilities are physically located;

"Inspectorate" means the Environmental Inspectorate established under section eighty-one of the Act; and

"wastes" subject to regulation 3, includes hazardous wastes and shall have the meanings assigned to them in the Act.

3. These Regulations shall not apply to-

(a) domestic waste from residential household of forty-five kilograms weight or less per week; and

(b) the transportation of construction and demolition debris to licensed disposal sites. Application

4. (1) A person intending to transport wastes or operate a waste disposal site or plant shall apply for a licence to the Inspectorate in Forms WM1 and WM2 of the First Schedule respectively and shall be accompanied by the appropriate fee set out in the Second Schedule. Application for licence to transport wastes or operate waste disposal plant

(2) A person who transports wastes or owns or operates a waste disposal site or plant before the commencement of these Regulations shall apply for a licence within thirty days from the commencement of these Regulations.

5. (1) The Inspectorate shall issue a licence to transport wastes in form WM3 of the First Schedule if-Licence to transport wastes

(a) satisfied that the applicant has adequate and appropriate facilities and equipment to transport wastes without causing significant damage to the environment;

(b) satisfied with collection schedule of wastes of the applicant; and

(c) the Inspectorate had published its intention to issue the licence by notice in the Gazette, twenty-eight days before the issue of the licence.

(2) A licence to transport wastes shall be subject to the following conditions:

(a) The collection and transportation of wastes shall be conducted in a manner that would not cause scattering of the waste.

(b) The vehicles, pipelines and equipment for the transportation of waste shall be in such a state as not to cause the scattering of or the flowing out of the wastes or the emitting of bad smells from the wastes.

(c) The vehicles for the transportation of wastes shall follow the approved schedule routes from the point of collection to the disposal site or plant.

(d) The personnel involved in the collection and transportation of wastes shall be provided with-

(i) adequate protective and safety clothing;

(ii) adequate appropriate equipment or facilities for loading wastes; and

(iii) safe and secure sitting facilities in the vehicles for transporting wastes.

(e) The personnel involved in the collection and transportation of wastes shall undergo an annual medical check up.

(f) Any other condition which the Inspectorate shall consider relevant for the transportation of wastes.

(3) A licence to transport wastes shall be valid for thirty-six months and may be renewed for a like period:

Provided that the Inspectorate may limit the validity of the licence for any period less than thirty-six months but not less than six months, when necessary.

(4) An Inspector may at any reasonable time stop and inspect any vehicle used for the transportation of wastes.

6. (1) The Inspectorate shall issue a licence in Form WM4 of the First Schedule to own or operate a waste disposal site or plant if-Licence to own or operate a waste disposal site or plant

(a) approval has been obtained from the town and country planning authority on the location of the waste disposal site or plant;

(b) satisfied that the owner or operator of the waste disposal site or plant has the ability and the appropriate facilities to manage the waste disposal site or plant without causing significant damage to the environment; taking into account the summary of the environmental impact statement submitted by the owner or operator; and

(c) notice has been given by the Gazette on the proposed waste disposal site or plant, twenty-eight days before the issue of the licence.

(2) A licence to own or operate a waste disposal site or plant shall be subject to the following conditions:

(a) the waste disposal site or plant shall be enclosed and secure from scavenging;

(b) the waste disposal site or plant shall have hazard and safety signs displayed at appropriate places indicating the disposal site or plant;

(c) the waste disposal site or plant shall be operated in a way which would-

(i) avoid polluting surface and underground water;

(ii) avoid the emitting of bad smells from the site or plant to levels beyond that approved by the Inspectorate;

(iii) prevent the breeding of rats, mosquitoes or other vermin at the site or plant;

(d) the wastes at the disposal site or plant shall be compacted to a thickness of approximately three metres or less for each layer of waste and each layer shall be covered with thirty centimetres of soil;

(e) means of ventilation shall be provided at the disposal site or plant to remove bio-gas generated from the disposal site or plant;

(f) the personnel working at the waste disposal site or plant shall be provided with-

(i) adequate protective and safety clothing;

(ii) adequate water and appropriate equipment or facilities for the operations of the disposal site or plant;

(iii) first aid facilities and training;

(g) the personnel working at the waste disposal site or plant shall undergo an annual medical check up;

(h) human waste or sewage shall be disposed of at a waste disposal site or plant after sewage treatment;

(i) measures to control and prevent scattering of papers or other light waste materials shall be installed at the waste disposal site or plant; and

(j) any other conditions which the Inspectorate shall consider relevant for the operation of the waste disposal site or plant.

(3) A licence to own or operate a waste disposal site or plant shall be valid for thirty-six months and may be renewed for a like period:

Provided that the Inspectorate may limit the validity of the licence for any period less than thirty-six months, but not less than six months when necessary.

(4) An Inspector may at any time, enter and inspect any waste disposal site or plant.

(5) Any person who-

(a) operates or owns a waste management disposal site without a licence; or

(b) discharges waste onto a site or plant which is unlicensed;

shall be guilty of an offence.

7. (1) The holder of a licence under these Regulations shall-Duty to keep records

(a) keep a record of the licensed activities; and

(b) submit the record referred to in paragraph (a) to the Inspectorate every six months from the commencement of the licensed activities.

(2) The Inspectorate may order the holder of a licence under these Regulations to install, at the expense of the holder of the licence, metering devices and to take samples and analyse them as the Inspectorate may direct.

8. The Inspectorate shall maintain a licences register of holders of licences to transport wastes or operate wastes disposal sites or plants. Register of licences

9. (1) If the Inspectorate has reasonable cause to believe that a person is contravening any of the provisions of these Regulations or a condition of the licence is or is likely to be contravened, the Inspectorate shall serve an enforcement notice on that person. Enforcement notice

(2) An enforcement notice shall-

(a) state the belief regarding the contravention or the likely contravention of the provisions of these Regulations or a condition of the licence and specify the matters constituting the contravention or making it likely that the contravention will arise, as the case may be;

(b) specify the steps that have to be taken to remedy the contravention or avoid the contravention, as the case may be; and

(c) specify the time limit within which the steps described under paragraph (b) have to be taken.

10. Any person who contravenes any of the provisions of these Regulations or a condition of a licence after an enforcement notice has been issued under regulation 9-

(a) shall have the licence revoked; and

(b) shall be guilty of an offence and shall be liable upon conviction to a fine or conviction as set out in section ninety-one of the Act.

Offences and penalties

FIRST SCHEDULE

PRESCRIBED FORMS

(Regulations 4, 5 and 6)

REPUBLIC OF ZAMBIA

ENVIRONMENTAL COUNCIL

Form WM1

The Waste Management (Licensing of Transporters of Wastes and Waste Disposal Sites) Regulations

APPLICATION TO TRANSPORT WASTES

(Regulation 4)

(To be completed in Triplicate)

To: The Chief Inspector (Pollution Control)
Environmental Council
P.O. Box 35131
Lusaka

Name and address of applicant

Number and type of vehicles to transport waste

Facilities and equipment available on vehicles to transport wastes

Type of waste to be transported

Quantity of wastes per vehicle to be transported

Licensed sites/plant to which wastes are to be transported

Collection schedule

Collection frequency

Any other information

.....
.....
.....

Date Signature

Designation/title.....

FOR OFFICIAL USE ONLY

Application received Fee
paid.....

.....

.....

Chief Inspector (Pollution Control)

Environmental Council Inspectorate

Form WM2

REPUBLIC OF ZAMBIA

Environmental Council

The Waste Management (Licensing of Transporters of Wastes and Waste Disposal Sites) Regulations

(To be completed in triplicate)

APPLICATION TO OWN/OPERATE WASTE DISPOSAL SITE/PLANT

(Regulation 4)

To: The Chief Inspector (Pollution Control)
Environmental Council
P.O. Box 35131
Lusaka

Name and address of applicant

Location of site/plant

Approval of Town and Country Planning Authority

Type of wastes to be disposed of at site/plant

Quantity being disposed of/per annum tonne/Kg

Type of facilities/treatment to be carried on at site/plant

(a) Land fill

(b) Compost

(c) Incinerator

(d) Other-specify

Estimated life span of plant/site

Proposed hectarage/area of site/plant (include site plan and design)

Summary of environmental impact statement

Any other information

.....
.....
.....

Date Signature

Designation/title.....

FOR OFFICIAL USE ONLY

Application received Fee
paid.....

