GOVERNMENT OF ZAMBIA

STATUTORY INSTRUMENT NO. 112 OF 2013

The Environmental Management Act
(Act No. 12 of 2011)

The Environmental Management (Licensing) Regulations, 2013

ARRANGEMENT OF REGULATIONS

Copies of this Statutory Instrument can be obtained from the Government Printer, P.O. Box 30136, 10101, Lusaka, Price K60.50 each

PART IV
HAZARDOUS WASTE

PART V
PESTICIDES AND TOXIC SUBSTANCES

Part VI
OZONE DEPLETING SUBSTANCES

IN EXERCISE of the powers contained in sections *forty-three* and *one hundred* and *thirty-four* of the Environmental Management Act, 2011, and in consultation with the Agency, the following Regulations are hereby made:

Title

1. These Regulations may be cited as the Environmental Management (Licensing) Regulations, 2013.

Interpretation

2. In these Regulations, unless the context otherwise requires—

" Agency " means the Zambia Environmental Management Agency provided for under section *seven* of the Act;

" banned chemical " means a chemical—

(a) whose uses in all categories are prohibited by regulatory action in order to protect human health, animal or plant life or the environment; and

(b) that is denied approval for first-time use or is withdrawn by industry from the domestic market or from further consideration in the approval process;

" Board " means the Board of the Agency established under section *eleven* of the Act;

" bunding " means an upraised area surrounding the floor of a warehouse to contain any spillage and washing from pesticides or toxic substances and from cleaning water of the pesticides and toxic substances;

" calculated levels " in relation to—

(a) an imported or exported controlled substance, means the quantity of the controlled substance; or

(b) a group of controlled substances set out in the Fourteenth Schedule imported or exported during a given period, means the sum of the calculated levels of importation of the controlled substances within the group during that period determined in accordance with the formula specified under regulation 43;

" chemical " means an industrial toxic substance, pesticide, fertiliser or a chemical substance in a complex mixture or preparation, manufactured or derived from nature or in any other form;

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

" child " means a person below the age of eighteen years;

" chlorofluorocarbon (CFC) " means a fully halogenated chlorofluorocarbon each molecule of which contains one, two or three carbon atoms;

" collect " means removing waste material for the purpose of disposal;

" construction waste " means waste produced during the construction, alteration, repair or demolition of a structure or rubble, earth, rock and wood that is displaced during the construction, alteration, repair or demolition of the structure;

" contaminant " has the meaning assigned to it in the Act;

" contamination " means the presence in or under any land, site, building or structure of a substance or microorganism above the concentration which is normally present in or under that land, which affects or may affect the quality of soil or the environment adversely;

" controlled substance " means a substance set out in the second column of the Fourteenth Schedule, in pure form or in a mixture, or isomers of the substance, unless otherwise indicated;

" country of import " means the country to which a transboundary movement of hazardous waste is planned or takes place for the purpose of disposal in that country or for the purpose of loading prior to disposal in an area that is not under the jurisdiction of any country;

" date of prohibition " means the date set out in the third column of the Fifteenth Schedule;

"developer" has the meaning assigned to it in the Act;

"Director-General" means the person appointed as such under section *thirteen* of the Act;

" discharge " has the meaning assigned to it in the Act;

" distribute " means the process by which pesticides are supplied through trade channels to local or international markets;

" disposal " means the burial, deposit, discharge, abandoning, dumping, placing or release of waste into or onto air, land or water;

" disposal of hazardous waste " means the storing, handling, processing, treatment, utilisation and final location of hazardous waste;

" disposal site " means the land or water area on which waste disposal facilities are physically located, designated by a local authority and approved by the Agency;

"domestic waste " means waste that emanates from premises used wholly or mainly for residential, educational, health care, sport or recreation purposes, excluding hazardous waste;

" effluent " has the meaning assigned to it in the Act;

" effluent generating entity " means an agricultural scheme, sewerage system, industrial facility, plant or business, undertaking or premises that generates effluent;

" emission " has the meaning assigned to it in the Act;

" emission licence " means a licence issued by the Agency under section *thirty-three* of the Act;

" emission limit " means the maximum limit, level, rate, amount or concentration of a given substance permitted to be discharged into the atmosphere;

" environmentally sound management of waste " means the taking of reasonable and practical steps to ensure that waste or hazardous waste is managed in a manner that protects human health, plant and animal life and the environment against adverse effects from the waste;

" formulation " means the combination of various ingredients designed to render a pesticide useful and effective for the purpose claimed or the form of the pesticide as purchased by users;

" general waste " means domestic waste, trade and commercial waste, construction waste, garden waste or waste that does not pose an immediate hazard or threat to human health, plant and animal life or the environment;

" generator " means a person whose activity produces hazardous waste or if that person is not known, the person who is in possession or control of the hazardous waste;

" halon " means a brominated chemical related to a chlorofluorocarbon used in fire-fighting and has a very high ozone depleting potential;

" hazardous waste " has the meaning assigned to it in the Act;

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

" hazardous waste licence " means a licence issued under sub-section (2) of section *fifty-five* of the Act;

" illegal traffic " means any movement of hazardous waste that takes place without the consent of the Agency;

" incineration " means the oxidation of hazardous waste by burning at high temperature so that it is rendered less harmful or inert with or without the recovery of combustion heat generated;

" industrial waste " means waste generated from industrial activities or mining operations, but excludes hazardous waste;

" inspector " means a person appointed as such under section *fourteen* of the Act;

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

" landfill " means a waste disposal site for the deposit of waste onto or into land, including internal waste disposal sites, but excludes facilities where waste is unloaded in order to permit its preparation for further transport for recovery, treatment or disposal and temporary deposit of waste prior to recovery, treatment or disposal;

" landfilling " means waste disposal on land, by filling in excavations or the creation of a landfill above ground;

" law enforcement officer " means a police officer, customs officer, forest officer or wildlife officer;

" local authority " means a city council, municipal council or district council established under the Local Government Act; Cap. 281

" management " means the handling, separation, collection, transportation, storage, treatment, recycling and disposal of hazardous waste, including the aftercare of disposal sites;

" manufacturer " means a corporation or other entity in the public or private sector or an individual engaged in the business or function, whether directly or through an agent or entity controlled by or under contract with it, of manufacturing a pesticide active ingredient or preparing its formulation or product;

" municipal waste " means waste generated from domestic, trade and commercial activities;

" new pesticide or toxic substance" means a pesticide or toxic substance that is brought into the country for the first time, a pesticide or toxic substance that has undergone a re-formulation, modification or change, or a generic or patented product or pesticide or toxicsubstance that is proposed to be manufactured in Zambia for the first time;

" operator " in relation to hazardous waste, means a person charged with the responsibility of managing a hazardous waste disposal site or facility;

" ozone depleting potential (ODP) " means the ability of a controlled substance to destroy the atmospheric ozone based on atmospheric lifetime, stability and reactivity;

" ozone depleting substance " means a substance listed in the Fourteenth and Fifteenth Schedules;

" ozone layer " has the meaning assigned to it in the Act;

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

"packaging material" means the material with which the container of pesticides or toxic substances is made;

" personal protective equipment " means any clothes, material or device designed to provide protection when handling or applying pesticides or toxic substances;

" pesticide " has the meaning assigned to it in the Act;

" pesticide and toxic substance licence " means the licence issued under section *sixty-five* of the Act;

" pollutant " has the meaning assigned to it in the Act;

" pollution " has the meaning assigned to it in the Act;

" pretreatment or treatment " in relation to hazardous waste, means the physical, chemical or biological processes, including sorting, that change the characteristics of the waste in order to reduce its volume or hazardous nature, facilitate its handling or enhance recovery;

" receiving country " means the country to which a transboundary movement of hazardous waste is planned or takes place for the purpose of disposal in that country or for the purpose of loading prior to disposal in an area that is not under the jurisdiction of any country;

" reclaimed " in respect of a controlled substance, means recovered, reprocessed and upgraded through filtering, drying, distillation or chemical treatment in order to restore the controlled substance to industrial accepted reuse standards;

" recovered " in respect of a controlled substance, means—

(a) collected after the substance has been used; or

(b) collected from machinery, equipment or a container during servicing or before the disposal of the machinery, equipment or container;

" recovery " means operations which lead to the possibility of resource recovery, recycling, reclamation, direct reuse or alternative uses;

" recovery " in relation to waste, means the controlled extraction or retrieval of energy from waste;

" recycle " in relation to waste, means to separate and process material from waste for further use as a new product or resource;

" recycled " in relation to a controlled substance, means reused, recovered, cleaned by filtering, drying or reused to recharge equipment;

" refrigerant " means substance, whether part or mixture, that is used as a coolant in a refrigerator, freezer, cold room, de-humidifier, heat pump or an air conditioner;

" re-pack " means to transfer a pesticide from a commercial package into another usually smaller container for subsequent sale;

" restricted chemical " means a chemical for which certain uses within one or more categories is prohibited by regulatory action in order to protect human health, animal or plant life or the environment, but for which certain uses are allowed;

" re-use " in relation to waste, means to use articles from the waste stream for a similar or different purpose without changing the form or properties of the articles;

" severely restricted chemical" means a chemical whose—

(a) uses within one or more categories is prohibited by regulatory action in order to protect human health, animal or plant life or the environment, but for which some specific uses are permitted; or

(b) use is not approved or is withdrawn by industry from the domestic market or from further consideration in the approval process in order to protect human health, animal or plant life or the environment;

" severely restricted pesticide or toxic substance " means a pesticide or toxic substance whose general licensed uses are prohibited but other uses permitted under these Regulations;

" storage " means the accumulation of waste in a manner that does not constitute treatment or disposal of that waste;

" storage of hazardous waste " means the keeping of hazardous waste for a period exceeding three months under conditions that prevent its release to the environment until appropriate recovery, treatment or disposal facilities are provided;

" technician " means a person qualified in ozone friendly technology to service or maintain refrigeration or air conditioning systems and certified by the Agency;

" toxic substance " has the meaning assigned to it in the Act;

" toxicity " means a physiological or biological property which determines the capacity of a substance to injure or harm living organism by means other than mechanical means;

" trade in " means the exchange of hazardous waste with money or any other means of exchange within the Southern African Development Community;

" transboundary movement " means the movement of hazardous waste or other waste from an area under the jurisdiction of one country to or through an area under the jurisdiction of another country, or to or through an area not under the jurisdiction of any country;

" transit country " means a country, other than the country of import or export, through which a transboundary movement of hazardous waste is planned or takes place;

" transportation of hazardous waste " means the movement of hazardous waste from the place of its generation to the storage site or the site of disposal;

" treatment " means a method, technique or process designed to change the physical, biological or chemical character or composition of waste, or to remove, separate, concentrate or recover a hazardous or toxic component of waste or to destroy or reduce the toxicity of the waste in order to minimise the impact of the waste on the environment;

" use " means handling, pest control and fumigation services, spraying or other release of a pesticide or the exposure of human beings, animals or the environment to pesticides;

" waste " has the meaning assigned to it in the Act;

" waste management " means the taking of practical steps to ensure that waste generated from industrial or commercial operations or domestic and community activities is managed in a manner that protects human health, animal and plant life and the environment against the adverse effect which may result from the waste, including transportation of waste water;

" waste management licence " means a licence issued under subsection (1) of section *fifty-five* of the Act;

" wastewater " means water that has been used for domestic, commercial, agricultural, trading or industrial purposes that may cause water pollution when discharged into the aquatic environment; and

" withholding period " means the period between the last application of the pesticide or toxic substance and the harvest of plant products, grazing of treated areas and slaughter of treated animals for food.

PART II
AIR AND WATER POLLUTION

Non-application of Part

3. This Part does not apply to the discharge of a pollutant into a sewer—

(a) within the area of operation of a water utility or local authority, unless the water utility or local authority approves the discharge of the pollutant into the sewer; or

(b) on private property, unless the owner of the sewer approves the discharge of the pollutant into the sewer.

Emission licence

4. (1) A person who intends to emit or discharge a pollutant or contaminant into the environment shall apply to the Agency for an emission licence in Form I set out in the First Schedule.

(2) The Agency shall, within thirty days of receipt of an application under sub-regulation (1), approve the application if the applicant—

(a) has measures and facilities in place to ensure the safe emission or discharge of a pollutant or contaminant into the environment; or

(b) complies with the requirements of the Water Resources Management Act, 2011, if the application relates to pre-heating or treating hazardous waste.

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(3) The Agency shall reject an application for an emission licence if the applicant does not meet the requirements of the Act and these Regulations.

(4) The Agency shall, where it approves an application for an emission licence, issue the licence in Form II set out in the First Schedule.

Emission limits

5. (1) The emission limits shall be as prescribed in the Second Schedule.

(2) The emission limits apply to a plant, undertaking or process that emits air pollutants.

Ambient air quality guidelines

6. The Agency shall, in accordance with the guidelines set out in the Second Schedule, assess the quality of ambient air in order to protect human health, animal or plant life and the environment.

Obligations of holder of emission licence

7. (1) A holder of an emission licence relating to air shall—

(a) comply with the emission limits prescribed in the Second Schedule;

(b) install air measuring devices and pollution control equipment at the plant, undertaking or process that emits air pollutants;

(c) collect such samples and conduct such analysis of the emissions as the Agency may direct for the monitoring of emission levels;

(d) operate an internal air emission monitoring system approved by the Agency;

(e) submit emission returns to the Agency twice a year;

(f) report immediately to the Agency any emissions exceeding the limits prescribed in the Second Schedule; and

(g) take reasonable steps to contain the discharge of emissions to prevent, mitigate or remedy their adverse effects on human health, animal or plant life and the environment.

(2) A holder of an emission licence relating to water shall —

(a) comply with the effluent and waste water standards prescribed in the Third Schedule;

(b) install at the premises, pollution control equipment for the treatment of the effluent or wastewater;

(c) carry out regular effluent or wastewater discharge quality and quantity monitoring and submit records of the monitoring to the Agency twice a year;

(d) employ Best Management Practices (BMPs) to control or abate the discharge of pollutants into the environment;

(e) submit emission returns to the Agency twice a year; and

(f) immediately report to the Agency any abnormal discharge of effluent.

(3) The returns referred to in paragraph *(e)* of subregulation (1) and paragraph *(e)* of sub-regulation (2) shall be submitted to the Agency on or before the fifteenth day of the month following the end of the six month period from the beginning of the year or as directed by the Agency.

(4) The measurements for emissions shall be expressed at standard temperature of twenty-five degrees celsius ($25^{o}C$) and pressure of one hundred and one point three kilo pascals (101.3 kPa).

Classification criteria for effluent

8. The criteria for the classification of effluent and waste water shall be as prescribed in the Fourth Schedule.

Monitoring and minimising contamination by effluent

9. (1) The Agency may order an owner or operator of an effluent generating entity to drill monitoring wells for monitoring the contamination of ground water.

(2) An owner or operator of an effluent generating entity may re-use, recycle and minimise the discharge of effluent into the environment.

(3) An owner or operator of an effluent generating entity shall—

(a) use energyefficient and environmentally sound processes for management of effluent or waste water;

(b) ensure that the control, treatment and monitoring facilities are properly maintained and that they are kept in constant state of repair; and

(c) ensure that operations of discharge of effluent are conducted in a manner that protects human health, animal or plant life and the environment from adverse effects of the effluent or waste water.

PART III
WASTE MANAGEMENT

Non-application of Part

10. (1) This Part does not apply to—

(a) general waste from domestic household of fortyfive kilograms weight or less per week; or

(b) the transportation of construction waste that is not contaminated or mixed with hazardous waste to licensed disposal sites.

(2) The generator of the waste referred to in paragraph *(a)* of sub-regulation (1) shall comply with the waste management requirements prescribed by the local authority in the area.

Restriction against open air burning

11. A person shall not conduct open air burning of waste from industrial, commercial operations or domestic or community activities except with the written consent of the Agency.

Waste management licence

12. (1) A person who intends to reclaim, re-use, recover, recycle, transport, dispose of, transit, trade in, export waste or collect and dispose of waste from industrial, commercial, domestic or community activities or own, construct or operate a waste disposal site or facility for the permanent disposal or storage of waste shall apply to the Agency for a waste management licence in Form III set out in the First Schedule.

(2) The Agency shall, within thirty days of receipt of an application under sub-regulation (1), approve the application if the applicant —

(a) demonstrates technical capacity to reclaim, re-use, recover, transport, trade in, export or recycle waste; and

(b) has measures and facilities in place to ensure the safe reclamation, re-use, recovery or recycling of waste.

(3) The Agency shall, where it approves an application for a waste management licence, issue the licence in Form IV set out in the First Schedule.

Obligations of holder of waste management licence

13. (1) A holder of a waste management licence shall—

(a) keep a record of the licenced activity and submit the record to the Agency twice a year from the commencement of the licensed activities;

(b) prevent the generation of waste or minimise the toxicity and amount of waste generated;

(c) install at the premises, pollution control equipment;

(d) re use, recycle or recover waste;

(e) ensure that generated waste is treated and disposed of in an environmentally sound manner;

(f) ensure environmentally sound management of waste; and

(g) take reasonable measures to prevent the generated waste from being used for an unlawful purpose.

(2) The Agency shall review the monitoring records submitted under sub-regulation (1) in order to ensure compliance with these Regulations.

Recovery, re-use or recycling of waste

14. (1) Unless otherwise specified in these Regulations or any other written law, a person who recovers, re-uses or recycles waste shall ensure that the method of recovery, reuse or recycling the waste

(a) uses less natural resources than required for the disposal of the waste; and

(b) is less harmful to the environment than the disposal of the waste.

(2) The Agency or a local authority may require a person who uses a local authority collection service to separate specified types of waste from the general waste for the purposes of recovery, re use or recycling of the waste.

Monitoring contamination of ground water

15. The Agency may order the owner or operator of a waste management facility to drill monitoring wells for monitoring the contamination of around water.

National Waste Management Strategy

16. (1) The Agency shall, within two years from the commencement of these Regulations and every five years thereafter, review the existing national waste management strategy.

(2) The national waste management strategy shall provide for

(a) the objectives, plans, guidelines, systems and procedures for the protection of the environment, the generation and prevention and minimisation of waste generation, use and environmental sound management of waste;

(b) mechanisms, systems and procedures to give effect to international best practice in waste management;

(c) principles and standards for waste management;

(d) targets for waste reduction;

(e) principles for waste service delivery;

(f) practical measures for achieving cooperative governance in waste management matters;

(g) guidance on raising awareness regarding the impact of waste on human health, animal and plant life and the environment; and

(h) any other matter that the Agency considers necessary for achieving the purposes of the Act.

(3) The national waste management strategy shall be published in the *Gazette* for public

information.

(4) A local authority shall give effect to the national waste management strategy when exercising a power or performing a duty in terms of these Regulations.

(5) The national waste management strategy may

(a) distinguish between geographical areas; and

(b) distinguish between types of waste.

Integrated waste management plan

17. (1) A local authority shall prepare and submit to the Agency, every three years, an integrated waste management plan.