.....
.....

for Chief Inspector (Pollution Control)

Environmental Council Inspectorate

Form WM3

REPUBLIC OF ZAMBIA

Environmental Council

Waste Management (Licensing of Transporters of Wastes and Waste Disposal sites) Regulations

LICENCE TO TRANSPORT WASTES

(Regulation 5)

Licence No.

Name

Address

You are hereby licensed to transport wastes to

from

Number and type of vehicles licensed

Type of wastes to be transported

This licence is valid from 19.....

to.....
.....19.....

Approval of Town and Country Planning Authority

Type of wastes to be disposed of at site/plant

Quantity being disposed of/per annum tonne/Kg

Type of facilities/treatment to be carried on at site/plant

- (a) Land fill
- (b) Compost
- (c) Incinerator
- (d) Other-specify

Estimated life span of plant/site

This licence is granted subject to the following conditions:

.....
.....
.....

Date Chief Inspector (Pollution Control)
Environmental Council Inspectorate

Form WM4

REPUBLIC OF ZAMBIA

Environmental Council

Waste Management (Licensing of Transporters of Wastes and Waste Disposal Site) Regulations

LICENCE TO OWN/OPERATE WASTE DISPOSAL SITE/PLANT

(Regulation 6)

Licence No.

Name

Address

You are hereby licensed to own/operate a waste disposal site/plant at Plot No.

Area.

Town

or the following types of wastes

this licence is granted valid from 19.....

to 19.....

The licence is subject to the following conditions

.....
.....
.....

Date Chief Inspector (Pollution Control)

Environmental Council Inspectorate

SECOND SCHEDULE

(Regulation 4)

1. Disposal Site Licence	Fee units	
(a) city and municipal councils and industries		555.5
(b) district councils and medical institutions		277.7
2. Transporters of Waste Licence		
(i) city and municipal councils and industries and commercial operators	277.7	
(ii) district councils and medical institutions		166.6

(As amended by S.I. No. 134 of 1996)

SECTIONS 23, 34 AND 96-THE WATER POLLUTION CONTROL (EFFLUENT AND WASTE WATER) REGULATIONS

Regulations by the Minister Statutory Instrument

72 of 1993

177 of 1993

133 of 1996

Act No.

13 of 1994

1. These Regulations may cited as the Water Pollution Control (Effluent and Waste Water) Regulations. Title

2. In these Regulations unless the context otherwise requires- Interpretation

"aquatic environment" means all surface and ground waters, but does not include water in installations and facilities for industrial effluent, sewage collection and treatment;

"discharge" means spilling, leaking, pumping, pouring, emitting, emptying or dumping;

"effluent" means waste water or other fluid of domestic, agricultural, trade or industrial origin, treated or untreated and discharged directly or indirectly into the aquatic environment;

"inspectorate" means the Environmental Inspectorate established under section eighty-one of the Act;

"inspector" means a person appointed as such under section eighty-three;

"licence" means a licence to discharge effluent issued under section thirty-one;

"pollutant" means any substance or energy which if it enters or is discharged into water may cause discomfort to, or endanger the health, safety and welfare of persons, or may cause injury or damage to plant or animal life or property,

or which may interfere unreasonably with the normal enjoyment of life or property or use of property or conduct of business, and those objects or substances as may inadvertently obstruct or divert the natural flow of a water course when discharged or dumped into it;

"sewage" means waste water generated by residential and commercial establishments;

"sewage system" includes sewage treatment plants;

"waste water" means water which has been used for domestic, commercial, agricultural, trading or industrial purposes and as a result of such uses may cause water pollution when discharged into the aquatic environment; and

"water pollution" means the introduction, directly or indirectly of pollutants into an aquatic environment.

3. (1) A local authority intending to operate a sewage system or owner or operator of any industry or trade which will discharge effluent into the aquatic environment shall apply to the Inspectorate for a licence in Form WP1 set out in the First Schedule and shall pay the appropriate fee set out in the Second Schedule. Application for licence to discharge effluent

(2) A local authority operating a sewage system or owner or operator of any industry or trade discharging effluent into the aquatic environment before the commencement of these Regulations shall apply to the Inspectorate for a licence, referred to in sub-regulation (1) within thirty days from the commencement of these Regulations.

(3) The application referred to in sub-regulation (1) shall contain information relating to the quality and quantity of effluent, its treatment and such other information as the Inspectorate may require.

(As amended by S.I. No. 177 of 1993)

4. (1) A person intending to withdraw water from a water course or any other source for the purpose of diluting an effluent shall apply to the Inspectorate for a licence in Form WP2 set out in the First Schedule and shall pay the appropriate fee set out in the Second Schedule. Application for licence to withdraw water for diluting effluent

(2) A person who has been withdrawing water from a water course or from any other source for the purpose of diluting effluent before the commencement of these Regulations shall apply for a licence referred to in sub-regulation (1) to the Inspectorate within thirty days of the commencement of these Regulations.

(3) The application referred to in sub-regulation (1) shall contain information relating to the amounts of water required, the treatment of effluent and such other information as the Inspector may require.

5. (1) The Inspectorate shall issue a licence to discharge effluent in Form WP3 of the First Schedule if-Licence to discharge effluent

(a) satisfied that the application has adequate and appropriate facilities and equipment for pre-treatment and the effluent will not cause significant damage to the environment;

(b) the Inspectorate had published its intention to issue the licence by notice in the Gazette, twenty-eight days before the issue of the licence.

(2) The licence to discharge effluent into the aquatic environment shall-

(a) conform to the conditions and standards for chemical and physical parameters contained in the table of standards for effluent and waste water, set out in the Third Schedule;

(b) be subject to such other conditions as the Inspectorate may determine; and

(c) be valid for thirty-six months and may be renewed for a like period:

Provided that the Inspectorate may limit the validity of the licence for any period less than thirty-six but not less than six months, when necessary.

6. (1) The Inspectorate shall issue a licence to withdraw water from a water course or other source for the purpose of diluting effluent in Form WP 4 of the First Schedule if-Licence to withdraw water for treatment of effluent

(a) satisfied that the water being withdrawn from the water course or source would not significantly affect the life of the water course or source;

(b) satisfied that the applicant will treat the effluent in a manner that would not have any adverse effect on the aquatic environment;

(c) the Inspectorate has published the intention to issue the licence by notice in the Gazette, twenty-eight days before the issue of the licence.

(2) The licence to withdraw water from a water course or source for the treatment of effluent shall-

(a) be subject to such conditions as the Inspectorate may determine; and

(b) be valid for thirty-six months and may be renewed for a like period:

Provided that the Inspectorate may limit the validity of the licence for any period less than thirty-six months but not less than six months, when necessary.

7. (1) The holder of a licence under these Regulations shall-Duty to keep records

(a) keep a record of the licensed activities;

(b) submit the record referred to in paragraph (a) to the Inspectorate every six months from the commencement of the licensed activities; and

(c) report to the Inspectorate any abnormal discharge of effluent.

(2) The Inspectorate may order the holder of a licence under these Regulations to instal at the expense of the holder of the licence, metering devices and to take samples and analyse them as the Inspectorate may direct.

8. An Inspectorate may at any reasonable time enter any premises on which a licensed activity is being conducted and take samples and analyse and examine

materials used for the licensed activity. Sampling of effluent and analysis

9. The Inspectorate shall maintain a register of holders of licences to discharge effluent into the aquatic environment or to withdraw water from a water course or any other source for the purpose of diluting an effluent. Register of licences

10. Any person who-

(a) operates or owns a sewage system or an industry or trade which discharges effluent into the aquatic environment without a licence; or

(b) withdraws water from a water course for the purpose of diluting effluent without a licence;

shall be guilty of an offence. Offences

11. (1) If the Inspectorate has reasonable cause to believe that a person is contravening any of the provisions of these Regulations or any conditions of a licence or is likely to contravene any of the provisions of these Regulations or a condition of the licence, the Inspectorate shall serve an enforcement notice on that person. Enforcement notice

(2) An enforcement notice shall-

(a) state the belief regarding the contravention of the Regulations or a condition of the licence and specify the matter constituting the contravention or making it likely that the contravention will arise, as the case may be;

(b) specify the steps that have to be taken to remedy the contravention or avoid the contravention, as the case may be; and

(c) specify the time limit within which the steps described under paragraph (b) have to be taken.