(2) The integrated waste management plan developed under sub-regulation (1) shall—

(a) contain a situation analysis that includes—

(i) a description of the population and development profiles of the area to which the plan relates;

(ii) an assessment of the quantities and types of waste generated in the area; and

(iii) a description of the services provided or available for the collection, recovery, reuse, recycling, treatment and disposal of waste;

(b) set out how the local authority intends to—

(i) identify and address the negative impact of poor waste management practices on human health, animal or plant life and the environment; and

(ii) provide for waste prevention, minimisation, recycling and reuse programmes; and

(iii) address the delivery of waste management services to residential and commercial premises; and

(c) indicate the local authority's priorities and objectives in waste management.

(3) A local authority shall report annually to the Agency on the implementation of its integrated waste management plan in accordance with subsection (2) of section *fifty-six* of the Act.

(4) A local authority may cooperate with another local authority in respect of the provision of joint waste management services.

PART IV
HAZARDOUS WASTE

Application of Part

18. (1) This Part applies to—

(a) the control and monitoring of the generation, collection, storage, transportation, pretreatment, treatment, disposal, export, import, transit, trade in and transboundary movement of the hazardous waste listed in the Fifth Schedule; and

(b) the waste specified in the Sixth Schedule, if that waste exhibits the characteristics found in the Seventh Schedule.

(2) This Part does not apply to municipal, general or industrial waste.

Hazardous waste licence

19. (1) A person who intends to generate, pre-treat, treat, handle, transport, store, dispose of, transit, trade in or export hazardous waste shall apply to the Agency for a hazardous waste licence in Form V set out in the First Schedule.

(2) The Agency shall, within thirty days of receipt of an application under sub-regulation (1), approve the application if the applicant—

(a) demonstrates technical capacity to safely generate, pre-treat, treat, handle, transport, store, dispose of, transit, trade in or export hazardous waste; and

(b) has measures and facilities to ensure the safe generation, pre-treatment, treatment, handling, transportation, storage, disposal of, transit, trade in or export of hazardous waste.

(3) The Agency shall reject an application for a hazardous waste licence if the applicant does not meet the requirements of the Act and these Regulations.

(4) The Agency shall, where it approves an application for a hazardous waste licence, issue the licence in Form VI set out in the First Schedule.

Obligations of holder of hazardous waste licence

20. A holder of a hazardous waste licence shall—

(a) investigate, assess and evaluate the impact of the generated hazardous waste on human health, animal or plant life and the environment;

(b) educate the public of the impact of the hazardous waste on human health, animal or plant life and the environment;

(c) cease, modify or control an act or process generating hazardous waste or causing adverse effects to the environment or harm to human health, animal or plant life;

(d) comply with prescribed hazardous waste management standards and practices;

(e) eliminate any pollution or environmental degradation caused by the hazardous waste;

(f) remedy the effects of the pollution or environmental degradation resulting from the hazardous waste; and

(g) if contamination of the environment occurs, take the relevant steps to prevent any adverse effects from the hazardous waste on the environment and immediately notify the Agency.

Storage of hazardous waste

21. A holder of a hazardous waste licence who stores hazardous waste shall—

(a) monitor the stored hazardous waste to prevent contamination of the environment and submit the results of the monitoring to the Agency as specified in the hazardous waste licence; and

(b) comply with the requirements for storage of hazardous waste prescribed in the Eighth Schedule.

Transportation of hazardous waste

22. The transportation of hazardous waste is subject to the following conditions:

(a) the transporter shall comply with the requirements of the Eighth Schedule;

(b) the transportation shall be undertaken according to approved times on approved routes and in approved vehicles with approved labels;

(c) the transporter shall provide for security and an emergency procedure or plan to deal with any accidental spillage or contamination of the environment;

(d) the transporter shall specify the final destination of the hazardous waste; and

(e) the transporter shall provide adequate insurance security to cover third party liabilities.

Pre-treatment of hazardous waste

23. A holder of a hazardous waste licence pretreating or treating hazardous waste shall—

(a) comply with the requirements of the Nineth Schedule;

(b) keep records of the types, nature and quantities of pretreated or treated hazardous waste;

(c) provide regular reports to the Agency on the activities according to the conditions of the licence;

(d) develop improvement programmes on the operations; and

(e) provide a security and emergency procedure or plan.

Hazardous waste disposal site

24. (1) A hazardous waste disposal site shall be managed in accordance with the guidelines prescribed in the Nineth Schedule.

(2) An operator of a hazardous waste disposal site shall—

(a) obtain adequate insurance or financial security to cover any third party liabilities and compensate victims of an accident from the operation of the disposal site;

(b) ensure that the site is compatible with the landuse and development plans of the relevant local authorities; and

(c) keep and maintain records of the types and quantities of hazardous waste.

Transboundary movement of waste

25. (1) An exporter, importer or transporter who intends to move hazardous waste into or out of the Republic shall notify the Agency in Form VII set out in the First Schedule.

(2) The Agency may conduct regular or random inspections of sites, facilities and cargo and seize any hazardous waste transported contrary to these Regulations or any mode of transportation used contrary to these Regulations.

(3) A transporter or importer who illegally traffics hazardous waste shall transport the hazardous waste back to the country of export at the transporter's or importer's expense.

(4) The Agency shall, where the reexport of illegally trafficked hazardous waste is not practicable, direct the method of disposal for the hazardous waste and the exporter, importer and transporter shall meet the cost of the disposal.

(5) The Agency shall, where any illegally trafficked hazardous waste cannot be attributed to a particular person and reexport is not practicable, dispose of the hazardous waste in accordance with these Regulations.

Importation of hazardous waste

26. The Agency may, upon application by a person, approve the importation of hazardous waste into Zambia if —

(a) the hazardous waste is obtained from a county within the Southern African Development Community;

(b) the hazardous waste will be imported into Zambia for the purpose of reuse, recycling, recovery, pre-treatment and treatment;

(c) the facility to which the hazardous waste is destined has the capacity to re-use, recycle, recover, pre-treat and treat the hazardous waste;

(d) the hazardous waste is not or does not contain radioactive waste or material;

(e) the importer complies with the provisions of the Act; and

(f) the hazardous waste is not a subject of illegal traffic.

Export of hazardous waste

27. The Agency shall, upon application by a person licensed to export hazardous waste, approve the export of the hazardous waste if —

(a) the exporter, through the Agency, obtains the consent of the transit and receiving countries and notifies the Agency in Form VII set out in the First Schedule;

(b) the hazardous waste cannot be reasonably re-cycled, re-used or disposed of locally in a safe and environmentally sound manner;

(c) the receiving country has the necessary facilities, capacity or suitable disposal site to dispose of the hazardous waste in an environmentally sound manner, and has notified the Agency accordingly;

(d) the hazardous waste in question is required as raw material for re-cycling or recovery in specified industries in the receiving country;

(e) the export is in accordance with an agreement or arrangement between the exporter and importer and meets the requirements of the Act and these Regulations;

(f) the exporter of the hazardous waste has taken comprehensive insurance to cover any incidents from Zambia up to the country of destination; and

(g) the labelling, packaging and transportation identified in the notification and movement document for transboundary movement of waste meet the requirements specified in the Eighth Schedule.

Transit of hazardous waste

28. A person who intends to transit hazardous waste through the Republic shall notify the Agency in Form VII set out in the First Schedule.

Labelling and packaging of hazardous waste

29. The labelling and packaging of hazardous waste shall conform to the requirements specified in the Eighth Schedule.

Risk assessment

30. (1) The Agency shall, before authorising the generation, storage, transportation, pretreatment, treatment, export or disposal of hazardous waste conduct a risk assessment.

(2) A person licenced to generate, store, transport, pretreat, treat, export or dispose of hazardous waste shall bear the costs incidental to the requirement under subregulation (1).

PART V
PESTICIDES AND TOXIC SUBSTANCES

Pesticide and toxic substance licence

31. (1) A person who intends to manufacture, import, export, store, distribute, transport, blend, process, re-process or change the composition of a pesticide or toxic substance or re-process an existing pesticide or toxic substance for a new use shall apply to the Agency for a pesticide and toxic substance licence in Form VIII set out in the First Schedule.

(2) The Agency shall, within thirty days of receipt of an application under sub-regulation (1), approve the application if the applicant—

(a) demonstrates technical capacity to manufacture, import, export, store, distribute, transport, blend, process, re-process or change the composition of a pesticide or toxic substance or re-process an existing pesticide or toxic substance; and

(b) has measures and facilities to ensure the safe manufacture, importation, exportation, storage, distribution, transportation, blending, processing, re-processing or changing of the composition of a pesticide or toxic substance or re-processing an existing pesticide or toxic substance.

(3) The Agency shall, where it approves an application for a pesticide and toxic substance licence, issue the licence in Form IX set out in the First Schedule.

Alteration of pesticide or toxic substance

32. A holder of a pesticide or toxic substance licence shall not alter the composition, formulation or usage of the pesticide or toxic substance without the approval of the Agency.

Transportation of pesticide or toxic substance

33. (1) A person shall transport a pesticide or toxic substance as prescribed in the Tenth and Eleventh Schedules.

(2) A driver or person in charge of a vehicle or other conveyance transporting a pesticide or toxic substance shall -

(a) secure the container or package of the pesticide or toxic substance during transportation;

(b) use hazard warning symbols on the vehicle or conveyance which comply with the standards for the classification and labelling of chemicals and the standards on the transportation of dangerous goods prescribed under the Standards Act; and

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(c) be trained in the transportation of dangerous goods and be in possession of the relevant competence certificate at all times during the transportation of the pesticide or toxic substance.

(3) A person shall not transport—

(a) a banned, restricted or severely restricted pesticide or toxic substance without the approval of the Agency; or

(b) a package of a pesticide or toxic substance that is damaged, corroded or is likely to leak.

(4) An owner of a vehicle or conveyance in which a pesticide or toxic substance is transported shall comprehensively insure the vehicle or conveyance transporting the pesticide or toxic substance.

Packaging of pesticides and toxic substances

34. (1) A person shall pack a pesticide or toxic substance in a container or package that—

(a) cannot react chemically or physically with the pesticide or toxic substance it is to contain; and

(b) is capable of preventing the leakage or spillage of the pesticide or toxic substance during handling and transportation.

(2) A person shall not re-pack a pesticide or toxic substance without the approval of the Agency.

(3) A person shall not re-pack, decant or dispense a pesticide or toxic substance into a food or beverage container.

(4) A person may, with the approval of the Agency, re-pack a pesticide or toxic substance into another container if—

(a) the person takes appropriate measures for the safety of any other person who may be at risk from exposure to the pesticide or toxic substance; and

(b) the person makes adequate provision for facilities and qualified personnel to administer first aid or other emergency treatment.

(5) A person re-packing a pesticide or toxic substance shall —

(a) take the necessary precautions in the handling of the pesticide or toxic substance as specified in regulation 36; and

(b) ensure that the persons involved in re-packing are educated on the toxic nature of the pesticide or toxic substance and wear the appropriate personal protective equipment.

Labelling of pesticides and toxic substances

35. (1) A person shall not deal in a pesticide or toxic substance in a container or package without a label or a container or package that has a label which is not approved by the Agency.

(2) A person shall apply for approval of a label for a pesticide or toxic substance in Form X set out in the First Schedule.

(3) The Agency shall, where it approves a label—

(a) endorse its approval on the label; and

(b) keep and maintain a sample of the approved label.

(4) A label shall be affixed on a prominent place on the container or package containing the pesticide or toxic substance.

(5) A pesticide or toxic substance shall not be transported within Zambia to a destination for processing, packing or re-packing for retail without the label affixed in accordance with this regulation.

(6) A person shall not use a label which contains inaccurate or false information relating to the pesticide or toxic substance.

Handling, use and safety

36. (1) A person handling or using a pesticide or toxic substance shall use personal protective equipment if—

(a) the pesticide or toxic substance is in the form of powder, vapour or spray droplets, the container of which bears or is required to bear a label with the word "danger" or "warning";

(b) the application of the pesticide or toxic substance is in a confined place; or

(c) the container of that pesticide or toxic substance bears or is required to bear a label with the word "danger" or "warning".

(2) A person shall not authorise or order the wearing of a respirator when the canister or cartridge in the respirator exceeds the service life specified by the manufacturer.

(3) A child or pregnant woman shall not be employed in the handling of pesticides or toxic substances.

(4) A person shall not eat, drink or smoke whilst handling a pesticide or toxic substance.

Storage of pesticides and toxic substances

37. (1) Pesticides and toxic substances shall be stored in a warehouse in accordance with the Twelveth Schedule.

(2) Pesticides and toxic substances shall be stored outdoors if—

(a) the area is fenced and under lock and key;

(b) the floor of the storage area is made of impervious material and has containment provisions;

(c) hazard and safety signs are displayed at appropriate places in the area;

(d) the pesticides or toxic substances are covered with all weather material; and

(d) the storage area is well ventilated at all times.

Disposal of pesticides and toxic substances

38. A pesticide or toxic substance shall be disposed of in accordance with—

(a) the scheme of disposal submitted with the application for the pesticide or toxic substance licence;

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

(c) the requirements and conditions set out in the Thirteenth Schedule.

Advertising of pesticides and toxic substances

39. (1) A person who intends to advertise a pesticide or toxic substance shall ensure that the advert—

(a) contains statements which are technically justified;

(b) prohibits any other use of the pesticide or toxic substance except those specified on the approved label;

(c) draws attention to the appropriate warning phrases and symbols prescribed in these Regulations;

(d) provides adequate information on correct practices, including the observance of recommended application rates, frequency of applications and pre harvest intervals; and

(e) encourages purchasers and users to read the label carefully or have the label read to them if they cannot read.

(2) An advert of a pesticide or toxic substance made under sub-regulation (1) shall not—

(a) contain any statement or visual presentation that is likely to mislead the public with regard to the safety, nature, composition, suitability for use, official recognition or approval of the pesticide or toxic substance;

(b) use statements such as "safe", "nonpoisonous", "harmless", "nontoxic" or "compatible with Integrated Pest Management (IPM)", without a qualifying phrase such as "when used as directed" except that reference to IPM may be included where validated by the Agency and the claim is qualified accordingly;

(c) contain a statement comparing the risk, hazard or safety of different pesticides or toxic substances;

(d) contain misleading statements relating to the effectiveness of the pesticide or toxic substance;

(e) guarantee or imply a guarantee, such as "more profits with…" or "guarantees high yields", unless the evidence to substantiate such claims is available; and

(f) contain any visual representation of potentially dangerous practices such as mixing or application without sufficient personal protective equipment.

(3) A person advertising a pesticide or toxic substance shall not —

(a) advertise a pesticide which is legally restricted for use by trained or registered operators, unless—

(i) the advert is contained in a journal for trained or registered operators; or

(ii) the advert prominently and clearly states the restricted usage;

(b) market different pesticides, toxic substances or active ingredients or a combination of ingredients under a single brand name;

(c) include in the advert recommendations which are at variance with those of research institutions or advisory agencies; or

(d) misuse research results or quotations from technical and scientific literature to make the claims in the advert appear to have a scientific basis that they do not possess.

(4) A member of staff involved in the sale or promotion of an advertised pesticide or toxic substance shall be adequately trained and possess sufficient technical knowledge to present complete, accurate and valid information on the products sold.

Banned, severely restricted or restricted pesticide or toxic substance

40. (1) The Minister may, on the advice of the Agency, ban, severely restrict or restrict the use or production of a pesticide or toxic substance where the Minister determines that the unregulated use or production of the pesticide or toxic substance is or is likely to be harmful to human health, animal or plant life or the environment.

(2) The Agency shall publish a list of the banned, restricted and severely restricted pesticides and toxic substances in a daily newspaper of general circulation in Zambia within seven days of the ban or restriction.

Part VI
Ozone Depleting Substances

Prohibition of certain activities

41. A person shall not emit into the environment a controlled substance or ozone depleting substance likely to cause an adverse effect to human health, animal or plant life or the environment.

Ozone depleting substance licence

42. (1) The following persons shall apply for a licence under this Part—

(a) an importer, exporter, producer or distributor of a controlled substance or ozone depleting substance;

(b) an importer, exporter, producer or distributor of technology or a product which uses or contains a controlled or zone depleting substance;

(c) a person who services refrigerators, air conditioners, mobile phones or other technology that uses controlled or ozone depleting substances;

(d) a person or an institution servicing fire extinguishers; and

(e) a person or an institution using any controlled or ozone depleting substance.

(2) An application for an ozone depleting substance licence shall be made to the Agency in Form XI set out in the First Schedule.

(3) The Agency shall, within thirty days of receipt of an application under sub-regulation (1), approve the application if the applicant has measures and facilities to ensure the safe—

(a) conduct of an activity that produces or is likely to produce a controlled substance or any other substance likely to deplete the ozone layer; and

(b) importation, exportation, distribution, sale or offer for sale, handling, recycling or reclamation of a substance likely to deplete the ozone layer.

(4) The Agency shall, where it approves an application for an ozone depleting substance licence, issue the licence in Form XII set out in the First Schedule.

Calculated level of controlled substance

43. The calculated level of an imported or exported controlled substance or ozone depleting substance shall be determined in accordance with the following formula:

I x ODP, where—

(a) I is the quantity imported or exported during that period; and

(b) ODP is the ozone depleting potential for the controlled substances set out in the third column of the Fourteenth Schedule.

Sale, importation or exportation of controlled substance after date of prohibition

44. (1) Subject to sub-regulation (2), a person shall not use, sell, offer for sale, distribute, import, export or in any manner deal with a controlled substance or a product containing a substance within a group set out in the Fifteenth Schedule on or after the date of prohibition set out in the last column of the Fifteenth Schedule in respect of that substance.

(2) Subregulation (1) does not apply to—

(a) controlled substance or ozone depleting substance that was imported before the date of its prohibition; or

(b) a recovered, recycled, reclaimed, or used controlled substance or ozone depleting substance imported or exported with the authority of the Agency.

Prohibition of exportation or importation of certain air conditioners

45. (1) A person shall not export or import an air conditioner containing or designed to use a controlled substance or ozone depleting substance.

(2) A person shall not import a vehicle fitted with an air conditioner or refrigeration unit unless the vehicle's cooling unit is fitted with chlorofluorocarbon (CFC) free coolant.

Aerosol products

46. (1) Subject to subregulation (2), from the date of entry into force of these Regulations, a person shall not import any aerosol product which uses a chlorofluorocarbon as a gas or a propellant.

(2) Subregulation (1) shall not apply to a medical aerosol.

Retrofitting refrigeration containing controlled substance

47. A person shall not retrofit refrigeration or air conditioning equipment with a chlorofluorocarbon.

Fire-fighting services

48. (1) A person shall not use any halon in fire fighting.

(2) A person shall not sell or re-fill any fire-fighting equipment with a halon.

Labelling

49. An importer, producer, distributor, seller or exporter shall not import, produce, distribute, sell, export or in any manner deal with a product or other material containing an ozone depleting substance unless—

(a) the product or material containing the ozone depleting substance is labelled with the words "Not ozone friendly" or "ozone depleting"; or

(b) the substance is sealed in a package or other material to avoid any leakage and labelled as determined by the Agency.

Customs

50. (1) A person who imports a controlled substance or ozone depleting substance or product containing a controlled substance or ozone depleting substance shall provide a copy of the ozone depleting substance licence to an authorised officer at the port of entry or exit.

(2) A person who imports or exports any product shall tender the product to the Agency for certification whether the product contains or is made of a controlled substance.