12. Any person who contravenes any of the provisions of these Regulations or a condition of the licence after an enforcement notice has been issued under regulation 11-

(a) shall have the licence revoked; and

(b) shall be guilty of an offence and shall be liable upon conviction to a fine not exceeding two thousand penalty units or imprisonment for a period not exceeding three years or to both.

(As amended by Act No. 13 of 1994) Penalties

FIRST SCHEDULE

PRESCRIBED FORMS

(Regulations 3, 4, 5 and 6)

REPUBLIC OF ZAMBIA

Environmental Council

Form WP 1

The Water Pollution Control (Effluent and Waste Water) Regulations

APPLICATION TO DISCHARGE EFFLUENT

(Regulation 3)

(To be completed in Triplicate)

To: The Chief Inspector (Pollution Control)

Environmental Council

P.O. Box 35131

Lusaka

Name and address of applicant

Location of Plant/Industry

Indicate source of raw water (lake, river, well, common pipe)

Location of raw water (lake, river, etc.)

Raw water demand m³/year

m³/day max

m³/day min

m³/hour max

Water-meter Yes/No

Raw water treatment methods

Raw water quality

pH

Total dissolved solids mg/L

Total suspended solids mg/L

Conductivity US/cm

Is part of raw water used to dilute effluent prior to discharge?

Type of effluent	Discharge	Discharge	Discharge
(cooling, process, municipal, etc.)	min	max	average
	m3/day	m3/day	m3/year

Point of entry of effluent into water course/aquatic environment

WASTE WATER QUALITY

A. Physical

1. Temperature (thermometer) C
2. Colour (hazen units) Hazen Units
3. Odour and Taste
(threshold odour number)
4. Turbidity (NTU scale) NTU

5. Total suspended solid
(gravimetric method) mg/L
 6. Settleable matter sedimentation
in 2 hours (imhoff funnel) mg/L
 7. Total dissolved solids (evaporation
@105c and gravimetric method) mg/L
 8. Conductivity (electrometric method) US/cm
- B. Bacteriological
9. Total coliform/100 ml
(membrane filtration method)
 10. Faecal coliform/100 ml
(membrane filtration method)
 11. Algae/100 ml
(colony counter) cells
- C. Chemical
12. pH (0-14 scale) (electrometric method)
 13. Dissolved oxygen mg oxygen/Litre
(modified winkler method
and membrane electrode method) mg/L
 14. Chemical oxygen demand
(COD) (dichromat method) mg/L
 15. Biochemical oxygen demand (BOD)
(modified winkler method and
membrane electrode method) mg/L
 16. Nitrates (NO₃ as nitrogen)
(spectrophotometric method and
electrometric method) mg/L
 17. Nitrate (NO₂ as nitrogen/L
(spectrophotometric

	sulphanilamide)	mg/L	
18.	Organic nitrogen (spectrophotometric method N-Kjeldal)	mg/L	
19.	Ammonia and ammonium (total) (NH ₃ as N/L) (nesslerization method and electrometric method)	mg/L	
20.	Cyanides (spectrophotometric method)		mg/L
21.	Phosphorous (total) (PO ₄ as P/L) (colorimetric method)	mg/L	
22.	Sulphates (turbidimetric method)		mg/L
23.	Sulfite (iodometric method)	mg/L	
24.	Sulphide (iodometric and electrometric method)	mg/L	
25.	Chlorides Cl/L (silver nitrate and mercuric nitrate)	mg/L	
26.	Active chloride Cl ₂ /L iodometric method)	g/L	
27.	Active bromine (Br ₂ /L)	mg/L	
28.	Fluorides F/L (electrometric method and colorimetric method with distillation)	mg/L	
C. Metals			
29.	Aluminum compounds (atomic absorption method)	mg/L	
30.	Antimony (atomic absorption method)	mg/L	

31. Arsenic compounds (atomic absorption method) mg/L
32. Barium compounds (water soluble concentration) (atomic absorption method) mg/L
33. Beryllium salts and compounds (atomic absorption method) mg/L
34. Boron compounds (spectrophotometric method) mg/L
35. Cadmium compounds (atomic absorption method) mg/L
36. Chromium Hexavalent, Trivalent (atomic absorption method) mg/L
37. Cobalt compounds (atomic absorption method) mg/L
38. Copper compounds (atomic absorption method) mg/L
39. Iron compounds (atomic absorption method) mg/L
40. Lead compounds (atomic absorption method) mg/L
41. Magnesium (atomic absorption method and flame photometric method) mg/L
42. Manganese (atomic absorption method) mg/L
43. Mercury (atomic absorption method) mg/L
44. Molybdenum (atomic absorption

	method)	mg/L	
45. Nickel	(atomic absorption method)	mg/L	
46. Selenium	(atomic absorption method)	mg/L	
47. Silver	(atomic absorption method)		mg/L
48. Thallium	(atomic absorption method)	mg/L	
49. Tin compounds	(atomic absorption method)		mg/L
50. Vanadium compounds	(atomic absorption method)		mg/L
51. Zinc compounds	(atomic absorption method)		mg/L
D. Organics			
52. Total hydrocarbons	(chromatographic method)		mg/L
53. Oils (mineral and crude)	(chromatographic method and gravimetric method)		mg/L
54. Phenols (steam distillable)	(non-steam distilled) (colorimetric method)		mg/L
55. Fats and saponifiable oils	(gravimetric method and chromatography method)		mg/L
56. Detergents	(atomic) (atomic absorption spectrophometric)		mg/L

57. Pesticides and PCB's (total)

(chromatographic method) mg/L

58. Trihaloforms (chromatographic) mg/L

E. Radioactive Materials

59. Radioactive materials No discharge Not permitted

specified by Inter- accepted

national Atomic

Energy Agency

Other specify

Type of waste water treatment facilities (settling, filtering, chemical)

Treatment

efficiency % suspended solids BOD COD phosphate

No. 1 Method

No. 2 Method

No. 3 Method

Any other information

Date.....Signature

Designation/Title

FOR OFFICE USE ONLY

Application received

Fee paid

Chief Inspector (Pollution Control)

Environmental Council

Inspectorate

REPUBLIC OF ZAMBIA

Environmental Council

Form WP 2

The Water Pollution Control (Effluent and Waste Water) Regulations

APPLICATION TO WITHDRAW WATER FOR TREATMENT OF EFFLUENT

(Regulation 4)

(To be completed in Triplicate)

To: The Chief Inspector (Pollution Control)

Environmental Council

P.O. Box 35131

Lusaka

Name and Address of applicant

Location of plant/industry

Location of raw water (lake, river, etc.)

Raw water demand m³/year

m³/day max

m³/day min

m³/hour max

Water-meter Yes/No

Raw water treatment methods

Raw water quality

PH

Total dissolved solids mg/L

Total suspended solids mg/L

Conductivity US/cm

Type of Effluent Discharge Discharge Discharge

(cooling, process m3/day min m3/day max average

municipal, etc.)

Point of entry of effluent into watercourse/aquatic environment.....

WASTE WATER QUALITY

A. Physical

1. Temperature (thermometer) C
2. Colour (hazen units) Hazen Units
3. Odour and Taste (threshold odour number)
4. Turbidity (NTU scale) NTU
5. Total suspended solids (gravimetric method) mg/L
6. Settleable matter sedimentation in 2 hours (imhoff funnel) mg/L
7. Total dissolved solids (evaporation @ 105 C and gravimetric method) mg/L
8. Conductivity (electrometric method) US/cm

B. Bacteriological

9. Total coliform/100ml (membrane filtration method)

10. Faecal coliform/100 ml

11. Algae/ 100 ml (colony counter)

C. Chemical

12. pH (0-14 scale) (electrometric method)

13. Dissolved oxygen mg oxygen/litre
(modified winkler method and
membrane electrode method) mg/L

14. Chemical oxygen demand (COD)
(dichromat method) mg/L

15. Biochemical oxygen demand (BOD)
(modified winkler method and
membrane electrode method) mg/L

16. Nitrates (NO₃ as nitrogen) (spectrophotometric
method and electrometric
method) mg/L

17. Nitrite (NO₂ as nitrogen/L spectrophotometric
sulphanilamide) mg/L

18. Organic nitrogen (spectrophotometric
method N-Kjeldal) mg/L

19. Ammonia and ammonium (Total)
(NH₃ as N/L)
(nesslerization method) mg/L

Chemical

20. Cyanides (spectrophotometric)
method) mg/L

21. Phosphorous (total) (P₀₄ as P/L)
(colorimetric method) mg/L

22. Sulphates (turbidimetric method) mg/L

23. Sulfite (iodometric method) and

- electrometric method) mg/L
24. Sulphide (iodometric and
electrometric method) mg/L
25. Chlorides Cl/L (silver nitrate and
mercuric nitrate) mg/L
26. Active chloride Cl₂/L (iodometric
method) mg/L
27. Active bromine (Br₂/L) mg/L
28. Flourides F/L (electrometric method
and colorimetric method with
distillation) mg/L
- C. Metals
29. Aluminium compounds (atomic absorption
method) mg/L
30. Antimony (atomic absorption method) mg/L
31. Arsenic compounds (atomic absorption
method) mg/L
32. Barium compounds (water soluble
concentration) (atomic absorption
method) mg/L
33. Beryllium salts and compounds (atomic
absorption method) mg/L
34. Boron compounds (spectrophotometric
method-curcumin method) mg/L
35. Cadmium compounds (atomic absorption
method) mg/L
36. Chromium hexavalent, trivalent (atomic
absorption method) mg/L

37. Cobalt compounds (atomic absorption method) mg/L
38. Copper compounds (atomic absorption method) mg/L
39. Iron compounds (atomic absorption method) mg/L
40. Lead compounds (atomic absorption method) mg/L
41. Magnesium (atomic absorption method and flame photometric method) mg/L
42. Manganese (atomic absorption method) mg/L
43. Mercury (atomic absorption method) mg/L
44. Molybdenum (atomic absorption method) mg/L
45. Nickel (atomic absorption method) mg/L
46. Selenium (atomic absorption method) mg/L
47. Silver (atomic absorption method) mg/L
48. Thallium (atomic absorption method) mg/L
49. Tin compounds (atomic absorption method) mg/L
50. Vanadium compounds (atomic absorption method) mg/L
51. Zinc compounds (atomic absorption method) mg/L
- D. Organic
52. Total hydrocarbons (chromatographic method) mg/L
53. Oils (mineral and crude) (chromatographic method and

Gravimetric method) mg/L

54. Phenols (steam distillable) (non-steam distilled) (colorimetric method) mg/L

55. Fats and Saponifiable oils (gravimetric method and chromatographic method) mg/L

56. Detergents (atomic) (atomic absorption spectrophotometric method) mg/L

57. Pesticides and PCB's (total) (Chromatographic method) mg/L

58. Trihaloforms (Chromatographic) mg/L

E. Radioactive Materials

59. Radioactive material as No discharge Not permitted
 specified by International accepted
 Atomic Energy Agency
 Other specify

Type of waste water treatment facilities (settling, filtering, chemical)

Treatment

Efficiency %	Suspended solids	BOD	COD	Phosphate
No. 1 Method				
No. 2 Method				
No. 3 Method				
Any other information				

Date.....
..... Signature

Designation/Title

FOR OFFICE USE ONLY

Application received.....
Fee Paid

Chief Inspector (Pollution Control)

Environmental Council

Inspectorate

REPUBLIC OF ZAMBIA

Environmental Council

Form WP 3

The Water Pollution Control (Effluent and Waste Water) Regulations

LICENCE TO DISCHARGE EFFLUENT

(Regulation 5)

Licence No

Name

Address

You are hereby licensed to discharge effluent at

...

....

The licence is valid from

19.....

The licence is subject to the following conditions

Date:

Chief Inspector (Pollution Control)

Environmental Council

Inspectorate

REPUBLIC OF ZAMBIA

Environmental Council

Form WP 4

The Water Pollution Control (Effluent and Waste Water) Regulations

LICENCE TO WITHDRAW WATER FOR TREATMENT OF EFFLUENT

(Regulation 6)

Licence No

Name

Address

You are hereby licensed to withdraw water for the treatment of effluent from

quantity

This licence is valid from 19.....

to 19.....

This licence is subject to the following conditions:

Date

Chief Inspector (Pollution Control)

Environmental Council

Inspectorate

SECOND SCHEDULE

(Regulations 3 and 4)

PRESCRIBED FEES

Fee units

Application for licence to discharge effluent

(a) city council, municipal councils and industries 555.5

(b) district councils 277.7

Application for licence to withdraw water for treatment of effluent 833.3

(As amended by S.I. No. 133 of 1996)

THIRD SCHEDULE

(Regulation 5 (2))

TABLE OF STANDARDS (LIMITS) FOR EFFLUENT AND WASTE WATER

Column 1 Column 2

PARAMETER EFFLUENT AND WASTE WATER INTO

AQUATIC ENVIRONMENT

A. Physical

1. Temperature

(thermometer) 40 degreesC at the point of entry

2. Colour (hazen units) 20 Hazen units

3. Odour and taste Must not cause any deterioration

(threshold odour in taste or odour as compared with
number) natural state

4. Turbidity (NTU scale) 15 Nephelometer turbidity units

5. Total suspended solids 100 mg/L Must not cause formation

(gravimetric method) of sludge or scum in receiving
water

6. Settleable matter 0.5 mg/L in two hours must not

sedimentation in cause formation of sludge in

2 hours (Imhoff receiving water
funnel)

7. Total dissolved solids 3000 mg/L the TDS of waste water
(evaporation < 105°C must not adversely affect surface
and gravimetric water
method)

8. Conductivity 4300 US/cm
(electrometric
method)

B. Bacteriological

9. Total coliform/100 ml 25,000
(membrane filtration
method)

10. Faecal coliform/100 ml 5000
(membrane filtration
method)

11. Algae/100 ml 1000 cells

C. Chemical

12. pH (0-14 scale) (electrometric
method) 6.0-9.0

13. Dissolved oxygen mg oxygen/Litre 5 mg/L after complete mixing
(modified winkler method and extreme temperature may
membrane electrode method) result in lower values

14. Chemical oxygen demand COD based on the limiting
(COD) (dichromat method) values for organic carbon 90
mg O₂/L average for 24 hours a

15. Biochemical oxygen demand 50 mg/L O₂ (mean value over a
(BOD) (modified winkler 24 hour period) According

method and membrane to circumstances in relation to
electrode method) self to the self cleaning
capacity of the waters

16. Nitrates NO₃ as nitrogen) The nitrates burden must be
(spectrometric method reduced as far as possible
and electrometric method according to circumstances>
water course 50 mg/L lakes 20 mg/L

17. Nitrite (NO₂ as nitrogen/L
spectrophotometric
sulphanilamide) 2.0 mg NO₂ as N/L

18. Organic nitrogen (spectro
photometric method
N-Kjeldal) (*the % of
nutrient elements for
degradation of BOD should
be 0.4-1% for phosphorous
(different for processes
using algae) 5.0 mg/L Mean*

Column 1 Column 2

PARAMETER EFFLUENT AND WASTE WATER INTO

AQUATIC ENVIRONMENT

19. Ammonia and ammonium The burden of ammonium salts
(Total) (NH₃ as N/L) must be reduced to 10 mg/L
(nesslerization method (depending upon temperature,
and electrometric method) pH and salinity)

20. Cyanides (spectropho
tometric method) 0.2 mg/L

21. Phosphorous (total) (P₀₄ Treatment installation located
as P/L) (colorimetric in the catchment area of lakes:

- method) 1.0 mg/L; located outside the catchment area: reduce the load of P as low as possible (P04=6 mg/L)
22. Sulphates (turbidimetric method) The sulphate burden must be reduced to 1500 mg/L
23. Sulfite (iodometric method) 1.0 mg/L (presence of Oxygen Changes S03 to S04)
24. Sulphide (iodometric and electrometric method) 0.1 mg/L (depending on temperature, pH and dissolved O2)
25. Chlorides Cl/L (silver nitrates and mercuric nitrate) 800 mg/L
26. Active chloride Cl2/L (iodometric method) 0.5 mg/L
27. Active bromine (Br2/L) 0.1 mg/L
28. Fluorides F/L (electrometric method and colorimetric method with distillation) 2.0 mg/L
- C. Metals
29. Aluminium compounds (atomic absorption method) 2.5 mg/L
30. Antimony (atomic absorption method) 0.05 mg/L
31. Arsenic compounds (atomic absorption method) 0.5 mg/L
32. Barium compounds (water