(3) An authorised officer shall inspect and certify whether the controlled substance imported into or exported out of Zambia is in accordance with these Regulations.

(4) An authorised officer or law enforcement officer shall seize any controlled substance exported or imported contrary to these Regulations.

(5) The seized controlled substance shall be disposed of by an authorised officer in accordance with the guidelines set by the Agency.

PART VII
GENERAL PROVISIONS

Personal protective equipment

51. (1) A holder of a pesticide and toxic substance licence, waste management licence or a hazardous waste licence shall provide appropriate personal protective equipment to an employee exposed to pollution from the—

(a) manufacture, blending, processing, re-processing or storage of a pesticide or toxic substance;

(b) use, sale, distribution or transportation of a pesticide or toxic substance;

(c) importation, transit or exportation of a pesticide or toxic substance; or

(d) handling of waste or hazardous waste.

(2) The personal protective equipment referred to in sub-regulation (1) shall include the following—

(a) acid resistant or chemical resistant overalls or dust coatswith buttons to the neck;

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

(c) Polyvinyl Chloride (PVC) gloves;

(d) Polyvinyl Chloride (PVC) aprons;

(e) rubber boots;

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

(g) face shields; and

(h) any other appropriate personal protective equipment.

(3) An employee to whom personal protective equipment is provided under sub-regulation (1) shall maintain the personal protective equipment in sanitary and proper conditions.

(4) An employer shall, where there is any spillage during the activities specified in sub-regulation (1), provide the following to clean up the spillage:

(a) absorbent material (saw dust, sand, earth, powdered lime) or any other absorbent;

(b) washing detergent;

(c) brooms;

(d) shovels and spades;

(e) funnels; and

(f) any other cleaning material or apparatus.

(5) An employer shall, where a self- contained breathing apparatus is to be used by an employee, ensure that only persons with the relevant training and experience use the self-contained breathing apparatus.

Notice of arrival, possession, assignment or expiry of product

52. (1) A notice of arrival, possession, assignment or expiry of a pesticide, toxic substance, ozone depleting substance, pollutant, hazardous waste or waste shall be in Form XIII set out in the First Schedule.

(2) A notice of arrival referred to in sub- section (1) shall be lodged with the Agency ninety days before the arrival of the pesticide, toxic substance, ozone depleting substance, pollutant, hazardous waste or waste.

Notice of rejection of application

53. The Agency shall, where it rejects an application for a licence, inform the applicant of the rejection in Form XIV set out in the First Schedule.

Validity period of licence

54. Subject to regulation 60, a licence shall be valid for three years and may be renewed for a like period.

Amendment of licence

55. (1) An application to amend a licence shall be made to the Agency in Form XV set out in the First Schedule.

(2) The Agency shall, where it rejects an application for the amendment of a licence—

(a) inform the applicant of the rejection in Form XIV set out in the First Schedule; and

(b) endorse the rejection on the licence.

(3) The Agency shall, where it approves an application for the amendment of a licence, endorse the approval on the licence.

Surrender of licence

56. (1) A licensee who decides not to continue with the activity to which the licence relates shall agree with the Agency on the terms and conditions of the surrender of the licence.

(2) A licence surrendered under sub-regulation (1) shall lapse and, subject to regulation 60, be cancelled.

Change in particulars of licence

57. (1) A licensee shall, where there is a change in the particulars of the licensee or the licence, notify the Agency, in writing, within fourteen days of the change.

(2) The Agency shall, on receipt of the notice referred to in sub-regulation (1), amend the licence accordingly.

(3) The Agency shall, where it identifies an error on the Register of Licences relating to any particulars of a licence, inform the licensee and amend the licence accordingly.

Transfer of licence

58. (1) A licensee shall not transfer the licence to a third party without the prior approval of the Agency.

(2) An application for approval to transfer a licence shall be in Form XVI set out in the First Schedule.

(3) An application for approval to transfer a licence shall be—

(a) made by the transferor at least six months before the expiry of the licence; and

(b) accompanied by an application for the relevant licence made by the prospective transferee.

(4) The Agency shall, within thirty days of receipt of an application under sub-regulation (2), approve the application if the transferor meets the requirements of the Act and these Regulations.

(5) The Agency shall reject an application for approval to transfer a licence if the transferor does not meet the requirements of the Act and these Regulations.

(6) The Agency shall, where it approves an application to transfer a licence, endorse the approval on the licence.

Renewal of licence

59. (1) A licensee may apply for the renewal of the licence in Form XVII set out in the First Schedule.

(2) An application for the renewal of a licence shall be made six months before the expiry of the licence.

(3) The Agency shall, within ninety days of receipt of an application under sub-regulation (1), approve the application and renew the licence if the applicant meets the requirements of the Act and these Regulations.

(4) The Agency shall, where it approves an application under sub-regulation (3), endorse the renewal on the licence.

(5) The Agency shall reject an application for the renewal of a licence if the applicant does not meet the requirements of the Act and these Regulations.

Suspension or cancellation of licence

60. (1) Subject to the provisions of the Act and these Regulations, the Agency may suspend or cancel a licence if—

(a) the holder obtained the licence by fraud or deliberate or negligent submission of false information or statement;

(b) the holder contravenes the terms and conditions of the licence, the Act or any other relevant written law;

(c) the holder fails to maintain any required records for purposes of the Act; or

(d) the holder fails to submit annual returns.

(2) The Agency shall, before suspending or cancelling a licence in accordance with sub-regulation (1), give notice to the holder thereof of its intention to suspend or cancel the licence in Form XVIII set out in the First Schedule.

(3) The Agency shall not suspend or cancel a licence under this regulation if the holder takes remedial measures to the satisfaction of the Agency within the period specified in the notice referred to in sub-regulation (2).

(4) Where a holder of a licence who is notified under sub-regulation (2) fails to show cause to the satisfaction of the Agency or does not take any remedial measures within the time specified in the notice, the Agency shall suspend or cancel the licence and notify the holder in Form XIX set out in the First Schedule.

(5) Where a licence is cancelled, the holder of the licence shall return it to the Agency and the Agency shall cancel the licence and record accordingly in the Register of Licences.

(6) Subject to sub-regulation (7), a person whose licence is cancelled may re-apply for a licence in the relevant form set out in the First Schedule if that person takes remedial measures to the satisfaction of the Agency.

(7) An application for a new licence may be made after one year from the date of the cancellation of the licence.

Order to cease operation or activity

61. An inspector who intends to order the cessation of an operation or activity causing adverse effects to the environment or which poses or is likely to pose adverse effects to human health, animal or plant life shall make the order in Form XX set out in the First Schedule.

Notice of seizure

62. An inspector who seizes and obtains any substance, material, matter, vehicle, aircraft, boat or other conveyance shall furnish the Agency with a report of the seizure in Form XXI set out in the First Schedule.

Receipt for removal of document, matter etc

63. (1) An inspector who removes from an industrial facility, plant, undertaking, business or premises for purposes of examination and safeguarding, any document, matter, material, substance or article that has a bearing on an investigation shall issue a receipt for the item removed to the owner or person in control of the industrial facility, plant, undertaking, business or premises.

(2) A receipt for the removal of a document, matter, material, substance or article under sub-regulation (1) shall be in Form XXII set out in the First Schedule.

Site restoration order

64. (1) The Director-General may serve a site restoration order on a person, in accordance with section *sixty* of the Act, requiring that person to remove waste and restore the site specified in the order to a condition satisfactory to the Director-General.

(2) A site restoration order shall be issued in Form XXIII set out in the First Schedule.

Prevention order

65. The Director-General may serve a prevention order in Form XXIV set out in the First Schedule on a person who is or will be conducting an activity or is or will be in possession or control of a substance or thing that my result in an adverse effect on human health, plant or animal life or the environment.

Protection order

66. The Director-General shall, where it is necessary for purposes of conserving, protecting and enhancing the environment serve a protection order in Form XXV set out in the First Schedule on the persons specified in subsection (1) of section *one hundred* and *four* of the Act.

Environmental restoration order

67. Where there is a discharge of a contaminant or pollutant into the environment in an amount, concentration or manner that poses a risk to human health, animal or plant life or that causes or has the potential to cause adverse effects on the environment, an inspector shall serve an environmental restoration order on any of the persons stipulated in subsection (1) of section *one hundred* and *five* of the Act in Form XXVI set out in the First Schedule.

Compliance order

68. The Director-General shall, where there are reasonable grounds to believe that any condition of a licence has been breached, serve a compliance order in Form XXVII set out in the First Schedule requiring the licensee to remedy the breach.

Cost order

69. Where a person fails to comply with a requirement in an order, licence or approval issued under the Act and the Director-General causes the Agency to take the required measures, the Director-General shall issue a cost order in Form XXVIII set out in the First Schedule, requiring the person on whom the cost order is served to reimburse the Agency for the cost of taking the measures.

Notice of issuance of conditional order

70. (1) An inspector shall, where a court makes a conditional order in accordance with section *one hundred* and *twenty-nine* of the Act, within thirty days from the date of the order, cause a notice of the order to be published in at least three issues of a daily newspaper of general circulation in the place where the offence was committed.

(2) A notice of issuance of a conditional order shall be in Form XXIX set out in the First Schedule.

Notice of intention to apply for court order

71. (1) An inspector who intends to make an application to the court for an order to prohibit the carrying out of activities set out in section *one hundred* and *thirty-one* of the Act, on specified premises, shall give the owner or occupier of the premises seven days' notice of the intention to make the application to court.

(2) A notice of intention to apply for a court order under sub-regulation (1) shall be in Form XXX set out in the First Schedule.

Installation of metering device

72. The Agency may order a licensee tov install, at the expense of the licensee, at such place as may be specified in the order, such metering devices and to take samples and analyse them as the Agency may direct.

Register of Licences

73. The Agency shall keep and maintain a Register of Licences issued under the Act.

Offences

74. A person who—

(a) conducts open air burning of waste or any other material or substance without the written consent of the Agency;

(b) fails or neglects to withdraw from sale or any other use, a pesticide or toxic substance within six months of the date of its ban or restriction;

(c) exports a pesticide or toxic substance which is banned, restricted or severely restricted, without the approval of the Agency or in contravention of the terms and conditions of the ban or restriction;

(d) fails to comply with a condition of a licence issued under the Act;

(e) provides to the Agency false information in an application required under the Act; or

(f) contravenes a provision of these Regulations;

commits an offence and is liable, upon conviction, to a fine not exceeding two hundred thousand penalty units or to imprisonment for a period not exceeding two years, or to both.

Fees

75. The fees set out in the Sixteenth Schedule shall be the prescribed fees for the matters set out therein.

Revocation of specified statutory instruments

76. The Regulations set out in the Seventeenth Schedule are revoked.

FIRST SCHEDULE

(*Regulations* 4,12, 19, 25 27, 28, 31, 35, 42, 52, 53, 55, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70 and 71)

PRESCRIBED FORMS

FORM I
(*Regulation* 4(1))

THE ZAMBIA ENVIRONMENTAL MANAGEMENT AGENCY

The Environmental Management Act, 2011
(Act No. 12 of 2011)

The Environmental Management (Licensing) Regulations, 2013

APPLICATION FOR AN EMISSION LICENCE

Please complete in block letters	Shaded fields for official use only	Licence Code	
		Date and Time	

	Information Required	*Information Provided*	√
1.	*(a)* Type of Activity *(b)* Name(s) of applicant(s) *(c)* Certificate of incorporation No. (if applicable)		
2.	Type of facility		
3.	Notification address *(a)* Telephone No. *(b)* Fax No. *(c)* Email address		
4.	Name and title of contact person authorised to represent the applicant: *(a)* Telephone No. *(b)* Fax: *(c)* E-mail		
5.	Area to be licenced	*(a)* *(b)* *(c)* *(d)* *(e)*	
6.	**Appendices** (attach the following information where applicable)		
	Appendix 1	Returns	
	Appendix 2	EIA report	
	Appendix 3	Name and qualifications of the person responsible for compliance with the Act and the conditions of the licence	
	Appendix 4	Documentary proof that the residents of the area surrounding the proposed emission site were notified of the applicant's intention to apply for an emission licence in a daily newspaper of general circulation in Zambia, after seven days from the date of the notification.	
	Appendix 5	Emergency Preparedness Plan	

	Appendix 6 — Environmental Management Plans	
	Request for confidentiality of information (tick) Yes ……..... No ……..… Reasons:…….....	
7.	Endorsement by local authority (if applicable): ……	

SECTION A

Requirements Relating to Emission to Air

CATEGORY (tick) (A) New plant, undertaking or process ☐

(B) Existing plant, undertaking or process ☐

1.	Type (s) of activity (e.g. mining, quarrying, metallurgical processes, waste incineration, thermal power generation etc)	
2.	Name(s) of department(s)/ section(s)/ unit(s) where air emissions occur	
3.	Name(s) and type(s) of raw materials used in the process(es)	
4.	Amount of each raw material used yearly (kilograms, litres, tons, cubic metres)	
5.	Name(s) and types of products	
6.	Sources (unit or process operation) of air emissions	
7.	Name(s) and type(s) of air pollutants	
8.	Rate of emission of each air pollutant discharged	
9.	into the ambient air (kg/h, ton/yr, mg/Nm^3, m^3/day,) Concentration of each air pollutant discharged into the ambient air (µg/m^3, mg/m^3, ppm, etc)	
10.	Energy source used (e.g. coal, diesel, etc)	
11.	Amount of each energy source used daily or yearly (kg, ton)	
12.	Type of production operation (continuous or intermittent)	
13.	Total number of hours of operation (per day, per week, per month, per year)	
14.	Number of air emission stacks in operation	
15.	Physical air emission stack height for each (m)	
16.	Air emission stack gas volume for each (m^3/s, m^3/h)	
17.	Internal air emission stack diameter at gas exit level for each (m)	
18.	Air emission stack gas exit temperature for each (°C)	
19.	Exit gas velocity at each air emission stack (m/s)	
20.	Pollution control technology in operation/to be employed	
21.	Reliability of the pollution control technology	
22.	Frequency of maintenance of the pollution control installation	
23.	Year of installation of Plant(s)/ Unit (s)	
24.	Expected life time of the Plant(s)/ installation(s)	
25.	List other potential air pollutants other than those mentioned in 9	

	LEVELS OF EMISSIONS (Complete Parts only relevant to your facility)		
	Industry/process	**Parameter**	**Emission level**
	COBALT AND COPPER PRODUCTION		
26.	Smelter, roasters and converters	Sulphur (SO_2)mg/Nm^3	
		Dust	mg/Nm^3
		Heavy metals (Lead, Cobalt, Arsenic, Cadmium, Mercury etc	mg/Nm^3
		Uranium associated activity	
		CO	mg/Nm^3
		CO_2	mg/Nm^3
		NO_x	mg/Nm^3
27.	Leach Plants	Acid mist	mg/l
28.	Coal preparation	Dust	mg/Nm^3
29.	Ore concentrate dryer	Dust	mg/Nm^3
		SO_2	mg/Nm^3
	CEMENT AND LIME PRODUCTION		
30.	**Cement Production**	Dust	mg/Nm^3
		CO	mg/Nm^3
		CO_2	mg/Nm^3
		SO_2	mg/Nm^3
		NO_x	mg/Nm^3
31.	**Lime Production**	Dust	mg/Nm^3
		CO	mg/Nm^3
		CO_2	mg/Nm^3
		SO_2	mg/Nm^3
		NO_x	mg/Nm^3
32.	**Manganese Production**	Dust	mg/Nm^3
		Manganese	mg/Nm^3
		CO_2	mg/Nm^3
		SO_2	mg/Nm^3
		NO_x	mg/Nm^3
	NITRIC ACID AND SULPHURIC ACID PRODUCTION		
33.	Nitric acid production	NO_x	kg/day
34.	Sulphuric acid production	H_2S	kg/day
		Particulate matter	kg/day
		SO_2	kg/day

	FERTILIZER PRODUCTION		
35.	Ammonium nitrate production	Dust NO_x	kg/day
	Coal treatment	Dust NO_x	kg/day
	NPK production	Dust NO_x	kg/day
	COMBUSTION UNITS		
36.	Oil fired, < 50MW(1)	Dust SO_2 CO	mg/Nm^3 mg/Nm^3 mg/Nm^3
37.	Coal fired, <10MW(2)	Dust SO_2 CO	mg/Nm^3 mg/Nm^3 mg/Nm^3
38.	Coal fired, 10-50 MW(2)	Dust SO_2 CO	mg/Nm^3 mg/Nm^3 mg/Nm^3
	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 by *Fee paid*

…… ……

Date *Director-General*
Zambia Environmental Management Agency

OFFICAL STAMP

SECTION B

Effluent discharge (Effluent)

Requirements relating to discharge to water

1.0	Type(s) of activity (e.g. sewage treatment, food processing, mining, metallurgical processes, tanneries, brewing, etc)	
1.1	Location (i) Describe the physical location of the facility (and state the zone, i.e., industrial, commercial, residential, etc) (ii) Describe the physical location of the facility (and state the Zone, i.e., industrial, commercial, residential, etc)	

1.2 Application for:

	New Plant		Change in discharges
	Renewal		Change in production
	Other,specify: ……..……		

2.0 Production

2.1 Nature of Activity:

	Food processing		Chemical processing		Leather tanning
	Mining/Metallurgical		Manufacturing		Sewage treatment
	Other specify:				

2.2 Products manufactured/handled:

	Product	Quantity per Year
1		
2		
3		
4		
5		

2.3

	Raw Material	Quantity per Year
1		
2		
3		
4		
5		

2.4 Energy Sources/Consumption

	Energy Source	Consumption (MJ/Year)
1		
2		
3		
4		
5		

If space in 2.2, 2.3 and 2.4 not enough use space in 8.0 or enclose extra page

3.0 Raw Water Information

3.1 Indicate source and name of raw water (e.g. **Source:** River, **Name of source:** Kafue River):

	Lake		Council/Utility		Name of Source
	River		Well		
	Underground		Other,specify: …….....		

3.2 Raw water demand:

Cubic Meter/Hour				Cubic Meter/Day				Cubic Meter/Year		
Max	Mean	Min		Max	Mean	Min		Max	Mean	Min

State number of operational days: ……..……

3.3	Is water-meter installed?		Yes		No		
3.4	Raw water treatment method(s):						
		Chlorination		Flocculation		Screening	
		Coagulation		Grit removal		Filtration	
		Other: specify: ……..……..					
3.5	Is part of raw water used to dilute effluent prior to discharge?		Yes		No		
4.0	**Waste Water/Effluent Information**						
4.1	Type of waste water/effluent:						
	Process		Municipal		Leakages		
	Cooling		Washing		Dewatering		
	Other, specify: ……..……						
4.2	Waste water treatment method (s):						
	Filtration		Bio-filtration		Aeration		
	Setting		Chemical		Chlorination		
	Other, specify: ……						
4.3	Point of entry of effluent into the aquatic environment (not sewerage system)						
	Storm drain				River		
	Stream				Groundwater		
	Dam				Lake		
	Other, specify: ……..…						
4.4	State actual location of point entry……						
4.5	Are the discharges intermittent?		Yes. Enclose description		No		
4.6	Has waste water quality been monitored?		Yes. Enclose results		No		
4.7	Have other measure to reduce the quantity and effects of the discharges been evaluated?		Yes. Enclose results		No		
4.8	Are the discharges likely to pollute aquatic environment and soils in the vicinity?		Yes. Enclose results		No		
	Waste water flow-rate:						
	Cubic Meter/Hour		Cubic Meter/Day		Cubic Meter/Year		
	Max Mean Min		Max Mean Min		Max Mean Min		
	State number of operational days: ……..……						
4.9	What is the use(s) of the main water body receiving the effluent within the vicinity of the discharge point?						
	Domestic		Irrigation		Power generation		
	Recreation		Industrial		Other,specify: .....…...		
5.0	**Raw Water Quality**						
	Parameters		**Concentration Mg/l, ppm etc**				
	A Physical						
	1.						
	2.						
	3.						
	4.						
	5.						