- soluble concentration)
(atomic absorption method) 0.5 mg/L
33. Beryllium salts and
compounds (atomic
absorption method) 0.5 mg/L
34. Boron compounds (spectro-
photometric method-
curcumin method) 0.5 mg/L
35. Cadmium compounds (atomic
absorption method) 0.5 mg/L
36. Chromium Hexavelant,
trivalent (atomic absorption
method) 0.1 mg/L
37. Cobalt compounds (atomic
absorption method) 1.0 mg/L
38. Copper compounds (atomic
absorption method) 1.5 mg/L
39. Iron compounds (atomic
absorption method) 2.0 mg/L
40. Lead compounds (atomic
absorption method) 0.5 mg/L
41. Magnesium (atomic
absorption method and
flame photometric method) 500 mg/L
42. Manganese (atomic
absorption method) 1.0 mg/L
43. Mercury (atomic absorption
method) 0.002 mg/L

Column 1 Column 2

PARAMETER EFFLUENT AND WASTE WATER INTO

AQUATIC ENVIRONMENT

44. Molybdenum (atomic
absorption method) 5.0 mg/L

45. Nickel (atomic absorption
method) 0.5 mg/L

46. Selenium (atomic absorption
method) 0.02 mg/L

47. Silver (atomic absorption
method) 0.1 mg/L

48. Thallium (atomic absorption
method) 0.5 mg/L

Metals

49. Tin compounds (atomic
absorption method) 2.0 mg/L

50. Vanadium compounds
(atomic absorption method) 1.0 mg/L

51. Zinc compounds (atomic
absorption method) 10.0 mg/L

D. Organics

52. Total hydrocarbons
(chromatographic method) 10.0 mg/L

53. Oils (mineral and crude)
(chromatographic method
and gravimetric method) 5.0 mg/L

54. Phenols (steam distillable) 0.2 mg/L
(non-steam distilled) 0.05 mg/L

(colorimetric method)

55. Fats and saponifiable oils

(gravimetric method and

chromatographic method) 20.0 mg/L

56. Detergents (atomic) (atomic

absorption spectro- 2.0 mg/L

photometric) (detergents should contain at

least biodegradable

compounds)

57. Pesticides and PCB's (total)

(chromatographic method) 0.5 mg/L

58. Trihaloforms (chromato-

graphic) 0.5 mg/L

E. Radioactive Materials

59. Radioactive materials No discharge Not permitted

as specified by accepted

international atomic

energy agency

(As amended by S.I. No. 177 of 1993 and No. 133 of 1996)

SECTIONS 37, 46 AND 96-THE AIR POLLUTION CONTROL
(LICENSING AND EMISSION STANDARDS) REGULATIONS

Regulations by the Minister Statutory Instrument
141 of 1996
24 of 1997

1. These Regulations may be cited as the Air Pollution Control (Licensing and Emission Standards) Regulations, and shall come into effect on the expiration of a period of ninety days after publication in the Gazette. Title and commencement

2. In these Regulations, unless the context otherwise requires- Interpretation

"Council" means the Environmental Council established by section three of the Act;

"emission" means the discharge into the atmosphere of a pollutant from a specified source in solid, liquid or gaseous state;

"emission limit" means the limit, level, rate, amount or concentration of a given substance discharged in the air that must not be exceeded;

"imission" means pollutants in solid, liquid or gaseous state that are present in the air outside a plant on the surface of the ground, approximately one and a half metres above ground level;

"Inspectorate" means the Environmental Inspectorate established under section eighty-one of the Act;

"intermediate emission limit" means an emission limit that is of higher levels than the long term emission limit, but is in the interim acceptable to the Inspectorate;

"long term emission limit" means an emission limit that is the ultimate acceptable limit;

"licence" means a licence to emit air pollutants into the ambient air issued under these Regulations;

"operator" in relation to works, industry, undertaking or business means the person having the control of the works, undertaking or business; and

"permit" means a temporary or intermediate permit to discharge air pollutants issued under regulations 8 and 9.

3. The Council shall, in accordance with the guidelines set out in the First Schedule, assess the quality of ambient air in order to safeguard the general health, safety or welfare of persons, animal life, plant life or property affected by the works, industrial or business activities undertaken by an operator. Ambient air quality guidelines

4. (1) The long term emission limits shall be as set out in the Third Schedule. Long term emission limits

(2) The long term emission limits shall-

(a) apply to any new plant, undertaking or process that is emitting air pollutants; and

(b) be complied with by an operator of any new plant, undertaking or process before a licence under regulation 6 is issued by the Inspectorate.

(3) The Inspectorate may determine the period of time within which an operator of a plant, undertaking or process shall meet the long term emission limit.

5. (1) Any person who intends to erect or install a new industrial plant, undertaking or process which is likely to cause air pollution shall-Application for licence to emit air pollutants

(a) register with the Inspectorate during the planning stages;

(b) apply for a licence in Form AP1 set out in the Second Schedule; and

(c) pay the appropriate fee set out in the Fourth Schedule.

(2) The application for a licence made under sub-regulation (1) shall be

submitted to the Inspectorate at least six months prior to the commencement of new operations.

(3) Any person operating an existing plant, undertaking or process that conforms to the long term emission limits shall-

- (a) apply for a licence in Form AP1 set out in the Second Schedule; and
- (b) pay the appropriate fee set out in the Fourth Schedule.

(4) The application for a licence made under sub-regulation (3) shall be submitted to the Inspectorate within twelve months after the commencement of these Regulations.

6. (1) The Inspectorate shall issue a licence to discharge air pollutants in Form AP2 set out in the Second Schedule-Licence to emit air pollutants

(a) after taking into account the details specified in section forty-five of the Act; and

(b) if the Inspectorate has published its intention to issue the licence by notice in the Gazette, twenty-eight days before the issue of the licence.

(2) The licence to discharge air pollutants shall-

(a) conform to the long-term emission limits set out in the Third Schedule; and

(b) be subject to such other conditions as the Inspectorate may determine.

(3) The licence issued under sub-regulation (1) shall be valid for thirty-six months and may be renewed for a further period:

Provided that the Inspectorate may limit the validity of the licence for any period less than thirty-six months but not less than six months when necessary.

7. (1) Any person who intends to make a new extension to an existing plant, undertaking or process as described under section forty-four of the Act, which is likely to cause air pollution shall-Application for licence for new sources of emissions

(a) notify the Inspectorate during the planning stages;

(b) apply for a licence in Form AP5 as set out in the Second Schedule; and

(c) pay the appropriate fee set out in the Fourth Schedule.

(2) The application for a licence for new sources of emissions shall be submitted to the Inspectorate at least six months prior to the commencement of operations.

8. (1) The Inspectorate shall issue a licence for a new source of emission in Form AP6 set out in the Second Schedule if-Licence for new sources of emissions

(a) it is satisfied that the details set out in section forty-five of the Act have been met by the applicant; and

(b) the new source of emission conforms to the long-term emission limits set out in the Third Schedule.

(2) A licence issued under sub-regulation (1) shall be valid for thirty-six months and may be renewed for a further period.

Provided that the Inspectorate may limit the validity of the licence for any period less than thirty-six months but not less than six months when necessary.

9. (1) The intermediate emission limits shall be determined by the Inspectorate on the basis of the details set out in sub-regulation (2) of regulation 11. Intermediate emission limits

(2) The intermediate emission limits specified under sub-regulation (1) shall apply to any existing plant, undertaking or process that commenced its activities before the commencement of these Regulations.

10. An owner or operator of an industrial plant, undertaking or process who, before the commencement of these Regulations, is emitting air pollutants or who the Inspectorate so requires, shall within twelve months from the commencement of these Regulations-Application for permit to emit air pollutants

(a) apply for a permit in Form AP3 set out in the Second Schedule; and

(b) pay the appropriate fee set out in the Fourth Schedule.

11. (1) The Inspectorate shall issue a permit to discharge air pollutants in Form AP4 set out in the Second Schedule-Permit to emit air pollutants

(a) after taking into account the details set out in section forty-five of the Act;

(b) if the applicant undertakes to comply with conditions specified under sub-regulation (2); and

(c) if the Inspectorate has published its intention to issue the permit by notice in the Gazette twenty-eight days before the issue of the permit.

(2) The permit to discharge air pollutants shall be subject to intermediate emission limits and such conditions specified for a particular period of time, as may be determined by the Inspectorate on the basis of-

(a) the age and technology of the plant;

(b) the ability of the operator to install cleaning equipment; and

(c) such other facts as the inspectorate may consider necessary;

(3) The permit shall be valid for such period as may be determined by the Inspectorate.