	B Bacteriological		
	1.		
	2.		
	3.		
	4.		
	5.		
	C Metals		
	1.		
	2.		
	3.		
	4.		
	5.		
	D Metals		
	1.		
	2.		
	3.		
	4.		
	5.		
	E Organics		
	1.		
	2.		
	3.		
	4.		
	5.		
5.1	**Waste Water Quality**		
	Parameters	**Concentration Mg/l, ppm etc**	**EmissionLimit Values (ELV)**
	A Physical		
	1.		
	2.		
	3.		
	4.		
	5.		
	B Bacteriological		
	1.		
	2.		
	3.		
	4.		
	5.		
	C Chemical		
	1.		
	2.		
	3.		
	4.		
	5.		
	D Metal		
	1.		
	2.		
	3.		
	4.		
	5.		

	E Organics			
	1.			
	2.			
	3.			
	4.			
	5.			
6.0	Preventive Measures and Contingency Plans for Abnormal Discharges			
6.1	Risk Assessment: Include recent Environmental Audit Report			
6.2	Preventive Measures Employed			
	Source of Discharges	*Yes*	*No*	*Measures*
	1. Storage tanks			
	2. Accident spills			
	3. Loss to soil from drainage			
	4. Leaks from plant units			
	5. Outages at treatment plant			
	6. Overfilling/overflow			
	7. Others, Specify.....			
6.3	Are there contingency plans for dealing with abnormal discharges?			
	Yes, enclose description		No, explain	
7.0	**Internal Control System and Measurements of Releases of Pollutants**			
7.1	Is your Internal Control System operational?			
	Yes, enclose description		No, explain	
7.2	Control and monitoring of discharges. Are discharges measured regularly?			
	Yes, enclose description		No	
8.0	**List of Enclosures**			
	No	*Contents*	*No. of pages*	

SECTION C

Discharge to Land

	A: Requirements relating to Operation of Hazardous Waste Final Disposal Sites			
1.	Description of the sites(s) or facility(ies), including capacity, estimated life span (attach details of site plan, design and layout of different facilities)			
2.	Location of the site(s) or facility(ies):			
3.	Method(s) of disposal (e.g. encapsulation, inertisation, landfilling) :			
4.	Details on types and quantities of hazardous wastes to be disposed of:			
	No	*Type of hazardous waste*	*Quantities (Weight/volume)*	*Type of packaging material*

5.	Method of environmental monitoring to be done:		
6.	Type of insurance cover (attach proof):		
7.	Security measures at site:		
8.	Summary of environmental management plan including decommissioning, closure and post closure plans:		
9.	Other relevant information to support the application:		
B: Requirements relating to Operation of Municipal and Industrial Waste Disposal site			
1.	Type of waste to be disposed of at site/plant (tick appropriate): *(a)* Municipal Waste *(b)* Industrial Waste		
2.	Quantity being disposed of per annum (tonne/kg):		
3.	Type of facilities/treatment to be carried on at site/plant		
	(a) Landfill *(b)* Compost *(c)* Incinerator		
	(d) Other specify: ……..		
4.	Estimated life span of plant/site		
5	Hectare/area of site/plant (include site plan and design)		
6.	Method of environmental monitoring to be done:		
7.	Type of insurance cover (attach proof):		
8.	Characteristics of hazardous waste to be disposed of:		
9.	Security measures at site:		
10.	Summary of environmental management plan including decommissioning, closure and post closure plans:		
11.	Any other information:		
C: Requirements relating to Operation of Mine Waste Disposal site			
1.	Type of waste to be disposed of at site/plant (tick appropriate): *(a)* Tailing Dam/Dump *(b)* Overburden Dumps *(c)* Waste Rock Dumps *(d)* Slag Dumps		

2.	Type of facilities/treatment to be carried on at site/plant	
3.	Estimated life span of plant/site	
4.	Hectare/area of site/plant (include site plan and design)	
5	Method of environmental monitoring to be done:	
6.	Type of insurance cover (attach proof):	
7.	Emergency preparedness and response plans:	
8.	Security measures at site:	
9.	Summary of environmental management plan including decommissioning, closure and post closure plans:	
10.	Any other information:	

DECLARATION

I certify that these particulars are to the best of my knowledge, true and correct. I acknowledge that any false or misleading statement made knowingly may lead to cancellation of my licence under applicable law.

…….....…… …….....……

Name of applicant *Signature*

…….....……..

Date

FOR OFFICIAL USE ONLY

Received by: …… ……

Officer (Name and Signature) *Date*

Amount Received: …… Receipt No.: ……

……

Director-General

OFFICAL STAMP

FORM II
(*Regulation* 4(4))

THE ZAMBIA ENVIRONMENTAL MANAGEMENT AGENCY

The Environmental Management Act, 2011
(Act No. 12 of 2011)

The Environmental Management (Licensing) Regulations, 2013

SERIAL NO.: ……..
LICENCE NO.: ……..

EMISSION LICENCE

Holder's name ……
Address……

The licence relates to the emission or discharge of a pollutant/contaminant to the environment for the following facilities and associated locations:

(a).....
(b).....
(c).....
(d).....

The licence is granted for a period of ……..…. commencing on the ……day of ……, 20……..

The conditions of grant of the licence are as shown in the Annexures attached hereto.

Issued at ……..…… this …… day of ……..…… 20 …….

…….
Director-General

ENDORSEMENT OF LICENCE

This Emission Licence has this ……. day of ……..,20……..…...
…….. beenentered in the Register.

....
Date and Official stamp *Director-General*

Renewals and Amendments

Date of Renewal or Amendment	*Details of Renewal or Amendment*	*Date of Licence and Licence No.*	*Signature of Director-General*

FORM III
(*Regulation* 12(1))

THE ZAMBIA ENVIRONMENTAL MANAGEMENT AGENCY

The Environmental Management Act, 2011
(Act No. 12 of 2011)

The Environmental Management (Licensing) Regulations, 2013

APPLICATION FOR WASTE MANAGEMENT LICENCE

Please complete in block letters		Shaded fields for official use only	Licence Code							
			Date and Time							
Information Required(Tick as appropriate)		*Information Provided*								√
1.	Name of Applicant									
2.	Type of Waste	General			Industrial					
3.	Licenced activity	Wastereclamation			Waste recovery			Waste recycling		
		Wastetransportation			Trade in waste			Waste re-use		
		waste transit			waste export			waste import		
4.	Type of facility (if applicable)									
5.	Certificate of incorporationNo. (if applicable)									
6.	Notification address									
	(a) Telephone No.									
	(b) Fax No.									
	(c) Email address									
7.	Name and title of contact person authorised to represent applicant									
	(a) Telephone No.									
	(b) Fax:									
	(c) E-mail									
8.	**Appendices** (attach the following documents where applicable)									
	Appendix 1	Returns								
	Appendix 2	Insurance								
	Appendix 3	Name and qualifications of the person responsible for waste management,compliance with the Act and the conditions of the licence								
	Appendix 4	Documentary proof that the residents of the area surrounding the proposed waste disposal site were notified of the person's intention to apply for a waste management licence in a daily newspaper of general circulation in Zambia, after seven days from the date of the notification.								
	Appendix 5	Documentary proof that the residents of the area surrounding the proposed disposal aquatic environment were notified of the applicant's intention toapply for a hazardous waste licence in a daily newspaper of generalcirculation in Zambia, after seven days from the date of the notification.								
	Appendix 6	EIA								
	Appendix 7	Policy, procedures and plans for technical capacity, facilities and governance structures.								
	Appendix 8	Name and qualifications of waste management compliance officer								
	Appendix 9	Proof of consultations with residents in area surrounding proposed licence area.								
	Request for confidentiality of information (tick) Yes …… No …….. Reasons: …… ……									

SECTION B: WASTE MANAGEMENT DETAILS

1.	Mode of Waste Management or Transportation Management:	
2.	Number and type of waste transportation system:	
3.	Facilities and equipment available to manage or transport waste	
4.	Type of waste to be managed or transported (please tick appropriate) *(a)* General Waste *(b)* Industrial Waste	

5. Quantity of waste to be transported in a conveyance (tonnes/kg) monthly

No.	*Type of waste*	*Quantities (weight/Volume)*	*Type of packaging material*	*Suitability and Capacity of Conveyance*

6.	Quantity of wastes to be disposed of (tonnes/kg) monthly and source of waste:	
7.	Final destination of sites/plant to which wastes are to be transported:	
8.	Transportation schedule:	
9.	Transportation frequency (daily/weekly/monthly/quarterly/annually):	
10.	Any other information:	

DECLARATION

I certify that these particulars are to the best of my knowledge, true and correct. I acknowledge that any false or misleading statement made knowingly may lead to cancellation of my licence under applicable law.

…… …….

Date *Signature of applicant and official stamp*

FOR OFFICIAL USE ONLY

Received by: ……..…… ……

Officer (Name and Signature) *Date*

Amount Received: …… Receipt No.: ……

OFFICAL STAMP

……

Director-General

FORM IV
(*Regulation* 12(3))

THE ZAMBIA ENVIRONMENTAL MANAGEMENT AGENCY

The Environmental Management Act, 2011
(Act No. 12 of 2011)

The Environmental Management (Licensing) Regulations, 2013

SERIAL NO.: ……………………
LICENCE NO.: ……………………

WASTE MANAGEMENT LICENCE

Holder's name ………………………..……………………........……...…………………...…………..
Address……………………………………………………………………………………...……………

The licence relates to handling of general and industrial waste...
in (Province [s])...............................

The licence is granted for a period of ……….……. commencing on the …………day of
……………………………………….,20…………

The conditions of grant of the licence are as shown in the Annexures attached hereto.

Issued at ……………………………..…… this …………………… day of ………...…………

…………………………….....………………..
Director-General

ENDORSEMENT OF LICENCE

This Waste Management Licence has this ……………. day of …..............…..,20………..…....
been entered in the Register.

....
Date and Official stamp *Director-General*

Renewals and Amendments

Date of Renewal or Amendment	*Details of Renewal or Amendment*	*Date of Licence and Licence No.*	*Signature of Director-General*

FORM V
(*Regulation* 19(1))

THE ZAMBIA ENVIRONMENTAL MANAGEMENT AGENCY

The Environmental Management Act, 2011
(Act No. 12 of 2011)

The Environmental Management (Licensing) Regulations, 2013

APPLICATION FOR A HAZARDOUS WASTE LICENCE

Please complete in block letters	Shaded fields for official use only	Licence Code	
		Date and Time	

	Information Required	*Information Provided*	√
1.	Type of Activity	Generation	
		Pre – treatment	
		Treatment	
		Trade	
		Handling	
		Transportation	
		Storage	
		Transit	
		Exportation	
2.	Name(s) of applicant(s)		
3.	Type of facility		
4.	Certificate of incorporation no. (if applicable)		
5.	Notification address		
	(a) Telephone No.		
	(b) Fax No.		
	(c) Email address		
6.	Name and title of contact person authorised to represent applicant		
	(a) Telephone No.		
	(b) Fax:		
	(c) E-mail		
7.	Facility to be licensed	*(a)*	
		(b)	
		(c)	
		(d)	
		(e)	
8.	**Appendices** (attach the following information where applicable)		
	Appendix 1	Returns	
	Appendix 2	Decision Letter	
	Appendix 3	Name and qualifications of the person responsible for hazardous waste licence, compliance with the Act and the conditions of the licence	
	Appendix 4	Emergency preparedness and Response plan	
	Appendix 5	Policy, procedures and plans for technical capacity facilities and governance structures	
	Appendix 6	Name and qualifications of hazardous waste management compliance officer	
	Appendix 7	Proof of consultations with residents in area surrounding proposed licence area	
	Appendix 8	Management Plans	
	Request for confidentiality of information (tick) Yes …… No …… Reasons:…… …… ……		

	PROFILE OF APPLICANT			
1.	Line of business:			
2.	Qualification of the technical personnel (attach):			
3.	Location of the site(s) or facility(ies):			
4.	Description of the sites(s) or facility(ies), including capacity, estimated life span			
5.	Source(s) of hazardous waste:			
6.	Information on the assessment of the suitability of the facility			
7.	Nature of process generating, pre – treating or treating hazardous waste			
8.	Estimated types and quantities of hazardous waste to be generated, pre-treated, traded in, treated or handled:			
	No.	Type of hazardous waste	Quantities (weight/Volume)	Type of packaging material
9.	Characteristics of the hazardous waste generated, pre – treated, treated, traded in or handled:			
10.	Details on handling and storage:			
	(i) Reasons for storage:			
	(ii) Quantities stored:			
	(iii) Type of storage:			
	(iv) Type of packaging materials:			
	(v) Place of storage:			
	(vi) Maximum period of storage:			
11.	Pre-treatment or treatment method(s) to be used:			
12.	Re-use and recycling options:			
13.	Products or by-products of the pre-treatment or treatment:			
14.	Method(s) of monitoring for contamination of the environment:			
15.	Plans for reducing generation of hazardous waste over a period of time:			
16.	Method(s) of disposal:			
17.	Site and location of final disposal:			
18.	Type of insurance cover (attach proof):			
19.	Type of insurance cover (attach proof):			

DECLARATION

I certify that these particulars are to the best of my knowledge, true and correct. I acknowledge that any false or misleading statement made knowingly may lead to cancellation of my licence under applicable law.

…… ……

Date *Signature of applicant and official stamp*

FOR OFFICIAL USE ONLY

Received by: …… ……..

Officer (Name and Signature) *Date*

Amount Received: …… Receipt No.: ……

……

Director-General

OFFICAL STAMP

FORM VI
(*Regulation* 19(4))

THE ZAMBIA ENVIRONMENTAL MANAGEMENT AGENCY

The Environmental Management Act, 2011
(Act No. 12 of 2011)

The Environmental Management (Licensing) Regulations, 2013

SERIAL NO.: ……………………
LICENCE NO.: ……………………

HAZARDOUS WASTELICENCE

Holder's name ……………………..……………………………………………………...…………
Address.………………………………………………………………………………………………..

The licence relates to generation, pre–treatment, treatment, trading in, handling, transportation, storage, transit or exportation of hazardous waste in …………………….. (Province [s]).

The licence is granted for a period of ……................……………..…. commencing on the ………..day of ……………………………., 20………..

The conditions of grant of the licence are as shown in the Annexures attached hereto.

Issued at ………………………...…… this …………………… day of ………...…………

……………………………..
Director-General

ENDORSEMENTOF LICENCE

This Hazardous Waste Licence has this ….......…. day of ………..............……..,20……..….. beenentered in the Register.

....
Date and Official stamp *Director-General*

Renewals and Amendments

Date of Renewal or Amendment	*Details of Renewal or Amendment*	*Date of Licence and Licence No.*	*Signature of Director-General*

FORM VII
(*Regulation* 25(1), 27 and 28)

THE ZAMBIA ENVIRONMENTAL MANAGEMENT AGENCY

The Environmental Management Act, 2011
(Act No. 12 of 2011)

The Environmental Management (Licensing) Regulations, 2013

NOTIFICATION OF TRANSBOUNDARY MOVEMENT OR TRANSIT OF HAZARDOUS WASTE OR OTHER WASTE

To: The Director
Zambia Environmental Management Agency

(1) Here insert the full names and address of the transporter

Please be notified that on the …........…… day of ……….…………,20……..
I (1)...
....
………………………........…………………………………… intend to move on a transboundary basis or to transit through the Republic the following hazardous waste or other waste:

(a)………………………………….......................................……...……….
(b)……………………………………………………………....……………...……
(c)……………………………………………………………......……………..…
(d)…………………………......………………….........................…………

The specifications of the method of transportation and safety arrangements and the necessary authorization are annexed to this notification.

Any documents required to be sent to me by your office in respect of this notice may be sent at the following address:

………………………………………...

*I/We undertake that the necessary authorisationshave been given and are annexed to this notification.

Dated this ……………… day of ……………………, 20……….………..

....
Applicant

*Delete whichever is not applicable

Note:

The person providing notification shall annex the following documentation:

(1) proof of notification of both the country of export and import in a language understood by the parties and approved by the relevant authorities;

(2) details of –

(a) the exporter, the carrier and the licensed operator of a hazardous waste disposal site;(

(b) specifications, qualities and mode of transport and final destination;

(c) countries of export, import and final destination of the hazardous waste;

(d) a timetable specifying the expected dates of transit through the area under the jurisdiction of the Agency;

(e) information detailing emergency procedures in case of accidents;

(f) comprehensive insurance to cover any incidents;

(g) a completed movement document for transboundary movements of waste;

(h) an authorised route is to be followed; and

(i) a specified transit period

(3) proof that the exporter, carrier, importer, operator and the site or facility for disposal are licensed to carry out the operations in question in relation to the waste.

FORM VIII
(*Regulation* 25(1), 27 and 28)

THE ZAMBIA ENVIRONMENTAL MANAGEMENT AGENCY

T he Environmental Management Act, 2011

(Act No. 12 of 2011)

The Environmental Management (Licensing) Regulations, 2013

APPLICATION FOR A PESTICIDE AND TOXIC SUBSTANCE LICENCE					
Please complete in block letters		Shaded fields for official use only	Licence Code		
			Date and Time		
Information Required		*Information Provided*			√
1.	Type of Activity	Manufacturing			
		Blending			
		Formulating			
		Re-formulating			
		Processing			
		Re-processing			
		Sale			
		Distribution			
		Packaging			
		Re-packaging			
		Changing composition			
		Advertising			
		Pest Control			
		Fumigation			
2.	Name(s) of applicant(s)				
3.	Type of facility				
4.	Certificate of incorporation no. (if applicable)				
5.	Notification address *(a)* Telephone No. *(b)* Fax No. *(c)* Email address				
6.	Name and title of contact person authorised to represent applicant *(a)* Telephone No. *(b)* Fax: *(c)* E-mail				
7.	Name of local agent (if different from registration holder) *(a)* Telephone No. *(b)* Fax: *(c)* E-mail				
8.	Product to be manufactured, blended, formulated, re-formulated, processed, reprocessed or changed in composition	*(a)* *(b)* *(c)* *(d)* *(e)* *(f)* *(g)* *(h)* *(i)*			
9.	Indicate reasons for import/ export				

10.	**Appendices** (attach the following forms where applicable)				
	Appendix 1	Decision Letter			
	Appendix 2	Returns			
	Appendix 3	Efficacy report			
	Appendix 4	Name and qualifications of the person responsible for pesticide or toxic substance management, compliance with the Act and the conditions ofthe licence;			
	Appendix 5	Chemical dossier			
	Appendix 6	Details of field trials (where applicable)			
	Request for confidentiality of information (tick) Yes: …… No: …… Reasons: …… ……				
	PRODUCT IDENTIFICATION				
1.	Product Registration Number:				
2.	Product status		*(a)*	Trial Product	
			(b)	Non-Trial Product	
3.	Type of Pesticide (insecticide, herbicide, fungicide, etc) or toxic substances (e.g. cyanide, benzene)				
4.	*(a)* Trade Name:				
	(b) Trade mark:				
	(c) Trade mark holder:				
	(d) Is the product registered in the country of: (i) Origin: Yes …… No ……... If No, specify ……..…….. (ii) Manufacture: Yes …… No ……. If No, specify …… ……..…… …… (i) Formulation: Yes …… No …….. If No, specify …… (ii) Name and address of formulation if different from above ……				
	(e) Registration in SADC countries				
	(f) Registration in other countries				
5.	Full chemical name of each ingredient				
6.	Common name of each active ingredient				
7.	The empirical and structural formula for each active ingredient				
8.	Formulation (type of formulation: wettable powder, emulsifiable concentrate, e.t.c)				
9.	*(a)* Concentration of active agent in technical material				
	(b) 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 or percentage applies to each ingredient:				
10.	Physical and chemical properties of each ingredient with specific reference to type of formulation:				
	10.1 Appearance:				
	10.2 Density (liquids only):				
	10.3 Flammability (i) Liquids flash point: (ii) Solids – statement to be made as to whether product is flammable:				
	10.4 Wettability (for dispersible powders):				
	10.5 Suspendibility (for emulsified suspension concentrates):				
	10.6 Emulsion stability (for for emulsifiable concentrates):				
	10.7 Corrosiveness				
	10.8 Known incompatibilities with otherproducts (specify):				

11.	Size of containers in which the pesticide or toxic substance is to be sold and the net weight or volume:	
12.	Nature of containers in which the pesticide or toxic substance is to be sold:	
13.	Stability of formulation:	
	(a) On storage (at temperature of $25^{o}C \pm 3^{o}C$):	
	(b) On dilution:	
	(c) Shelf life in general:	

TOXICOLOGY

Toxicology (active ingredient)

Rat	Acute Oral (LD_{50} mg/kg)	Acute Dermal (LD_{50} g/kg)	Inhalation LC_{50} (mg/4hour)	Intra-peritoneal injection for infectivity (LD_{50} g/kg)
Experimental				
Calculated				
Hypersensitivity/allergies in humans				

Approved ☐ or Rejected ☐ (√)

Toxicology (formulated product)

		Acute Oral (LD_{50} mg/kg)	Acute Dermal (LD_{50} g/kg)	Inhalation LC_{50} (mg/4hour)
Rat	Experimental			
	Calculated			

Rabbit	Eye irritation	Skin irritation
None		
Mild		
Moderate		
Severe		

Skin sensitization in guinea pig: (tick)	None	Mild	Moderate		Severe

WHO classification (tick):	Ia	Ib	II	III	Others
GHS Classification (e.g. Class, Division or Type)					
Summary of other mammalian toxicological studies: eg. Livestock, wildlife, poultry, pets					

ECOTOXICOLOGY

	YES/NO
Toxicity to bees:	
Toxicity to fish and other aquatic organisms:	
Toxicity to birds:	
Toxicity to earth worms or other soil invertebrates, and soil micro-organisms:	
Toxicity to other non-target organisms:	
Persistence in the environment:	
Available toxicological data relating to other ingredients in formulation (non-active additives in formulation):	

Other effects: Specify	
PACKAGING	
Type of packaging material/container:	
Pack size(s)	
Method of disposal of empty container(s)	
OTHER SPECIFIC REQUIREMENTS	
Directions for safe disposal of expired pesticide or toxic substance	
Measures to minimise operator exposure	

	Sanitary and phytosanitary measures		
	Has the product been cleared by the phytosanitary authorities? (tick): *(a)* In the country of origin *(b)* The recipient country	Yes (provide evidence) No ☐ ☐ ☐ ☐ If No, give reasons	
14.	Phytotoxicity:		
15.	Safety precautions to be observed in handling, use and storage:		
16.	Hazard to environment (e.g wildlife, aquatic etc.):		
17.	Residue data:		
18.	Proposed use:		
19.	*(a)* Directions for use: *(b)* If pesticide state the method, dosage rates and frequency of application		
20.	(a) Biological effectiveness and benefit in use: (b) Mode of action		

DECLARATION

I certify that these particulars are to the best of my knowledge, true and correct. I acknowledge that any false or misleading statement made knowingly may lead to cancellation of my licence under applicable law.

…… ……

Date *Signature of applicant and official stamp*

FOR OFFICIAL USE ONLY

Received by: …… ……..

Officer (Name and Signature) *Date*

Amount Received: …… Receipt No.: …….

……

Director-General
Zambia Environmental Management Agency

OFFICAL STAMP

1. Application approval status
   Approved ☐ or Rejected ☐ (√)

2. If approved, ZEMA Product No. ……..
   *ZEMA to insert the Product No.

FORM IX
(*Regulation* 31(3))

HE ZAMBIA ENVIRONMENTAL MANAGEMENT AGENCY

The Environmental Management Act, 2011

(Act No. 12 of 2011)

The Environmental Management (Licensing) Regulations, 2013

SERIAL NO.: ……
LICENCE NO.: ……
ZEMA PRODUCT NO.: ……

PESTICIDE AND TOXIC SUBSTANCES LICENCE

Holder's name ……..……..……..…….
Address…….……..…..…..……

The licence relates to manufacture/blend/formulate/re – formulate/process/reprocess/change the composition of a pesticide or toxic substance of .....in (Province [s])..........

The licence is granted for a period of ……..……. commencing on the ……..……day of ……, 20……..

The conditions of grant of the licence are as shown in the Annexures attached hereto.

Issued at ……..…… this …… day of ……..……

……
Director-General

ENDORSEMENT OF LICENCE

This Pesticide and Toxic Substance Licence has this ……..…… day of ……..,20…….. beenentered in the Register.

....
Date and Official stamp *Director-General*

Renewals and Amendments

Date of Renewal or Amendment	*Details of Renewal or Amendment*	*Date of Licence and Licence No.*	*Signature of Director-General*

FORM X
(*Regulation* 35)

HE ZAMBIA ENVIRONMENTAL MANAGEMENT AGENCY

The Environmental Management Act, 2011

(Act No. 12 of 2011)

The Environmental Management (Licensing) Regulations, 2013

APPLICATION FOR APPROVAL OF A LABEL FOR PESTICIDE OR TOXIC SUBSTANCE					
Please complete in block letters		Shaded fields for official use only	Licence Code		
			Date and Time		
Information Required		*Information Provided*			√
	Details of applicant Name: Address:				
		Details of Label			
1.	Trade Name				
2.	Active Ingredients				
3.	Chemical Name				
4.	Intended use				
5.	Directions for use				
6.	Details of the manufacturer, supplier and local distributor				
7.	The withholding period for the pesticides or toxic substance				
8.	Warnings, in pictograms, on the safe use of the pesticide or toxic substance				
9.	The hazard warnings of the contents of the pesticide or toxic substance				
10.	Warning against the re-use of containers for the pesticide or toxic substance				
11.	Instructions for safe disposal of a surplus or expired pesticide or toxic substance or de-contamination of empty containers				
12.	First aid instructions and medical advice on treatment				
13.	The date of manufacture and the date of expiry				
14.	The net contents of the pesticide or toxic substance				
15.	The colour code				
16.	Toxicity, Hazard class(es)				
17.	**Appendix**	Attach a proposed label and Consent Letter from the Supplier/Manufacturer			

DECLARATION

I certify that these particulars are to the best of my knowledge, true and correct. I acknowledge that any false or misleading statement made knowingly may lead to cancellation of my licence under applicable law.

…… ……

Date *Signature of applicant*

FOR OFFICIAL USE ONLY

Received by: …… ……...

Officer (Name and Signature) *Date*

Amount Received: …… Receipt No.: ……

……

Director-General

OFFICAL STAMP

*Delete whichever is not applicable

FORM XI
(*Regulation* 35)

HE ZAMBIA ENVIRONMENTAL MANAGEMENT AGENCY

The Environmental Management Act, 2011

(Act No. 12 of 2011)

The Environmental Management (Licensing) Regulations, 2013

APPLICATION FOR OZONE DEPLETING SUBSTANCES LICENCE

Please complete in block letters		Shaded fields for official use only	Licence Code		
			Date and Time		
Information Required		*Information Provided*			√
1.	Type of Activity	Sale			
		Offer for sale			
		Recovery			
		Recycling			
		Reclamation, handling			
2.	Name(s) of applicant(s)				
3.	Type of facility				
4.	Certificate of incorporation No. (if applicable)				
5.	Notification address				
	(a) Telephone No.				
	(b) Fax No.				
	(c) Email address				
6.	Name and title of contact person authorized to represent applicant				
	(a) Telephone No.				
	(b) Fax:				
	(c) E-mail				
7.	**Appendices** (attach the following information where applicable)				
	Appendix 1	Returns			
	Appendix 2	Insurance			
	Appendix 3	Name and qualifications of the person responsible for compliance with the Act and the conditions of the licence.			
	Appendix 4	Emergency Preparedness and Response Plan			
	Request for confidentiality of information (tick) Yes …… No …….. Reasons:…… …… ……				
	PROFILE OF APPLICANT				
1.	Line of business:				
2.	Qualification of the technical personnel (attach):				
3.	Location of the site(s) or facility(ies):				
4.	Description of the sites(s) or facility(ies), including capacity, estimated life span				
5.	Information on the assessment of the suitability of the facility				
6.	Source(s)of ozone depleting substances:				

7.	Details on types and quantities of the ozone depleting substances to be sold, offered for sale, recovered, recycled or reclaimed:			
	No.	*Type of ozone depleting substances*	*Quantities (weight/Volume)*	*Type of packaging material*
8.	Type of labelling on containers:			
9.	Characteristics of the ozone depleting substances to be sold, offered for sale, recovered, recycled or reclaimed:			
10.	Nature of process for recovering, recycling or reclaiming of ozone depleting substances			
11.	Details on handling and storage:			
	(i) Reasons for storage:			
	(ii) Quantities stored:			
	(i) Type of storage:			
	(iv) Type of packaging materials:			
	(i) Place of storage:			
	(ii) Maximum period of storage:			
	(iii) Emergency Response and Safety Plan			
12.	Recovery, recycling or reclaiming method(s) of ozone depleting substances to be used:			
13.	Recovery, recycling or reclaiming method(s) of ozone depleting substances to be used:			
14.	Products or by-products of recovery, recycling and reclaiming:			
15.	Method (s) of monitoring for contamination of the environment:			
16.	Method(s) of disposal:			
17.	Final destination of the ozone depleting substances:			
18.	Details related to security:			
19.	Type of insurance cover (attach proof):			
20.	Other relevant information to support the application: (write on separate paper if space provided is not adequate:			

DECLARATION

I certify that these particulars are to the best of my knowledge, true and correct. I acknowledge that any false or misleading statement made knowingly may lead to cancellation of my licence under applicable law.

…… ……

Date *Signature of applicant and official stamp*

FOR OFFICIAL USE ONLY

Received by: …… ……..

Officer (Name and Signature) *Date*

Amount Received: …… Receipt No.: ……

……

Director-General

OFFICAL STAMP

FORM XII
(*Regulation* 42(4))

HE ZAMBIA ENVIRONMENTAL MANAGEMENT AGENCY

The Environmental Management Act, 2011

(Act No. 12 of 2011)

The Environmental Management (Licensing) Regulations, 2013

SERIAL NO:……………………..
LICENCE NO.: ………………….

Holder's name ……………………………………………………………………...……….…
Address.………………………………………..………………….….....…...……………….

The licence relates to selling/offering for sale/recovering/recycling/reclaiming, handling a substance likely to deplete the ozone layer... in (Province [s]).....................

The licence is granted for a period of ……….…………..……. commencing on the ………….day of………………………….,20…………………

The conditions of grant of the licence are as shown in the Annexures attached hereto.

Issued at …………………..this …………………day of ………...…………,20…………..

…………………………...………………..
Director-General

ENDORSEMENT OF LICENCE

This Ozone Depleting Substances Licence has this .... day of ……………………………..,20…...….... been entered in the Register.

....
Date and Official stamp *Director-General*

Renewals and Amendments

Date of Renewal or Amendment	*Details of Renewal or Amendment*	*Date of Licence and Licence No.*	*Signature of Director-General*

FORM XIII
(*Regulation* 52)

HE ZAMBIA ENVIRONMENTAL MANAGEMENT AGENCY

The Environmental Management Act, 2011

(Act No. 12 of 2011)

The Environmental Management (Licensing) Regulations, 2013

NOTIFICATION OF ARRIVAL, POSSESSION, ASSIGNMENT OREXPIRY OF PESTICIDE OR TOXIC SUBSTANCE, OZONE DEPLETING SUBSTANCE, POLLUTANT, HAZARDOUS WASTE OR WASTE

To: The Director-General:

Please be notified that on the …… day of ……..……, 20……...

I (1) ……

……

give notice of arrival, having in possession or expiry of the following:

(a)……

(b)……..…..

(c)……..……..

(d)……

Holder of licence No. (2) ……

The pesticide or toxic substance, ozone depleting substance, pollutant, hazardous waste or waste were assigned/transmitted* to me by……of

……..……...

……..……..

Dated this …… day of ……, 20……

……..

Assignee/Licensee

*Delete as appropriate

(1) Here insert the full names and address of applicant

(2) Here insert No. of licence

FORM XIV
(*Regulation* 53 and 55)

HE ZAMBIA ENVIRONMENTAL MANAGEMENT AGENCY

The Environmental Management Act, 2011

(Act No. 12 of 2011)

The Environmental Management (Licensing) Regulations, 2013

REF NO.: ……

NOTICE OF REJECTION OF APPLICATION FOR LICENCE

(1)Here insert the full names and address of applicant

To (1)
……
……

(2) Here insert the subject of the application

TAKE NOTICE that your application for (2) …… has been rejected on the following grounds:

(a)……

(b)……

(c)……

(d)……

Dated this ……day of ……., 20……..

……
Director-General

FORM XV
(*Regulation* 55)

HE ZAMBIA ENVIRONMENTAL MANAGEMENT AGENCY

The Environmental Management Act, 2011

(Act No. 12 of 2011)

The Environmental Management (Licensing) Regulations, 2013

APPLICATION FOR AMENDMENT OF LICENCE

Please complete in block letters	Shaded fields for official use only	Licence Code	
		Date and Time	

	Information Required		*Information Provided*	√
1.	Name(s) of applicant(s)			
2.	Date of initial application			
3.	Proposed Licence			
4.	**Proposed amendment to the Licence**	*(a)*		
		(b)		
		(c)		
		(d)		
5.	Proposed amendments to the conditions attached to the Licence			
6.	**Appendices** (Please attach relevant supporting documentation			
	Appendix 1			
	Appendix 2			
	Appendix 3			

I hereby apply to amend the licence/conditions attached to the licence/both the licence and conditions attached to the licence*.

I certify that these particulars are to the best of my knowledge, true and correct. I acknowledge that any false or misleading statement made knowingly may lead to cancellation of my licence under applicable law.

…… ……..
Date Signature of applicant

FOR OFFICIAL USE ONLY

Received by: …… ……...
Officer (Name and Signature) *Date*

Amount Received: …… Receipt No.: ……

……
Director-General

OFFICAL STAMP

*Delete whichever is not applicable

FORM XVI
(*Regulation* 58)

HE ZAMBIA ENVIRONMENTAL MANAGEMENT AGENCY

The Environmental Management Act, 2011

(Act No. 12 of 2011)

The Environmental Management (Licensing) Regulations, 2013

To: The Director-General

TAKE NOTICE that I (1)……

seek approval to transfer my licence (2) …….

to (3) ……...

Find attached hereto an application by the prospective transferee for a licence

(4) ……

(5) ……..
Applicant (Transferor)

(1) Here insert thename of the holder of the licence

(2) Here insert type of licence and licenceNo.

(3) Here insert the name of the transferee

(4) Here insert the type of licence applied for

(5) Signature of the applicant (transferor)

FORM XVII
(*Regulation* 59)

HE ZAMBIA ENVIRONMENTAL MANAGEMENT AGENCY

The Environmental Management Act, 2011

(Act No. 12 of 2011)

The Environmental Management (Licensing) Regulations, 2013

APPLICATION FOR RENEWAL OF A LICENCE

		Shade fields for official use only	**Certificate Code**	
			Date and Time	

	Information Required	***Information Provided***			√
1.	Type of Licence No.				
2.	Date of expiry of licence				
3.	Renewal period				
4.	*(a)* Name(s) of applicant(s)				
	(b) Type of applicant	Individual	Company	Co-operative	Partnership
5.	*(a)* Date of Birth (dd/mm/yyyy)				
	(b) Nationality				
	(c) Identity Card (NRC No.) or Passport No.				
6.	Applicant's Address				
	(a) Tel:				
	(b) Fax:				
	(c) E-mail				
7.	Company Registration No.				
	Signature of Applicant (individual or authorised company representative)				
8.	Current licences held in Zambia, if any, by applicant	Type &Licence No.	Location	Area (km^2)	
		(a)	*(a)*	*(a)*	
		(b)	*(b)*	*(b)*	
		(c)	*(c)*	*(c)*	
		(d)	*(d)*	*(d)*	
		(e)	*(e)*	*(e)*	
		(f)	*(f)*	*(f)*	
9.	Previously held licence in Zambia, if any, by applicant	Licence (Type and Licence No.)	Location	Area (km^2)	
		(a)	*(a)*	*(a)*	
		(b)	*(b)*	*(b)*	
		(c)	*(c)*	*(c)*	
		(d)	*(d)*	*(d)*	
		(e)	*(e)*	*(e)*	
		(f)	*(f)*	*(f)*	
10.	Currently held licences in Zambia, if any, by subsidiary companies	Licence (Type and Licence No.)	Location	Area (km^2)	
		(a)	*(a)*	*(a)*	
		(b)	*(b)*	*(b)*	
		(c)	*(c)*	*(c)*	
		(d)	*(d)*	*(d)*	
		(e)	*(e)*	*(e)*	
		(f)	*(f)*	*(f)*	
11.	Currently held licences in other countries by applicant	Licence (Type and Licence No.)	Location	Area (km^2)	
		(a)	*(a)*	*(a)*	
		(b)	*(b)*	*(b)*	
		(c)	*(c)*	*(c)*	
		(d)	*(d)*	*(d)*	
		(e)	*(e)*	*(e)*	
		(f)	*(f)*	*(f)*	
12.	Have you been convicted of an offence involving fraud or dishonesty or of any offence under the Environmental Management Act, No. 12 of 2011 or any other law within or outside Zambia? If yes, specify details:……				

13.	Have you ever applied for a licence in Zambia, if yes, please give details: …… …….. …… …….		
	Licence applied for	Location	Date of application
Application Fee			

…… ……

Applicant Date

…… ……

Officer Date

FOR OFFICIAL USE ONLY

Received by: ……

Officer

OFFICAL STAMP

Amount Received: ……..