12. (1) The Inspectorate shall consider an application for a licence or a permit within ninety days after the receipt of the application, and shall notify the applicant of its decision. Period for consideration of licence or permit

(2) If a licence or permit is not granted, the Inspectorate shall, in the notice of refusal, state the reasons for the refusal.

13. An applicant aggrieved with the decision of the Inspectorate under regulation 12, may appeal to the Council, within fourteen days of the decision. Appeals

14. (1) The holder of a licence or permit under these Regulations shall-General conditions of licence or permit

(a) install, at the holder's expense, air measuring devices, collect such samples and conduct such analyses as the Inspectorate may direct;

(b) operate an internal air emission monitoring system, approved by the Inspectorate of the licenced or permitted activities;

(c) submit monthly emission returns, together with a declaration testifying that the entries are correct; and

(d) report immediately, to the Inspectorate any abnormal emissions.

(2) The returns referred to in paragraph (b) of sub-regulation (1) shall be submitted to the Inspectorate on or before the thirtieth day of the month following the month to which they relate, or as may be directed by the Inspectorate.

15. A person shall not conduct any open air burning of any waste from industrial, commercial operations, domestic or community activities except with the written consent of the Inspectorate. Restriction against open air burning

16. (1) Where the Inspectorate has reasonable cause to believe that a person has contravened any of the provisions of these Regulations, or any condition of a licence or permit, or is likely to contravene any or the provisions of these Regulations or a condition of a licence or permit, the Inspectorate shall serve an enforcement notice on that person. Enforcement notice

(2) An enforcement notice served under sub-regulation (1) shall-

(a) state the provisions or condition of the licence or permit, as the case may be, which have been contravened or are likely to be contravened;

(b) specify the steps to be taken to remedy the contravention or avoid the contravention, as the case may be; and

(c) specify the time limit within which the steps described under paragraph

(b) should be taken.

(3) Any person who contravenes any of the provisions of these Regulations or a condition of a licence or permit after an enforcement notice has been issued under this Regulation shall be guilty of an offence and shall-

(a) have the licence or permit revoked; and

(b) be liable upon conviction to the penalty specified under section ninety-one of the Act.

(As amended by S.I. No. 24 of 1997)

FIRST SCHEDULE

(Regulation 3)

TABLE OF GUIDELINE LIMITS FOR AMBIENT AIR POLLUTANTS

PARAMETER	REFERENCE TIME	GUIDELINE LIMIT
1. Sulphur dioxide (SO ₂)	10 minutes	500 mg/m ³
2. Sulphur dioxide (SO ₂) in combination with total suspended particles (TSP)*1 and (PM ₁₀)	24 hours	125 mg/m ³
36 months	50 mg/m ³	TSP 24 hours 120 mg/m ³
3. Respirable particulate matter (PM ₁₀ *2)	24 hours	70 mg/m ³
4. Oxides of nitrogen (NO _x)	1 hour	400 mg/m ³
24 hours	150 mg/m ³	5. Carbon monoxide (CO)
15 minutes	100 mg/m ³	30 minutes 60 mg/m ³
1 hour	30 mg/m ³	8 hours 10 mg/m ³
6. Ambient Lead (Pb)	3 months	1.5 mg/m ³
12 months	1.0 mg/m ³	7. Dust fall
30 days	7.5 tonnes/km ²	

*1. Total suspended particles (TSP) are particles with diameter less than 45 micrometers (mm).

*2. Respirable particles (PM₁₀) are particles with diameter less than 10 micrometers (mm). These can penetrate to the ancilliated regions of the deep lung.

Note: Reference time are the 98th percentile averaging times.

SECOND SCHEDULE

FORM AP1

SECOND SCHEDULE

(Regulations 5 and 6)

PRESCRIBED FORMS

REPUBLIC OF ZAMBIA

ENVIRONMENTAL COUNCIL

THE AIR POLLUTION CONTROL (LICENSING AND EMISSION STANDARDS)
REGULATIONS, 1996

APPLICATION FOR LICENCE TO EMIT AIR POLLUTANTS

(To be completed in triplicate)

CATEGORY: (A) New plant, undertaking or process

(B) Existing plant, undertaking or process meeting long-term emission
limits

(Delete inapplicable)

To: The Chief Inspector (Pollution Control)
Environmental Council of Zambia
P.O. Box 35131
Lusaka

1. Name and address of applicant:

.....Tel:.....
.....Fax:

2. Location of plant/activity

3. Type(s) of activity (e.g. copper mining, cement manufacture etc.)

4. Name(s) of department(s) section(s) unit(s) where air emission occur

5. Name(s) and type(s) of raw materials used in the process(es)

6. Amount of each raw material used yearly (kg)

7. Name(s) and types of products

8. Sources of air emissions

9. Name(s) and type(s) of air pollutants

10. Rate of emission of each air pollutant discharged into the ambient air (kg/h. ton/yr)

11. Concentration of each air pollutant discharged into the ambient air (mg/m³, mg/m³, ppm etc.)

12. Energy source used (e.g. coal, diesel etc.)

13. Amount of each energy source used yearly (kg)

14. Amount of each energy source used per day (kg)

15. Type of production operation (continuous or intermittent)

16. Total number of hours of operation (per day, per week, per month, per year)

17. Number of stacks in operation
18. Physical stack height for each (m)
19. Stack gas volume for each (m³/s. m³/h)
20. Internal stack diameter at gas exit level for each (m)
21. Stack gas exit temperature for each (°C)
22. Exit gas velocity at each stack (m/s)
23. Pollution control technology in operation/to be employed
24. Reliability of the pollution control technology

25. How often do you conduct maintenance of the installation?

26. When was/were the plant(s)/process(es) installed?
27. Expected life time of the plant(s)/installation(s)
28. How is the potential to produce other air pollutants? Name the pollutants

LEVELS OF EMISSIONS (complete parts only relevant to your organisation)

Industry/process	Parameter	Emission level
------------------	-----------	----------------

COPPER PRODUCTION

- | | | |
|-----------------------------|------------------------------------|-------------------------|
| 29. Smelters and converters | sulphur dioxide (SO ₂) |mg/Nm ³ |
| | dust |mg/Nm ³ |

- 30. Coal preparation dustmg/Nm3
- 31. Ore concentrator dryer dustmg/Nm3
(SO2)mg/Nm3

CEMENT AND LIME PRODUCTION

- 32. Cement production dustmg/Nm3
- 33. Lime production dustmg/Nm3

NITRIC ACID AND SULPHURIC ACID PRODUCTION

- 34. Nitric acid production (NOx) as (NO2)kg/day
- 35. Sulphuric acid production (SO2)kg/day

FERTILIZER PRODUCTION

- 36. Ammonium nitrate production dustkg/day
- 37. Coal treatment dustkg/day
- 38. NPK production dustkg/day

COMBUSTION UNITS

- 39. Oil fired, <\<>50 (MW (1)) dustmg/Nm3
(SO2)mg/Nm3
COmg/Nm3
- 40. Coal fired, <\<>10 (MW (2)) dustmg/Nm3
(SO2)mg/Nm3
COmg/Nm3
- 41. Coal fired, 10-50 (MW (2)) dustmg/Nm3
(SO2)mg/Nm3
COmg/Nm3

OTHER PROCESSES/UNITS

.....
.....

Name Signature

Designation/title.....
..... Date:

(1) The limits shall be normalised to 273K at 101.3Pa and 3 vol,% (O2)

(2) The limits shall be normalised to 273K at 101.3Pa and 7 vol,% (O2)

FOR OFFICIAL USE ONLY

Application	
received.....	Fee
paid	

Chief Inspector (Pollution Control) Environmental Council of Zambia Inspector

FORM AP2

(Regulation 6)

REPUBLIC OF ZAMBIA

ENVIRONMENTAL COUNCIL

THE AIR POLLUTION CONTROL (LICENSING AND EMISSION STANDARDS)
REGULATIONS, 1996

LICENCE TO EMIT AIR POLLUTANTS

(To be completed in triplicate)

CATEGORY: (A) New plant, undertaking or process

(B) Existing plant, undertaking or process meeting long-term emission
limits
(Delete inapplicable)

Licence No.

Name:

Address:

You are hereby licenced to discharge emissions into the ambient air at
(location)

The licence is valid from.....to

The licence is subject to the attached conditions and long-term emission limits
set out in the Regulations.