Serial No. of Application: ……

FORM XVIII
(*Regulation* 60(2))

HE ZAMBIA ENVIRONMENTAL MANAGEMENT AGENCY

The Environmental Management Act, 2011

(Act No. 12 of 2011)

The Environmental Management (Licensing) Regulations, 2013

LICENCE NO.: ……

NOTICE OF INTENTION TO SUSPEND OR CANCEL LICENCE

(1) Here insert the full names and address of holder of licence

To (1)……..……..……..……

.....

.....

you are hereby notified that the Agency intends to *suspend/cancel your licence on the following grounds:

(a)……

(b)……

(c)……

(d)……

You are requested to show cause why the licence should not be suspended/ cancelled and to take action to remedy the breaches set out in paragraphs…….....…..(above), within THIRTY days from the date of receipt of this notice.

Failure to remedy the said breaches shall result in the *suspension/ cancellation of your licence.

Dated this ……..……day of ……., 20……

(2) Signature of Director-General

(2) ……..
Director-General

*Delete whichever is not applicable

FORM XIX
(*Regulation* 60(4))

HE ZAMBIA ENVIRONMENTAL MANAGEMENT AGENCY

The Environmental Management Act, 2011

(Act No. 12 of 2011)

The Environmental Management (Licensing) Regulations, 2013

NOTICE OF CANCELLATION/SUSPENSION OF LICENCE

(1) Here insert the full names and address of the holder

To (1)……………………………......................……………………...………

....

....

(2) Here insert the type of licence and licence number

IN THE MATTER OF (2)………………………………..………..……....

you are hereby notified that your licence has been *cancelled/suspended on the following grounds:

(a) …………………………………………...…

(b)………………………………………………….....................................

(c)………………………………………………….....................................

(d)…………………………………………………………………..........………

Dated this …......................…...…… day of …………………….., 20……

(3) Signature of Director-General

(3) ………………………….……………………..
Director-General

*Delete whichever is not applicable

FORM XX
(*Regulation* 61)

HE ZAMBIA ENVIRONMENTAL MANAGEMENT AGENCY

The Environmental Management Act, 2011

(Act No. 12 of 2011)

The Environmental Management (Licensing) Regulations, 2013

ORDER TO CEASE AN OPERATION OR ACTIVITY

ORDER NO.:……

This Order is served on (1) ..... of (2)..... of (3) ..... District in the(4)..... Province of the Republic of Zambia.

It is hereby **ORDERED** that you immediately cease the following operation/ activity:

(a).....

(b).....

(c).....

Dated this ..... day of ....., 20……..

……..
Inspector

(1) Here insert name of person/ entity on whom Order is to be served
(2) Here insert the name of the premises or conveyance where the cessation of the operation or activity is to be effected
(3) Here insert the name of the District in which (2) is located
(4) Here insert the name of the Province in which (2) is executed

*Delete whichever is not applicable

FORM XXI
(*Regulation* 62)

HE ZAMBIA ENVIRONMENTAL MANAGEMENT AGENCY

The Environmental Management Act, 2011

(Act No. 12 of 2011)

The Environmental Management (Licensing) Regulations, 2013

NOTICE OF SEIZURE

TO: THE DIRECTOR-GENERAL

TAKE NOTICE that the following was/were *seized from …… (1) at ..... (2):

S/N	***Description of matter, material, substance vehicle, aircraft, boat or any other conveyance***	***Quantity***	***Comment***
1.			
2.			
3.			
4.			

Seized from (3)

NRC: .....
Occupation: .....
Address: .....
Signature: .....

Seized by (4)

Name: .....
NRC: .....
Designation: .....
Signature: .....

Dated this …….. day of ……., 20…....

In the Presence of Witness

Name: .....
NRC: .....
Occupation: .....
Address: .....
Signature: .....

In the Presence of Witness

Name: .....
NRC: .....
Designation: .....
Address: .....
Signature: .....

1. Here insert the name of the person against whom the seizure has been effected
2. Here insert the name and address of the place where the seizure was effected
3. Here insert further details of the person referred to in paragraph (1)
4. Here insert the details of the inspector effecting the seizure

FORM XXII

(*Regulation* 63)

HE ZAMBIA ENVIRONMENTAL MANAGEMENT AGENCY

The Environmental Management Act, 2011

(Act No. 12 of 2011)

The Environmental Management (Licensing) Regulations, 2013

RECEIPT FOR REMOVAL OF DOCUMENT, MATTER, MATERIAL, SUBSTANCE OR ARTICLE

TO:

(1)……

TAKE NOTICE that the following document, matter, material, substance or article have/has been remoked from (2).....

on this.....day of ....., 20.....

S/N	Description of document, matter, material, substance or article	Quantity	Comment
1.			
2.			
3.			
4.			

Removed by (3)

Name: .....

NRC: .....

Designation: .....

Address: .....

Signature: .....

Dated this ..... day of ....., 20…….

……..

Director-General

(1) Here insert names of the person from whom the document, matter, material, substance or article was removed

(2) Here insert the industrial facility or plant, undertaking business or premises from where the document, matter, material, substance or article was removed

(3) Here insert the details of the inspector effecting the removal

FORM XXIII
(*Regulation* 64)

HE ZAMBIA ENVIRONMENTAL MANAGEMENT AGENCY

The Environmental Management Act, 2011

(Act No. 12 of 2011)

The Environmental Management (Licensing) Regulations, 2013

SITE RESTORATION ORDER

(Section 60 of the Environmental Management Act, 2011)

ORDER NO.:…….

This Order is served on (1) ..... of (2) .....District in the (3)..... Province of the Republic of Zambia

IN RESPECT OF ……...……..…….. (4),

WHERE YOU

(a) deposited waste
(b) ordered or permitted waste to be deposited
(c) are the owner/occupier/person have the charge, management or control of the place or premises*

IT IS **ORDERED** that:

You remove the waste and restore the site to a condition satisfactory to the Director-General.

Dated this ..... day of ....., 20……..

……..
Director-General

(1) Here insert name of person/ entity on whom Order is to be served
(2) Here insert the name of district in which the person/ entity is located
(3) Here insert the name of the Province in which the person/ entity is located
(4) Here insert the site at which the Order is executed

☐ (√) Tick where appropriate
* Delete whichever is not applicable

FORM XXIV
(*Regulation* 65)

HE ZAMBIA ENVIRONMENTAL MANAGEMENT AGENCY

The Environmental Management Act, 2011

(Act No. 12 of 2011)

The Environmental Management (Licensing) Regulations, 2013

PREVENTION ORDER

(Section 103 of the Environmental Management Act, 2011)

ORDER NO.:…….

This Prevention Order is served on (1) ..... of (2) ..... of (3) ..... District in the(4)..... Province of the Republic of Zambia.

WHEREAS You are/will be* conducting ……...……..……. (5) which may result in an adverse effect

WHEREAS You are/will be* in possession or control of ……...… (6) which may result in an adverse effect ☐

It is hereby **ORDERED,** that you

(a) PREPARE a written emergency response plan to reduce or eliminate the risk and provide a copy of the plan to the Director-General

(b) HAVE the following equipment and facilities, available to deal with the risk: (7)

(i).....……..

(ii).....……..

(iii).....……..

(c) HAVE the following trained personnel available to deal with the risk:

(i).....……

(ii).....……

(iii).....……

(d) IMPLEMENT the emergency response plan upon the occurrence of the following: (8)

(i).....……

(ii)……..

(iii).....……

AND

1. Here insert the name of person/ entity on whom Order is to be served
2. Here insert the premises where the person is in possession of the substance or thing in question/ where the activity is being concluded*
3. Here insert the name of the district in which the person/entity is located
4. Here insert name of the Province in which the person/ entity is located
5. Here insert the activity being conducted or to be conducted
6. Here insert the name of the substance or thing
7. Here insert the necessary equipment and facilities
8. Here list the events or set of circumstances

(e) TAKE any measures that are necessary to ensure that any emergency can be effectively dealt with:

FURTHER, You are required to comply with this Order by the ……....… day of ……, 20 ……..

Dated this ..... day of ....., 20……..

……..
Director-General

☐ √ Tick where appropriate
* Delete whichever is not applicable

FORM XXV
(*Regulation* 66)

HE ZAMBIA ENVIRONMENTAL MANAGEMENT AGENCY

The Environmental Management Act, 2011

(Act No. 12 of 2011)

The Environmental Management (Licensing) Regulations, 2013

PROTECTION ORDER

(Section 104 of the Environmental Management Act, 2011)

ORDER NO.:…….

To: (1) ..... of (2) .....of (3) ..... District in the(4)..... Province of the Republic of Zambia.

You are ordered to:

(a) Take any measures to avoid, remedy or mitigate any adverse effects and to –
- (i) stop …… (5) ☐
- (ii) control …….. (6) ☐
- (iii) assess the actual or anticipated extent of the adverse effect ☐
- (iv) remedy any adverse effects caused by the …… ☐
- (v) prevent a recurrence of the ……(7) or the adverse effect ☐

(b) preserve flora and fauna ☐

(c) preserve the quality and flow of water in a dam, lake, river or aquifer ☐

(d) preserve any outstanding geological, physiographical, ecological,archeological or historical features of the area ☐

(e) preserve scenic view ☐

(f) preserve the natural contours and features ☐

(g) prevent or restrict the scope of any agricultural activity in …… (8) ☐

(h) create or maintain migration corridors for wildlife ☐

FURTHER, You are required to comply with the requirements of this order by the …… of ……, 20…….

Dated this ..... day of ....., 20……..

……..
Director-General

☐ (√) Tick where appropriate

(1) Here insert name of person/ entity on whom Order is to be served

(2) Here insert the place at which the Order is to be executed

(3) Here insert the name of district in which the person/ entity is located

(4) Here insert the name of Province in which the person/ entity is located

(5) Here insert the activity to be stopped

(6) Here insert the activity to be controlled

(7) Here insert the activity to be prevented

(8) Here insert the name of the area

FORM XXVI
(*Regulation* 67)

HE ZAMBIA ENVIRONMENTAL MANAGEMENT AGENCY

The Environmental Management Act, 2011

(Act No. 12 of 2011)

The Environmental Management (Licensing) Regulations, 2013

ENVIRONMENTAL RESTORATION ORDER

(Section 105 of the Environmental Management Act, 2011)

ORDER NO.:…….

This Order is served on (1) ..... of (2) ..... of (3) ..... District in the(4)..... Province of the Republic of Zambia

You are ordered to take measures to reduce or eliminate the risk or harman and to –

(a).....……. (5) to prevent the continuation or cause of pollution
(b) restore land, including**,** ……. (6)
(c).....…….. (7) to prevent the commencement or continuation of cause of environmental hazard
(d) cease to …… (8)
(e) remove or alleviate any injury to land or the environment or to the amenities of …….. (9)
(f)…….. (10)

FURTHER, you are required to comply with the requirements of this Order by the …… day of ……., 20……

Dated this ..... day of ....., 20……..

……..
Inspector

*Delete whichever is not applicable

(1) Here insert name of person/ entity on whom Order is to be served
(2) Here insert the name of the premises where the Order is to be executed
(3) Here insert the name of the district in which the person/entity is located
(4) Here insert the name of the Province in which the person/entity is located
(5) Here insert the action to be taken
(6) Here insert the action to be taken
(7) Here insert the action to be taken
(8) Here insert the action to be ceased
(9) Here insert the name of the area
(10) Here insert any other action to be taken

FORM XXVII
(*Regulation* 68)

HE ZAMBIA ENVIRONMENTAL MANAGEMENT AGENCY

The Environmental Management Act, 2011

(Act No. 12 of 2011)

The Environmental Management (Licensing) Regulations, 2013

COMPLIANCE ORDER

(Section 106 of the Environmental Management Act, 2011)

ORDER NO.:……

This Order is served on (1) ..... of (2) ..... District in the (3)..... Province of the Republic of Zambia

You are ORDERED to – (4)

The licence No. ……..(5) is immediately suspended ☐

You are REQUIRED to – (6)

You MUST comply with the requirements of this Order by the ……. day of ……., 20……

Dated this ..... day of ....., 20……..

……..
Director-General

(1) Here insert name of person/ entity on whom Order is to be served
(2) Here insert the name of district in which the person/entity is located
(3) Here insert the name of the Province in which the person/entity is located
(4) Here insert the action to be taken to remedy the breach of a licence condition
(5) Here insert the licenceNo.
(6) Here insert the measures to be taken by the licensee to prevent or abate any adverse effect

☐ (√) Tick where appropriate

FORM XVIII
(*Regulation* 69)

HE ZAMBIA ENVIRONMENTAL MANAGEMENT AGENCY

The Environmental Management Act, 2011

(Act No. 12 of 2011)

The Environmental Management (Licensing) Regulations, 2013

COST ORDER

(Section 107 of the Environmental Management Act, 2011)

ORDER NO.:…….

This Order is served on (1) ..... of (2) ..... District in the (3)..... Province of the Republic of Zambia

You are ORDERED to reimburse the Agency the sum of (4) …….

BEING the cost incurred by the Agency of taking the following measures: …… (5)

NOTEthat this Order shall be enforced as if it is an Order of Court if no application for the review of this Order is made.

Dated this ..... day of ....., 20……..

……..
Director-General

(1) Here insert name of person/ entity on whom Order is to be served
(2) Here insert the name of district in which the person/entity is located
(3) Here insert the name of the Province in which the person/entity is located
(4) Here insert the amount of monies the Agency is required to be reimbursed, in words
(5) Here state the measures taken by the Agency

FORM XXIX
(*Regulation* 70)

HE ZAMBIA ENVIRONMENTAL MANAGEMENT AGENCY

The Environmental Management Act, 2011

(Act No. 12 of 2011)

The Environmental Management (Licensing) Regulations, 2013

NOTICE OF ISSUANCE OF CONDITIONAL ORDER
(Section 129(4) of the Environmental Management Act, 2011)

(1) Here insert the name of the place where the Court sat
(2) Here insert the name of the convict

TAKE NOTICE that the Honourable Magistrate/Justice* Mr/Mrs ..... sitting at …….. (1) on the ….....day of....., 20……. made a conditional order in the case of the People v(2) ....., to the effect that unless any person other than the convicted person claims any right of ownership in the matter, article, vehicle, aircraft, boat or any other conveyance*the following matter, article, vehicle, aircraft, boat or any other conveyance* be forfeited to the state:

S/N	*Description of matter, article, substance vehicle, aircraft, boat or any other conveyance*	*Quantity*
1.		
2.		
3.		
4.		

This notice serves to advise any person who has a claim of right of ownership in the described matter, article, vehicle, aircraft, boat or any other conveyance*, within a period of three months from the date of the conditional order, to lodge a claim with the Agency.

TAKE FURTHER NOTICE that should the Agency receive no claim in respect of the foregoing, the Agency shall proceed to apply to court to have the order enforced accordingly.

Dated this.....day of....., 20……..

……

Inspector

*Delete whichever is not applicable

FORM XXX

(*Regulation* 71)

HE ZAMBIA ENVIRONMENTAL MANAGEMENT AGENCY

The Environmental Management Act, 2011

(Act No. 12 of 2011)

The Environmental Management (Licensing) Regulations, 2013

NOTICE OF INTENTION TO APPLY TO COURT FOR AN ORDER

(Section 131(2) of the Environmental Management Act, 2011)

To: (1) .....

TAKE NOTICE that the Agency intends, within seven days from the date of this Notice, to apply to court for an order with respect to your premises located on ..... (2) to —

(a) prohibit the carrying on of ..... (3) a (process/operation*) causing pollution or which is likely to cause adverse effects to humanhealth, plant or animal life or the environment ☐

(b) prohibit the use of..... (4) (machinery, plant,equipment or appliance*)whose use is causing or is likely to cause significant damage to humanhealth, plant or animal life or the environment ☐

Dated this.....day of....., 20…….

……
Inspector

1. Here insert the name of the owner or person in charge of or in control of the premises
2. Here insert the location of the premises
3. Here insert the process/ operation* intended to be prohibited by a court order
4. Here insert the machinery, plant, equipment or appliance* whose use is intended to be prohibited by a court order

☐ (√) Tick where appropriate

SECOND SCHEDULE

(*Regulations* 5, 6 and 7(1))

EMISSION LIMITS

1. EMISSION LIMITS FOR AMBIENT AIR POLLUTANTS

	Parameter	*Reference Time(Average)*		*GuidelineLimit*
1.	Sulphur dioxide (SO_2)	10 minutes		500µg/m^3
		1 hour		350µg/m^3
2.	Sulphur dioxide (SO_2)in combination with Total Suspended Particulates (TSP)*[1]) and PM_{10}	SO_2	24 hours	125 µg/m^3
			6 months	50 µg/m^3
		TSP	24 hours	120 µg/m^3
			6 months	50 µg/m^3
		PM_{10}	24 hours	70 µg/m^3
3.	Respirable particulate matter PM_{10} *[2] Respirable particulate matter $PM_{2.5}$ *[2]	PM_{10}	24 hours	70µg/m^3
		$PM_{2.5}$	12 months	15 µg/m^3
4.	Oxides of nitrogen (NO_X) as nitrogen dioxide (NO_2)	1 hour		400µg/m^3
		24 hours		150µg/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 µg/m^3
		12 months		1.0 µg/m^3
7.	Dust fall	30 days	Residential & light commercial areas	250mg/m^2/day
			Non-residential and light commercial areas	500mg/m^2/day
8.	Ozone (O_3)	8 hours		120 µg/m^3

*1) Total suspended particles (TSP) are particles with diameter less than 45 micrometers (µm).

*2) Respirable particles (PM10) are particles with diameter less than 10 micrometers (µm).

*3) Respirable particles (PM2.5) are particles with diameter less than 2.5 micrometers (µm).

NOTE: Reference times are the 98th percentile averaging times.