Date:

Chief Inspector (Pollution Control) Environmental Council of Zambia Inspectorate

FORM AP3

PRESCRIBED FORMS

REPUBLIC OF ZAMBIA

ENVIRONMENTAL COUNCIL

THE AIR CONTROL (LICENSING AND EMISSION STANDARDS)
REGULATIONS, 1996

APPLICATION FOR LICENCE TO EMIT AIR POLLUTANTS

(Regulation 10)

(To be completed in triplicate)

To: The Chief Inspector (Pollution Control)
Environmental Council of Zambia
P.O. Box 35131
Lusaka

1. Name and address of applicant:

.....Tel:.....
.....Fax:

2. Location of plant/activity

3. Type(s) of activity (e.g. copper mining, cement manufacture etc.)

4. Name(s) of department(s) section(s) unit(s) where air emission occur

5. Name(s) and type(s) of raw materials used in the process(es)

6. Amount of each raw material used yearly (kg)

7. Name(s) and types of products

8. Sources of air emissions

9. Name(s) and type(s) of air pollutants

10. Rate of emission of each air pollutant discharged into the ambient air (kg/h. ton/yr)

11. Concentration of each air pollutant discharged into the ambient air (mg/m³, µg/m³, ppm etc.)

12. Energy source used (e.g. coal, diesel etc.)

13. Amount of each energy source used yearly (kg)

14. Amount of each energy source used per day (kg)

15. Type of production operation (continuous or intermittent)

16. Total number of hours of operation (per day, per week, per month, per year)

17. Number of stacks in operation
18. Physical stack height for each (m)
19. Stack gas volume for each (m³/s. m³/h)
20. Internal stack diameter at gas exit level for each (m)

21. Stack gas exit temperature for each (°C)
22. Exit gas velocity at each stack (m/s)
23. Pollution control technology in operation/to be employed
24. Reliability of the pollution control technology

25. How often do you conduct maintenance of the installation?

26. When was/were the plant(s)/process(es) installed?
27. Expected life time of the plant(s)/installation(s)
28. How is the potential to produce other air pollutants? Name the pollutants

LEVELS OF EMISSIONS (complete parts only relevant to your organisation)

Industry/process	Parameter	Emission level
------------------	-----------	----------------

COPPER PRODUCTION

- | | | | |
|-----|-------------------------|------------------------------------|-------------------------|
| 29. | Smelters and converters | sulphur dioxide (SO ₂) |mg/Nm ³ |
| | | dust |mg/Nm ³ |
| 30. | Coal preparation | dust |mg/Nm ³ |
| 31. | Ore concentrator dryer | dust |mg/Nm ³ |
| | | (SO ₂) |mg/Nm ³ |

CEMENT AND LIME PRODUCTION

- | | | | |
|-----|-------------------|------|-------------------------|
| 32. | Cement production | dust |mg/Nm ³ |
| 33. | Lime production | dust |mg/Nm ³ |

NITRIC ACID AND SULPHURIC ACID PRODUCTION

- | | | | |
|-----|---------------------------|--|-------------|
| 34. | Nitric acid production | (NO _x) as (NO ₂) |kg/day |
| 35. | Sulphuric acid production | (SO ₂) |kg/day |

FERTILIZER PRODUCTION

- | | | | |
|-----|-----------------------------|------|-------------|
| 36. | Ammonium nitrate production | dust |kg/day |
|-----|-----------------------------|------|-------------|

37. Coal treatment dustkg/day

38. NPK production dustkg/day

COMBUSTION UNITS

39. Oil fired, 50 MW (1) dustmg/Nm3

(SO2)mg/Nm3

COmg/Nm3

40. Coal fired, 10 MW (2)) dustmg/Nm3

(SO2)mg/Nm3

COmg/Nm3

41. Coal fired, 10-50 MW (2) dustmg/Nm3

(SO2)mg/Nm3

COmg/Nm3

OTHER PROCESSES/UNITS (SPECIFY)

.....
.....

Name Signature

Designation/title

.....

Date:

(1) The limits shall be normalised to 273K at 101.3Pa and 3 vol,% (O2)

(2) The limits shall be normalised to 273K at 101.3Pa and 7 vol,% (O2)

FOR OFFICIAL USE ONLY

Application
received.....
Fee paid

Chief Inspector (Pollution Control) Environmental Council of Zambia Inspector

FORM AP4

REPUBLIC OF ZAMBIA

ENVIRONMENTAL COUNCIL

THE AIR POLLUTION CONTROL (LICENSING AND EMISSION STANDARDS)
REGULATIONS, 1996

PERMIT TO EMIT AIR POLLUTANTS

(Regulation 11)

(To be completed in triplicate)

Permit No.

Name:

Address:

You are hereby permitted to discharge emissions into the ambient air at
(location)

The permit is valid
from.....to

The permit is subject to the attached conditions and intermediate emission
limits.

Date:

Chief Inspector (Pollution Control) Environmental Council of Zambia Inspectorate

FORM AP5

REPUBLIC OF ZAMBIA

PRESCRIBED FORMS

ENVIRONMENTAL COUNCIL

THE AIR CONTROL (LICENSING AND EMISSION STANDARDS)
REGULATIONS, 1996

APPLICATION FOR LICENCE FOR NEW SOURCES OF AIR EMISSIONS

(Regulation 7)

(To be completed in triplicate)

To: The Chief Inspector (Pollution Control)
Environmental Council of Zambia
P.O. Box 35131
Lusaka

1. Name and address of applicant:

.....Tel:.....
.....Fax:

2. Location of plant/activity

3. Type(s) of activity (e.g. copper mining, cement manufacture etc.)

4. Name(s) of department(s) section(s) unit(s) where air emission occur

5. Name(s) and type(s) of raw materials used in the process(es)

6. Amount of each raw material used yearly (kg)

7. Name(s) and types of products

8. Sources of air emissions

9. Name(s) and type(s) of air pollutants

10. Rate of emission of each air pollutant discharged into the ambient air (kg/h. ton/yr)

11. Concentration of each air pollutant discharged into the ambient air (mg/m³, µg/m³, ppm etc.)

12. Energy source used (e.g. coal, diesel etc.)

13. Amount of each energy source used yearly (kg)

14. Amount of each energy source used per day (kg)

15. Type of production operation (continuous or intermittent)
16. Total number of hours of operation (per day, per week, per month, per year)

17. Number of stacks in operation
18. Physical stack height for each (m)
19. Stack gas volume for each (m³/s. m³/h)
20. Internal stack diameter at gas exit level for each (m)
21. Stack gas exit temperature for each (°C)

22. Exit gas velocity at each stack (m/s)
23. Pollution control technology in operation/to be employed
24. Reliability of the pollution control technology
25. How often do you conduct maintenance of the installation?
26. When was/were the plant(s)/process(es) installed?
27. Expected life time of the plant(s)/installation(s)
28. How is the potential to produce other air pollutants? Name the pollutants

LEVELS OF EMISSIONS (complete parts only relevant to your organisation)

Industry/process	Parameter	Emission level
------------------	-----------	----------------

COPPER PRODUCTION

- | | | | |
|-----|-------------------------|------------------------------------|-------------------------|
| 29. | Smelters and converters | sulphur dioxide (SO ₂) |mg/Nm ³ |
| | | dust |mg/Nm ³ |
| 30. | Coal preparation | dust |mg/Nm ³ |
| 31. | Ore concentrator dryer | dust |mg/Nm ³ |
| | | (SO ₂) |mg/Nm ³ |

CEMENT AND LIME PRODUCTION

- | | | | |
|-----|-------------------|------|-------------------------|
| 32. | Cement production | dust |mg/Nm ³ |
| 33. | Lime production | dust |mg/Nm ³ |

NITRIC ACID AND SULPHURIC ACID PRODUCTION

- | | | | |
|-----|---------------------------|--|-------------|
| 34. | Nitric acid production | (NO _x) as (NO ₂) |kg/day |
| 35. | Sulphuric acid production | (SO ₂) |kg/day |

FERTILIZER PRODUCTION

- | | | | |
|-----|-----------------------------|------|-------------|
| 36. | Ammonium nitrate production | dust |kg/day |
| 37. | Coal treatment | dust |kg/day |

38. NPK production dustkg/day

COMBUSTION UNITS

39. Oil fired, 50 MW (1) dustmg/Nm3

(SO2)mg/Nm3

COmg/Nm3

40. Coal fired, 10 MW (2) dustmg/Nm3

(SO2)mg/Nm3

COmg/Nm3

41. Coal fired, 10-50 MW (2) dustmg/Nm3

(SO2)mg/Nm3

COmg/Nm3

OTHER PROCESSES/UNITS (SPECIFY)

.....
.....