2. EMISSION LIMITS FOR AIR POLLUTION BY TYPEOF INDUSTRY/PROCESS

Industry/ Process	*Parameter*	*Emission Limit*
A. COPPER PRODUCTION		
Smelters and Converters	Sulphur dioxide (SO_2)	1000 mg/Nm^3
	Dust	50 mg/Nm^3
Concentrate dryer	Dust	50 mg/Nm^3
	SO_2	500 mg/Nm^3
Heavy Metal Content	Arsenic (As)	0.5 mg/Nm^3
in dust	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
	Uranium	
	Selenium	
B. LEAD AND ZINC SMELTING		
	Sulphurdioxide (SO_2)	400 mg/Nm^3
	Dust	20 mg/Nm^3
	Lead	0.5 mg/Nm^3
	Zinc	1.0 mg/Nm^3
C. MANGANESE SMELTING		
	Dust	30 mg/Nm^3
	Manganese	1.0 mg/Nm^3
	CO	175 mg/Nm^3
	SO_2	400 mg/Nm^3
	NO_x	600 mg/Nm^3
D. CEMENT AND LIME PRODUCTION		
1. Cement production	Dust	50 mg/Nm3
	Sulphur oxides (SO_x)	400 mg/Nm^3
	Oxides of nitrogen (NO_x)	600 mg/Nm^3
	Carbon dioxide (CO_2)	……
2. Lime production	Dust	50 mg/Nm3
	Sulphur oxides (SO_x)	mg/Nm^3
	Oxides of nitrogen (NO_x)	mg/Nm^3
	Carbon dioxide (CO_2)	mg/Nm^3
E. NITRIC ACID AND SULPHURIC ACID PRODUCTION		
1. Nitric acid production	NOx as NO_2	100 - 1,400 kg/day
2. Sulphuric acid production	SO_2	700 - 4,300 kg/day
3. Phosphoric acid		

F.	**FERTILISER PRODUCTION**		
1.	Ammonium Nitrate	Dust	500 kg/day
	Phosphate fertilizer	Dust	50 mg/Nm^3
	Blends	Dust	50 mg/Nm^3
		NOx	500 mg/Nm^3
	Coal treatment	Dust	150 kg/day
	NPK production	Dust	100 kg/day
	Urea	Dust	50 mg/Nm^3
G.	**DYE MANUFACTURING**		
		Chlorine or Chloride	10 mg/ Nm^3
		VOCs	20 mg/Nm^3
H.	**TANNING AND LEATHER FINISHING**		
		VOCs	20 mg/Nm^3
I.	**TEXTILES**		
		VOCs	20 mg/Nm^3
J.	**FOUNDRIES**		
		PM 10	20 mg/Nm^3
		Zinc	1.0 mg/Nm^3
		Lead	0.5 mg/Nm^3
		Cadmium	0.05 mg/Nm^3
		Nickel	1.0 mg/Nm^3
		Chromium	0.05 mg/Nm^3
K.	**GLASS MANUFACTURING**		
	Oil fired	Dust	50 mg/Nm^3
		SO_2	1800 mg/Nm^3
		NO_X	1000-2000mg/Nm^3
L.	**IRON AND STEEL MANUFACTURING**		
		Dust	50 mg/Nm^3
		Sulphur oxides (SO_X)	500 mg/Nm^3
		Oxides of nitrogen (NO_X)	750 mg/Nm^3
M.	**PETROLEUM REFINING**		
		Dust	50 mg/Nm^3
Recovery units		Sulphurdioxide (SO_2)	150 mg/Nm^3
		Oxides of nitrogen (NO_X)	460 mg/Nm^3
Combustion units		Sulphurdioxide (SO_2)	500 mg/Nm^3
		Oxides of nitrogen (NO_X)	460 mg/Nm^3
N.	**SUGAR MANUFACTURING**		
		Dust	50 mg/Nm^3
		Sulphur dioxides (SO_2)	500 mg/Nm^3
	Solid fuel	Oxides of nitrogen (NO_X)	600 mg/Nm^3
	Liquid fuel	Oxides of nitrogen (NO_X)	400 mg/Nm^3
O.	**THERMAL POWER PLANTS**		
	Solid fuel	Dust	50 mg/Nm^3
		Oxides of Sulphur (SO_X)	500 mg/Nm^3
		Oxides of nitrogen (NO_X)	600 mg/Nm^3
	Liquid fuel	Dust	50 mg/Nm^3
		Sulphur oxides (SO_X)	500 mg/Nm^3
		Oxides of nitrogen (NO_X)	400 mg/Nm^3

P.	**COMBUSTION UNITS**		
	BOILERS		
	Oil fired < 50MW (2)	Dust	50 - 150 mg/Nm^3
		SO_2	850 mg/Nm^3
		CO	100 mg/Nm^3
	Oil fired > 50MW (2)	Dust	100 mg/Nm3
		SO_2	1000 mg/Nm3
CO	100 mg/Nm3		
	Coal fired, <10 MW(2)	Dust	150 mg/Nm^3
		SO_2	2000 mg/Nm^3
		CO	100 mg/Nm^3
	Coal Fired, 10 – 50 MW(2)	Dust	50 mg/Nm^3
		SO_2	1000mg/Nm^3
		CO	175mg/Nm^3
	Coal Fired, >50 MW(2)	Dust	50 mg/Nm^3
		SO_2	2000 mg/Nm^3
		CO	175 mg/Nm^3
Q.	**INCINERATORS**		
	Oil fired < 50MW (2)	Dust	100 mg/Nm^3
		SO_2	850 mg/Nm^3
		CO	100 mg/Nm^3
		NO_X	460 mg/Nm^3
		Mercury	0.05 mg/Nm^3
	Oil fired > 50MW (2)	Dust	50 mg/Nm3
		SO_2	1500 mg/Nm3
		CO	100 mg/Nm3
		NO_X	750 mg/Nm^3
		Mercury	0.05 mg/Nm^3
	Coal fired, <10 MW(2)	Dust	150mg/Nm^3
		SO_2	2000mg/Nm^3
		CO	100 mg/Nm^3
		NO_X	750 mg/Nm^3
		Mercury	0.05 mg/Nm^3
	Coal Fired, 10 – 50 MW(2)	Dust	50 mg/Nm^3
		SO_2	1000 mg/Nm^3
		CO	175 mg/Nm^3
		NO_X	460 mg/Nm^3
		Mercury	0.05 mg/Nm^3
	Coal Fired, >50 MW(2)	Dust	50 mg/Nm^3
		SO_2	2000 mg/Nm^3
		CO	175 mg/Nm^3
		NO_X	750 mg/Nm^3
		Mercury	0.05 mg/Nm^3

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. CO limits are not necessary for oil combustion units <5MW and coal combustion units < 1 M

THIRD SCHEDULE

(*Regulation* 7(2))

LIMITS FOR EFFLUENT AND WASTE WATER

Parameter	*Effluent and waste water into aquatic environment*
A. Physical	
1. Temperature (Thermometer)	≤ 40 °C at point of entry
2. Colour (Hazen Units)	≤ 20 Hazen units
3. Odour (Threshold odour number)	Must not cause any deterioration in odour as compared with natural state
4. Turbidity (NTU scale)	≤ 15 Nephelometer turbidity units
5. Total suspended solids(Gravimetric method)	≤ 100 mg/L must not cause formation of sludge or scum in receiving water
6. Settleable matter sedimentation in 2 hours (Imhoff funnel)	≤ 0.5 mg/L in two hours. Must not cause formation of sludge in receiving water
7. Total Dissolved Solids (Evaporation @ 105^0 C and Gravimetric method)	≤ 3000 mg/L The TDS of waste water must not adversely affect surface water
8. Conductivity (Electrometric method)	≤ 4300 mS/cm
B. Bacteriological	
9. Total Coliform/100 ml (Membrane Filtration method)	≤ 25000 cells
10. Faecal Coliform/100ml (Membrane Filtration method)	≤5000 cells
11. E. coli counts/100 ml	≤ 10 cells
12. Algae /100 ml (Colony counter)	≤ 1000 cells
C. Chemical	
13. pH (0-14 scale) (Electro-metric method)	6.0 - 9.0
14. Dissolved oxygen mg Oxygen/Litre (Modified Winkler method and membrane electrode method)	≤ 5 mg/L after complete mixing extreme temperature may result in lower values
15. Chemical Oxygen Demand (COD) (Dichromat method)	COD based on the limiting values for organic carbon ≤ 90 mg 0_2/L average for 24 hours
16. Biochemical Oxygen Demand (BOD) (Modified Winkler method and Membrane Electrode method)	≤ 50 mg 0_2/L (mean value over 24 hours period) According to circumstances in relation to the self-cleaning capacity of waters
17. Nitrates (NO3 as nitrogen) (Spectrophotometric method and electrometric method)	The nitrates burden must be reduced as far as possible according to circumstances: water course ≤ 50 mg/L; Lakes 20 mg/L
18. Nitrite (NO2 as nitrogen/L Spectrophotometric sulphanilamide)	≤ 2.0 mg NO_2 as N/L
19. Organic Nitrogen (Spectro-photometric method N-Kjeldal)	≤ 5.0 mg/L Mean* (* the % of nutrient elements for degradation of BOD should be 0.4 - 1 % for phosphorous (different for processes using algae)
20. Ammonia and Ammonium (Total) (NH3 as N/L) (Nesslerization method and Electrometric method)	The burden of ammonium salts must be reduced to ≤ 10 mg/L (depending upon temperature, pH and salinity)
21. Cyanides (Spectrophoto-metric method)	≤ 0.2 mg/L
22. Phosphorous (Total) (PO4 as P/L) (Colori-metric method)	Treatment installation located in the catchment area of lakes: ≤ 1.0 mg/L; located outside the catchment area: reduce the load of P as low as possible (PO_4 = 6 mg/L)
23. Sulphates (Turbidimetric method)	≤ 1500 mg/L
24. Sulfite (Iodometric method)	≤ 0.1 mg/L (presence of Oxygen changes SO_3 to SO_4)
25. Sulphide (Iodometric and electrometric method)	≤ 0.1 mg/L (depending on temperature, pH and dissolved O_2)
26. Chlorides CI/L (Silver nitrate and Mercuric nitrate)	≤ 800 mg/L
27. Active chloride Cl2/L (Iodometric method)	≤ 0.5 mg/L
28. Active Bromine (Br2/L)	≤ 0.1 mg/L
29. Fluorides F/L (Electro-metric method and Colori-metric method with distillation)	≤ 2.0 mg/L

D. Metals	
30. Aluminium compounds (Atomic Absorption method)	d" 2.5 mg/L
31. Antimony (Atomic absorption method)	d" 0.5 mg/L
32. Arsenic compounds (Atomic Absorption method)	d" 0.05 mg/L
33. Barium compounds (water soluble concentration) (Atomic Absorption method)	d" 0.5 mg/L
34. Beryllium salts and compounds (Atomic Absorption method)	d" 0.5 mg/L
35. Boron compounds (Spectro photometric method- curcumin method)	d" 0.5 mg/L
36. Cadmium compounds (Atomic Absorption method)	d" 0.5 mg/L
37. Chromium Hexavelant, Trivalent (Atomic absorption method)	d" 0.1 mg/L
38. Cobalt compounds (Atomic Absorption method)	d" 1.0 mg/L
39. Copper compounds (Atomic Absorption method)	d" 1.5 mg/L
40. Iron Compounds (Atomic Absorption method)	d" 2.0 mg/L
41. Lead compounds (Atomic Absorption method)	d" 0.5 mg/L
42. Magnesium (Atomic Absorption method and flame photometric method)	d" 500 mg/L
43. Manganese (Atomic Absorption method)	d" 1.0 mg/L
44. Mercury (Atomic Absorption method)	d" 0.002 mg/L
45. Molybdenum (Atomic Absorption method)	d" 5.0 mg/L
46. Nickel (Atomic Absorption method)	d" 0.5 mg/L
47. Selenium (Atomic Absorption method)	d" 0.02 mg/L
48. Silver (Atomic Absorption method)	d" 0.1 mg/L
49. Thallium (Atomic Absorption method)	d" 0.5 mg/L
50. Tin compounds (Atomic Absorption method)	d" 2.0 mg/L
51. Vanadium compounds (Atomic Absorption method)	d" 1.0 mg/L
52. Zinc compounds (Atomic Absorption method)	d" 1.0 mg/L
53. Total metals	d" 10 mg/L
E. Organics	
54. Total hydrocarbons (Chromatographic method)	d" 10.0 mg/L
55. Oils and grease (Mineral and Crude) (Chromatographic method and Gravimetric method)	d" 5.0 mg/L
56. Adsorbable organic halides (AOX)	d"1.0 mg/L
57. Phenols (steam distillable) (Colorimetric method)	d" 0.2 mg/L
58. Phenols (Non-steam distillable) (Colorimetric method)	d" 0.05 mg/L
59. Fats and saponifiable oils (Gravimetric method and chromatographic method)	d" 20 mg/L
60. Detergents, Surfactants, and other tenside products (Atomic Absorption Spectrophotometric)	d" 2.0 mg/L (Detergents should contain biodegradable compounds)
61. Pesticides and PCBs (Total) (Chromatographic method)	d" 0.5 mg/L
62. Trihaloforms (Chromatographic)	d" 0.5 mg/L
F. Radioactive Materials	
63. Uranium (Mass spectrometry or Laser photometry)	d" 0.03mg/L
64. Any other radioactive materials	0

FOURTH SCHEDULE

(Regulation 8)

CLASSIFICATION CRITERIA FOR EFFLUENT

1. CRITERION FOR ESTABLISHING TYPE OF RECEIVING ENVIRONMENTAL SENSITIVITY

Score	*Receiving Environment Sensitivity*
4	Good
3	Good
2	Medium
1	Weak
0	Weak

Key:
1. Is it an open area, terrain (with respect to stack height), good exchange of air?
2. Are there no other emitting stacks in the fall-out area?
3. Is there human settlement in the fall-out area?
4. Is the area zoned for industrial activity?

Note:
A score of 4 means all the four criteria are met.
A score of 3 means three out of four criteria are met
A score of 2 means two out of four criteria are met.
A score of 1 means one out of four criteria is met.
A score of 0 means none of four criteria are met.

2. CRITERION FOR ESTABLISHING EMISSION CLASS

Emission Level	*Receiving Environment*	*Class*
High	Weak	I
Medium		
High	Good	II
Low	Weak	III
Low	Medium	IV

3. CRITERION FOR ESTABLISHING CLASS FOR DISCHARGE

	Volume (Quantity of effluent)		
[1]Number of times critical parameter(s) prescribed limit (Concentration)	High	Medium	Low
2.1 times and above	Class I	Class I	Class I
0.6 - 2 times	Class I	Class II	Class II
Up to 0.5	Class II	Class III	Class III
At prescribed limit and below	Class III	Class IV	Class IV

Key:
[1]Note: The parameter which determines the class is the one that most exceeds the prescribed limit.

Key for quantity of Effluent:
High= Volume above 100 m^3/day
Medium= Volume between 51 –100 m^3/day
Low=Volume below 51 m^3/day

FIFTH SCHEDULE

(*Regulation* 18(1))

LIST OF HAZARDOUS WASTE

1. METAL OR METAL BEARING WASTES

Hazardous Waste Number	*Hazardous Waste Description*
ZEMA A1010	Metal waste and waste containing alloys of arsenic, cadmium, lead, mercury, selenium
ZEMA A1020	Waste having as constituents or contaminated (excluding metal waste in massive form) with cadmium, lead, selenium or their compound
ZEMA A1040	Waste having as constituent's hexavalent chromium
ZEMA A1060	Waste liquor from pickling of metals
ZEMA A1070	Leaching residues, dust and sludges from zinc processing
ZEMA A1090	Ashes from the incineration of insulated copper wire
ZEMA A1160	Waste lead-acid batteries
ZEMA A1180	Waste electrical or electronic assemblies or scrap containing accumulator or other batteries, mercury switches, activated glass, polychlorinated biphenyls (PCBs), or contaminated with materials having hazard characteristics listed in the Seventh Schedule

2. WASTE CONTAINING IN-ORGANIC CONSTITUENTS

Hazardous Waste Number	*Hazardous Waste Description*
ZEMA A2020	Waste (spent) catalysts
ZEMA A2050	Waste Asbestos

3. ORGANIC

Hazardous Waste Number	*Hazardous Waste Description*
ZEMA A3020	Waste mineral oils, including that contaminated by polychlorinated biphenyls (PCBs)
ZEMA A3140	Waste non-halogenated organic solvents
ZEMA A3150	Waste halogenated organic solvents
ZEMA A3180	Waste containing polychlorinated biphenyls (PCBs), polychlorinated terphenyls (PCTs), polychlorinated naphthalenes (PCNs), polybrominatedbiphenyls (PBBs)
ZEMA A3190	Waste containing or contaminated with pesticides persistent organic pollutants (POPs)
ZEMA A4010	Waste from pharmaceuticals
ZEMA A4020	Waste from clinics and other related waste (medical, veterinary, investigations and research), excludes office and kitchen waste
ZEMA A4040	Wood preservation chemicals
ZEMA A4050	Inorganic or organic cyanides
ZEMA A4070	Wastes from inks, dyes, pigments, paint
ZEMA A4080	Explosive wastes
ZEMA A4150	Chemicals from research and development and teaching

SIXTH SCHEDULE

(*Regulation* 18(1))

CATEGORIES OF WASTE TO BE CONTROLLED

1. WASTE STREAMS

Hazard Number	*Waste Steam*
Y1	Clinical waste from medical care in hospitals and health facility
Y2	Waste from the production and preparation of pharmaceutical products
Y3	Waste pharmaceuticals, drugs and medicines
Y4	Waste from the production, formulation and use of biocides and phyto-pharmaceuticals
Y5	Waste from the manufacture, formulation and use of wood preserving chemicals
Y6	Waste from the production, formulation and use of organic solvents
Y7	Wastes from heat treatment and tempering operations containing cyanides
Y8	Waste mineral oils unfit for their originally intended use
Y9	Waste oils/water, hydrocarbons/water mixtures, emulsions
Y10	Waste substances and articles containing or contaminated with polychlorinated biphenyls (PCBs) or polychlorinated terphenyls (PCTs) or polybrominated biphenyls (PBBs)
Y11	Waste tarry residues arising from refining, distillation and any pyrolytic treatment
Y12	Waste from production, formulation and use of inks, dyes, pigments, paints, lacquers and varnish
Y13	Waste from production, formulation and use of resins, latex, plasticisers, glues and adhesives
Y14	Waste chemical substances arising from research and development or teaching activities which are not identified or are new and whose effects on man or the environment are not known
Y15	Waste of an explosive nature not subject to other legislation
Y16	Waste from production, formulation and use of photographic chemicals and processing materials
Y17	Waste resulting from surface treatment of metals and plastics
Y18	Residue arising from industrial waste disposal operations
2. WASTE HAVING AS CONSTITUENTS	
Y19	Metal carbonyls
Y20	Beryllium; beryllium compounds
Y21	Hexavalent chromium compounds

Y22	Copper compounds
Y23	Zinc compounds
Y24	Arsenic; arsenic compounds
Y25	Selenium; selenium compounds
Y26	Cadmium; cadmium compounds
Y27	Antimony; antimony compounds
Y28	Tellurium; tellurium compounds
Y29	Mercury; mercury compounds
Y30	Thallium; thallium compounds
Y31	Lead; lead compounds
Y32	Inorganic fluorine compounds excluding calcium fluoride
Y33	Inorganic cyanides
Y34	Acidic solutions or acids in solid form
Y35	Basic solutions or bases in solid form
Y36	Asbestos (dust and fibres)
Y37	Organic phosphorus compounds
Y38	Organic cyanides
Y39	Phenols; phenol compounds including chlorophenols
Y40	Ethers
Y41	Halogenated organic solvents
Y42	Organic solvents excluding halogenated solvents
Y43	Any congener of polychlorinated dibenzo-furan
Y44	Any congener of polychlorinated dibenzo-p-dioxin
Y45	Organohalogen compounds other than substances referred to in this Schedule (e.g. Y39,Y41, Y42, Y43, Y44)

SEVENTH SCHEDULE

(*Regulation* 18(1))