Name Signature

Designation/title.....

..... Date:

(1) The limits shall be normalised to 273K at 101.3Pa and 3 vol,% (O2)

(2) The limits shall be normalised to 273K at 101.3Pa and 7 vol,% (O2)

FOR OFFICIAL USE ONLY

Application received Fee
paid.....

Chief Inspector (Pollution Control)
Environmental Council of Zambia
Inspector

FORM AP6

REPUBLIC OF ZAMBIA

ENVIRONMENTAL COUNCIL

THE AIR POLLUTION CONTROL (LICENSING AND EMISSION STANDARDS)
REGULATIONS, 1996

LICENCE FOR NEW SOURCES OF AIR EMISSION

(Regulation 8)

(To be completed in triplicate)

Licence No.

Name:

Address:

You are hereby licenced to discharge emissions from your new sources of
emissions into the ambient air at
(location)

The licence is valid from.....to

The licence is subject to the conditions and long-term emission limits set out
in these Regulations and such other conditions the inspectorate may determine.

Condition

Date:

Chief Inspector (Pollution Control)
Environmental Council of Zambia
Inspectorate

THIRD SCHEDULE

(Regulation 4)

TABLE OF LONG-TERM EMISSION LIMITS FOR AIR POLLUTIONS BY TYPE OF INDUSTRY/PROCESS

Industry/Process	Parameter	Long-Term Emission Limit
A. COPPER PRODUCTION		
1. Smelters and Converters	Sulphur dioxide (SO ₂)	1000 mg/Nm ³
	dust	50 mg/Nm ³
2. Coal preparation	dust	50 mg/Nm ³
3. Concrete dryer	dust	50 mg/Nm ³
	(SO ₂)	500 mg/Nm ³
4. Heavy metal content in dust	arsenic (As)	0.5 mg/Nm ³
	cadmium (Cd)	0.05 mg/Nm ³
	copper (Cu)	1.0 mg/Nm ³
	lead (Pb)	0.2 mg/Nm ³
	mercury (Hg)	0.05 mg/Nm ³
B. CEMENT AND LIME PRODUCTION		
1. Cement production	dust	50 mg/Nm ³
2. Lime production	dust	50 mg/Nm ³
C. NITRIC ACID AND SULPHURIC ACID PRODUCTION		
1. Nitric acid production	NO _x as (NO ₂)	100-1,400 kg/day
2. Sulphuric acid production	(SO ₂)	700-4,300 kg/day
D. FERTILISER PRODUCTION		
1. Ammonium nitrate production	dust	500 kg/day
2. Coal treatment	dust	150 kg/day
3. NPK production	dust	100 kg/day
E. COMBUSTION UNITS		
1. Oil fire, <50 [MW (2)]	dust	50-150 mg/Nm(3)

(SO2) 850 mg/Nm3

(CO2) 100 mg/Nm3

2. Coal fired, <10 [MW (2)] dust 150 mg/Nm3

(SO2) 2000 mg/Nm3

3. Oil fired, <10-50 [MW (2)] dust 50 mg/Nm3

(SO2) 1000 mg/Nm3

CO 175 mg/Nm3

F. OTHER PROCESS

NOTES

1. The limits are normalised to 273K, 101.3 Pa and 3 Vol,-% (O2)

2. The limits are normalised to 273K, 101.3 Pa and 7 Vol,-% (O2)

3. More strict limits for light oil, less strict for heavy oil. Smaller combustion units need limits less strict than larger units. For this reason the Inspectorate will prescribe limits based on this range on a case to case basis.

4. CO limits are not necessary for oil combustion units <5 MW and coal combustion units <1 MW.

FOURTH SCHEDULE

(Regulations 5, 8 and 10)

FEEES

Fee units

Application for permit or licence to emit air pollutants for activities:

CLASS III (High Polluters) 25,000

CLASS III (Moderate Polluters) 16,667

CLASS III (Relatively Low Polluters) 8,333

CLASS IV (Low Polluters) 556

SECTIONS 6 AND 96-THE ENVIRONMENTAL PROTECTION AND POLLUTION CONTROL
(ENVIRONMENTAL IMPACT ASSESSMENT) REGULATIONS

Regulations by the Minister Statutory Instrument
28 of 1997

PART I PRELIMINARYPART I

PRELIMINARY

1. These Regulations may be cited as the Environmental Protection and Pollution Control (Environmental Impact Assessment) Regulations. 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 regulation 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 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" includes 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; and

"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 BRIEFSPART 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 environmental 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-

(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 will 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. Preparation of project brief

5. (1) A developer shall submit six copies of the project brief to the Council. Submission of project brief to 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.

6. (1) The Council shall consider the project brief and the comments received. Consideration of project brief and decision by Council

(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 PART III

ENVIRONMENTAL IMPACT STATEMENT

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. Decision that an environmental impact statement be prepared

(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 environmental impact statement and conduct of environmental 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.

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 community 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 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.

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. Contents of environmental impact statement

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 STATEMENTPART 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 considered appropriate.

16. (1) The Council shall-Public consultations

(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; and

(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.

17. (1) The Council shall consider an environmental impact statement and all the comments received under regulations 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). 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 shall enable it to make a fair and just decision; or

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

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

(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 preparation 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 suitable 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.

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

public hearing

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 COUNCILPART 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-Criteria for decisions

- (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; and
- (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.

21. The Council shall take into account the whole review process and issue a decision letter stating that-Decisions of Council and issues of decision letter

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

22. (1) In issuing its decision letter the Council shall, as the case may be-Reasons and conditions of decision

- (a) provide reasons for any rejection; 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

23. A decision of the Council under this Part shall be communicated to all parties concerned, within fifteen days of the decision.Communication of 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 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 rejects a claim that any information is proprietary, the Council shall request the developer to communicate, in writing, to the Council, where 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.

PART VII POST-ASSESSMENT ENVIRONMENTAL AUDITS PART VII

POST-ASSESSMENT ENVIRONMENTAL AUDITS

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. Preparation of an environmental audit

(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 prepared 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 measures to be taken following an environmental audit. Role of 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 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-Need for additional environmental information

(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.

(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. Issues of decision letter

PART IX PENALTIESPART IX

PENALTIES

34. (1) Any person who-Offences and penalties

(a) fails to prepare and submit a project brief to the Council under regulation 3;

(b) fails to prepare and submit an environmental impact statement under regulations 7, 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 regulation 25;

(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.

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 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 statements, 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

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 commencement 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 5 Ha or more or sites covering 700 dwellings and above.

(b) Establishment of industrial estates.

(c) Establishment or expansion of recreational areas such as golf courses, 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 5 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 m³/s.

(c) Water supply-reservoir surface area 50 m² 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 2 Ha 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 50 Ha 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 output 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 of 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 surrounding areas.
 - (ii) Possibility of multiple use.
5. Water
- (i) Effects on surface water quality and quantity.
 - (ii) Effects on underground water quality and quantity.
 - (iii) 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).

FOURTH SCHEDULE

(Regulation 9(4))

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, desalinisation, 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 of 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 36)

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.

REPUBLIC OF ZAMBIA

THE ACTIONS FOR SMOKE DAMAGE (PROHIBITION)
(REPEAL) ACT

CHAPTER 205 OF THE LAWS OF ZAMBIA

CHAPTER 205 THE ACTIONS FOR SMOKE DAMAGE (PROHIBITION) (REPEAL) ACTCHAPTER 205

THE ACTIONS FOR SMOKE DAMAGE (PROHIBITION) (REPEAL) ACT

CHAPTER 205

THE ACTIONS FOR SMOKE DAMAGE (PROHIBITION) (REPEAL) ACTAct
21 of 1996

An Act to repeal the Actions for Smoke Damage (Prohibition) Act.

[28th June, 1996]

1. This Act may be cited as the Actions for Smoke Damage (Prohibition) (Repeal) Act.Short title
2. The Actions for Smoke Damage (Prohibition) Act is hereby repealed.Repeal of Cap. 327 of the old edition

REPUBLIC OF ZAMBIA

THE RENT ACT

CHAPTER 206 OF THE LAWS OF ZAMBIA

CHAPTER 206 THE RENT ACTCHAPTER 206

THE RENT ACT

ARRANGEMENT OF SECTIONS

Section

1. Short title
2. Interpretation