LIST OF HAZARDOUS CHARACTERISTICS

UN Class	*Code*	*Characteristics*	*Definition*
1	**H1**	**Explosive**	An explosive substance or waste is a solid or liquid substance or waste (or mixture of substances or wastes) which is in itself capable by chemical reaction of producing gas at such a temperature and pressure and at such speed as to cause damage to the surroundings.
3	**H3**	**Flammable liquids**	The word "flammable has the same meaning as inflammable." Flammable liquids are liquids, or mixtures of liquids, or liquids containing solids in solution or suspension (for example, paints, varnishes, lacquers, etc., but not including substances or waste otherwise classified on account of their dangerous characteristics) which give off a flammable vapour at temperatures of not more than 60.5^0 C, closed-cup test, or not more than 65.6^0C, open-cup test.
4.1	**H4.1**	**Flammable solids**	Solids or waste solids, other than those classed as explosives, which under conditions encountered in transport are readily combustible, or may cause or contribute to fire through friction.
4.2	**H4.2**	**Substances or wastes liable to spontaneous combustion**	Substances or waste thatis liable to spontaneous heating under normal conditions, encountered in transport, or to heating upon contact with air, and being then liable to catch fire.
4.3	**H4.3**	**Substances or wastes, which, in contact with water emit flammable gases**	Substances or wastes, which, by interaction with water, are liable to become spontaneously flammable or to give off flammable gases in dangerous quantities.
5.1	**H5.l**	**Oxidizing**	Substances or waste which, while in themselves not necessarily combustible may generally by yielding oxygen cause, or contribute to, the combustion of other materials.
5.2	**H5.2**	**Organic Peroxides**	Organic substances or waste that contain the bivalent-O-O-structure are thermally unstable substances, which may undergo exothermicself-accelerating decomposition.
6.1	**H6.1**	**Poisonous (Acute)**	Substances or waste liable either to cause death or serious injury or to harm health if swallowed or inhaled or by skin contact.
6.2	**H6.2**	**Infectious substances**	Substances or waste containing viable micro-organisms or their toxins which are known or suspected to cause disease in animals or humans.
8	**H8**	**Corrosives**	Substances or waste which, by chemical action, will cause severe damage when in contact with living tissue or in the case of leakage will materially damage, or even destroy, other goods or the means of transport. They may also cause other hazards.
9	**H10**	**Liberation of toxic gases in contact with air or water**	Substances or waste that by interaction with air or water are liable to give off toxic gases in dangerous quantities.
9	**H11**	**Toxic (Delayed or chronic)**	Substances or waste that if they are inhaled or ingested or if they penetrate the skin may involve delayed or chronic effects, including carcinogenicity.
9	**H12**	**Exo-toxic**	Substances or wastes which if released present or may present immediate or delayed adverse impacts to the environment by means of bio-accumulation or toxic effects upon biotic systems.
9	**H13**	**Capable by any means after disposal of yielding other material**	Leachate which possesses any of the characteristics listed in this Schedule

EIGHTH SCHEDULE

(*Regulations* 21, 22, 27and 29)

HAZARDOUS WASTE HANDLING, STORAGE AND TRANSPORTATION

MINIMUM REQUIREMENTS FOR HAZARDOUS WASTE HANDLING, STORAGE AND TRANSPORTATION

Subject	*Minimum Requirement*
Qualification as disposal site	If waste is held at a storage site for a period exceeding three months, the site qualifies as a hazardous waste disposal site and must for purposes of licensing meet all the requirements of a hazardous waste disposal site.
Temporary storage area	A temporary storage area must have a firm, waterproof base and drainage system. It must be so designed and managed that there is no escape of contaminants into the environment.
Packaging	Packaging should be of good quality which should be constructed and closed so as to prevent leakages which might be caused under normal conditions of storage or transport.
	Parts of packagings which are in direct contact with substances should not be affected by chemical or other reaction of those substances. Where necessary, they should be provided with a suitable inner coating or treatment. Such parts of packagings should not incorporate constituents liable to react dangerously with contents so as to form other products or weaken them significantly.
	When filling packagings with liquids, sufficient ullage (outage) should be left to ensure that neither leakage or permanent distortion of the packaging occurs as a result of expansion of the liquid caused by temperatures likely to occur during storage or transport.
	Inner packings should be packed in an outer packaging that under normal conditions of storage or transport cannot break, be punctured or leak their contents into outer packaging. Inner packagings that are liable to break or be punctured easily, such as those made of glass, porcelain or stoneware or of certain plastics materialsshould be secured in outer packagings with suitable cushioning material. Any leakage of the contents should not substantially impair the protective properties of the cushioning material or the outer packaging.
	Inner packagings containing different substances which may react dangerously with one another should not be placed in the same packaging.
Packaging	Where pressure may develop in a package by the emission of gas from the contents as a result of temperature increase, the packaging may be fitted with vent as long as the gas emitted will not cause danger on account of its toxicity, its flammability, the quantity released, etc. The vent should be so designed that when the packaging is in the altitude in which it is intended to be stored or transported, leakage of the liquid and the penetration of foreign substances are prevented under normal conditions of storage or transport. Venting of the package is not permitted for air transport.
	A packaging which shows signs of reduced strength compared with the approved design type should no longer be used or should be reconditioned.
	Liquids should be filled only into packagings which have an appropriate resistance to internal pressure that may be developed under normal conditions of storage and transport. Packagings marked with the hydraulic test pressure should be filled only with a liquid with a vapour pressure - *(a)* such that the total gauge pressure in the packaging (i.e. the vapour pressure of the filling substance plus the partial pressure of the air or other inert gases, less 100 kPa) at 55^0C, determined on the basis of maximum degree of the filling and filling temperature of 15^0C, will not exceed two-thirds of the marked test pressure; *(b)* at 50^0C less than four-sevenths of the sum of the marked test pressure plus 100kPa; or *(c)* at 55^0C less than two-third of the sum of the marked test pressure plus 100kPa.
	An empty packaging that has contained dangerous substances should be treated in the same manner as is required by the recommendations for a filled packaging until it has been purged of the residue of the dangerous substance.
	Each package should be clearly marked on the outside with the name of its contents and UN number, together with the net mass of the material and the gross mass.
Specific Packaging Recommendations for Class 1:	Water soluble substances should be packed in waterproof receptacles
	Packages should be lead free
	The inside of packings should be galvanized, painted or otherwise protected
	The inner packings, which unless the ends of the articles are sealed, should be plastics
	Large articles without any means of ignition may be carried unpacked

Identification of waste	The transporter must be provided with accurate information about the nature and properties of the load.
Documentation	The transport operator must be provided with the relevant transportation documentation for the consignment.
Security of load	The load must be properly loaded and secured on site.
Hazchem placard	The transport operator must be supplied with the appropriate Hazchem placards.
Hazchem placard	The transport operator must ensure that the Hazchem placards are properly fitted to the vehicle.
Vehicle Roadworthiness	The responsible person must ensure that before the vehicle leaves the consignor's premises it is not overloaded or showing any obvious defect that would affect its safety.
Escape of hazardous spillage at site	The Agency and the local authority must be advised immediately should it prove impossible to contain spillage of a hazardous waste on a site.
Protection against effect of accident	The generator of the hazardous waste must ensure that adequate steps are taken to minimise the effect that an accident or incident may have on the public and on the environment.
Spillage on site	The generator of the hazardous waste must initiate remedial action to clean up any spillage remaining on a site after an accident.
Notification	All road accidents must be reported to the Agency responsible for road transport in the prescribed form.
Reporting of Accident	In case of an accident, a full report, containing all the information must be sent to the Agency immediately.

NINETH SCHEDULE

(*Regulations* 23 and 24)

HAZARDOUS WASTE TREATMENT AND DISPOSAL OPERATIONS

1. PHYSICAL TREATMENT TECHNOLOGIES

Technology	*Process Description*	*Applications*
Air Stripping	Air is passed countercurrent to a normally aqueous waste stream and the volatile waste is removed from the solution. Cooling or scrubbing of the air removes the wastes from the gas.	Removal of low concentrations of ammonia or volatile fatty acids e.g. acetic acid from water.
Electrodialysis	A membrane that selectively retains or permits the passage of specific ions is used. Separation of the ions is induced by the application of an electric current.	Recovery of developer in the photographic industry and hydrogen or ammonium fluoride from glass etching solutions.
Evaporation	A liquid is vaporised e.g. by heating in order to separate it from dissolved or suspended solids. Unlike distillation no attempt is made to separate the components of the vapour.	Solar evaporation ponds for volume reduction of the large amounts of inorganic solutions from the chemical and mining industries.
Filtration	Solids are removed from a solution by passing it through a filter medium.	Solids are often removed prior to discharge to receiving waters.
Flocculation	Small suspended particles are increased in size by the addition of chemicals such as alum, lime, ferrous sulphate, ferric chloride or organic polyelectrolytes. The particles can then be removed more readily by sedimentation or filtration.	Used with hydroxide precipitates in the metal finishing industry, in phosphate removal processes and for waste from spray paint booths.
Flotation	Air is passed through water containing suspended solids, the bubbles stick to the surface of the required particles and they float to the surface where they are skimmed off. In Dissolved Air Floatation (DAF) the water is pressurised and on removal of the pressure bubbles are formed.	Floatation is widely used in the mining industry but only DAF has so far found wide application in water treatment e.g. in the recovery of oily wastes and paint wastes from water
Ion Exchange	An organic resin that has cationic (positive) or anionic (negative) groups can exchange ions with those dissolved in a waste water.	De-ionisation of water to produce high grade water is the most common application but the recovery of valuable materials such as silver or toxic materials such as mercury and Cr (VI) find wide use.
Reverse Osmosis	A semi-permeable membrane that only allows passage of certain components of a solution is used. Pressure applied to one side of the membrane concentrates the dissolved components on that side.	The preparation of pure water, the removal of heavy metals such as Nickel(II) or Cr(VI) or organic components such as sugars has found wide use.
Solvent Extraction	A waste solution is contacted with a solvent such as kerosene or chloroform that has a high affinity for particular dissolved components. Stripping of the solvent results in a product with a high concentration of desired waste.	Extraction of phenols from water and de-oiling of water in the petroleum industry. Recovery of valuable metals from water or sludges is likely to gain wider acceptance in the future.
Waste Blending	A waste (solution, sludge or solid) is blended with an inert solid waste such as fly ash or bottom ash prior to co-disposal to a landfill.	A common produce is to ash-blend flammable wastes in order to raise the flash point above 61°C. Ash with a reasonable free lime content is often used to neutralise acidic wastes.
Ultra-filtration	Ultra-filtration is similar to reverse osmosis except that the semi-permeable membranes have larger pores so that only required molecules of high molecular mass are retained. Lower pressures are also used.	A versatile technology that can be used for recovery of materials as diverse as paint, protein from cheese, whey and oil from metal machining wastes.

2. CHEMICAL TREATMENT TECHNOLOGIES

Technology	*Process Description*	*Applications*
Dechlorination	Reaction of organochlorine compounds with alkali metals such as sodium, alkali metal hydroxides or with hydrogen and a catalyst. This removes the chlorine and makes the compounds less environmentally hazardous.	Detoxification of PCBs and Dioxins.
Electrolysis	An electric current is passed through a solution and the positive ions (cations) go to cathode where they are reduced and the negative ions (anions) go to the anode where they are oxidised.	Selective removal of metal ions from waste solutions e.g. silver, copper, cadmium and nickel. The electrochemical oxidation of cyanide is a Best Demonstrated Available Technology (BDAT) for concentrations >300mg/l.
Hydrolysis	Hydrolysis is a process where the elements of water are added to an organic compound. The process is usually carried out in strong acid or base at elevated temperatures.	Hydrolysis of the organics in waste water increases their biodegradability. Acid oil sludge from the recovery of used lubrication oils has been successfully treated by this technique.
Neutralisation	The pH of an acidic or alkaline waste stream is brought to near neutrality by the addition of base or acid respectively.	Neutralisation of metal containing acid waste with lime leads to precipitation of the metal hydroxides.
Oxidation	Oxidation occurs when one or more electrons are added to a molecule. Common oxidising agents include chlorine, oxygen, ozone and hydrogen peroxide.	Oxidation of cyanide with chlorine to the less toxic cyanate. Ozone and hydrogen peroxide with or without U/V treatment are finding wide application in removal of toxic organics such as phenols from water.
Precipitation	Some or all of a substance in a solution comes out as a solid. Common precipitating agents include alkalis, e.g. lime, and alkali metal sulphides.	Removal of heavy metals from solutions as their insoluble hydroxides or sulphides.
Reduction	Reduction occurs when one or more electrons are removed from a molecule. Common reducing agents include ferrous sulphate and sodium sulphite.	Reduction of Cr(VI) to Cr(III) with ferrous sulphate followed by precipitation of the Chromium(III) hydroxide.

3. MINIMUM REQUIREMENTS FOR HAZARDOUS WASTE DISPOSAL

Subject	*Minimum Requirement*
Classification	In accordance with its properties and characteristics, hazardous waste must be placed in a class as provided in these Regulations.
Unlisted compounds	Should a hazardous waste contain compounds NOT listed in these Regulations, the Agency shall be consulted before classification. Direct disposal of Class 1 waste is PROHIBITED.
Class 1	Class 1 waste to be pre-treated (destroyed). Flammable gases to be thermally destroyed. Non-flammable gases to be released to atmosphere, unless in contravention with the Act and the applicable international convention.
Class 2	Controlled destruction of poisonous gases. Landfilling of flammable liquids, flashpoint < 61°C is PROHIBITED.
Class 3	Flammable liquids to be treated to flashpoint > 61°C. Landfilling of flammable solids is PROHIBITED.
Class 4	Flammable solids to be treated to non-flammability. Landfilling of oxidising substances and organic peroxides is PROHIBITED.
Class 5	Treatment to neutralise oxidation potential. Infectious substances to be sterilised.
Class 6	Toxic substance, hazard rating 1 or 2 to be disposed at a licensed hazardous waste disposal site.
Class 7	Disposal of radioactive substance with specific activity > 74 Bq/g, total activity > 3,7kBq, is PROHIBITED. Consult Authority responsible for the regulation of radioactive substances. Disposal of corrosive substance, pH < 6 and/or pH > 12, by landfill is PROHIBITED. Radioactive substance with specific activity < 74 Bq/g, total activity < 3,7kBq, to be incinerated or landfilled.
Class 8	Corrosive substance to be treated to pH 6 - 12. The Agency should be notified if a compound contains substances listed in Class 8 and written approval must be obtained before disposal.
Class 9	The Agency should be notified if a compound contains substances NOT listed in Class 9.

TENTH SCHEDULE
(*Regulation* 33)

TRANSPORTATION OF PESTICIDES AND TOXIC SUBSTANCES

A. GENERAL GUIDELINES FOR TRANSPORTATION OF PESTICIDES AND TOXIC SUBSTANCES

1. Ensure that the emergency procedure information card relating to the pesticide(s) or toxic substance(s) is in the vehicle or conveyance.
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 at the times.

B. WARNING SIGNS FOR VEHICLESTRANSPORTING PESTICIDES OR TOXIC SUBSTANCES

1. A hazard-warning panel for pesticides and toxic substances shall be in form of an equilateral triangle and a square set with its sides at an angle of 45^{o} to the verticle respectively and the length of the sides shall be—

   (a) in the case of signs on hazard-warning panels, 200millimetres; or
   (b) in the case of signs on compartment labels 95millimetres.

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

C. HAZARD-WARNING PANELS FOR TRANSPORTATION OF PESTICIDES AND TOXIC SUBSTANCES

Product	*Colour of Symbol*	*Lettering*	*Background*
Flammableliquids	Black	Black	Red
Flammablegases	Black	Black	Red
Flammablesolid White with vertical red stripes		Black	Black
Corrosive substances	Black	White	White upper half black lower half
Toxic gases	Black	Black	White
Organic peroxides	Black	Black Black	Yellow
Oxidising substances	Black	Black	Yellow
Substances emitting			
spontaneously	Black	Black	Blue flammable gases when in contact with water
Harmful substances	Black	Black	White upper half combustible

D. HAZARD-WARNING SYMBOLS FOR TRANSPORTATION OF PESTICIDES AND TOXIC SUBSTANCES

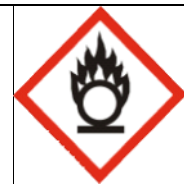
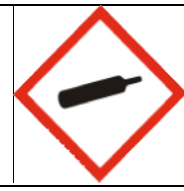
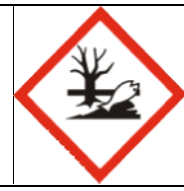
Colour Code	*Warning*
Red	Danger
Purple	Danger
Amber	Warning
Green	Warning

ELEVENTH SCHEDULE
(*Regulation* 33)

LABELLING OF PESTICIDES AND TOXIC SUBSTANCES

PICTOGRAMS

The pictograms set below shall be put on labels either as singly or in combination with appropriate ones to give complete instructions.

Flame	Flame over circle	Exploding bomb
		
Corrosion	Gas cylinder	Skull and cross bones
		
Exclamation mark	Environment	Health Hazard
		

COLOUR CODING CLASSIFICATION FOR PESTICIDES

			Oral		*Dermal*	
Hazard Class	*Color Band*	*Signal Word*	*LD50 (mg/ kg bw)*	*Hazard Statement*	*LD50 (mg/ kg bw)*	*Hazard Statement*
Category 1	Red	Danger	5 or less	Fatal if swallowed	50 or less	Fatal in contact with skin
Category 2	Red	Danger	5 - 50	Fatal if swallowed	50 - 200	Fatal in contact with skin
Category 3	Yellow	Danger	50 - 300	Toxic if swallowed	200- 1000	Toxic in contact with skin
Category 4	Blue	Warning	300 - 2000	Harmful if swallowed	1000 - 2000	Harmful in contact with skin
Category 5	Green	Warning	2000 -10000	Maybe harmful if swallowed	2000 - 10000	Maybe harmful in contact with skin`

TWELVETH SCHEDULE

(*Regulation* 37)

STORAGE OF PESTICIDES AND TOXIC SUBSTANCES

A. WAREHOUSING

1. A pesticide and toxic substance warehouse should be located away from homes, highly populated areas, drinking water sources, seismic activity and areas liable to flooding.
2. 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.
3. The building should be designed such that escape in case of emergency should be possible in at least two directions. Emergency exits should be clearly marked.
4. The warehouse should have access from at least two sides to facilitate firefighting, regardless of wind direction.
5. A warehouses should have special provision for bunding.
6. The building should permit reasonable movement of materials and enough space to allow hygienic working conditions and clear access to fire-fighting equipment.
7. The walls of the warehouse should be of non-flammable type and all piping and electrical wiring should be sealed.
8. 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.
9. The warehouse should have drains which should not be directly linked to waterways or public sewers. They should be linked by a closed system to an evaporation tank.
10. 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 filing by rain water.

B. STORAGE

1. 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 food and stock feed.
2. 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.
3. 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.

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

5. 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.

6. All stocks in the warehouse should be frequently inspected for firmly fixed and legible labels on containers, 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.

7. 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 cleaned up.

8. A 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, saw dust, earth or any other absorbent, an empty clearly labelled container (for collecting wastes) and a spade.

9. Always strictly follow the rule "First-in First-out".

THIRTEENTH SCHEDULE

(*Regulation* 38)

DISPOSAL OPTIONS FOR PESTICIDES AND TOXIC SUBSTANCES

Pesticides and toxic substance waste, expired pesticides or toxic substances and spillages, obsolete and leftover products and packaging materials for pesticide and toxic substancesshall be disposed of in the following manner:

1. **Product Use by Recycling**

   If an alternative use exists the product may be re- used or may be reformulated for the purpose for which it is included 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; or

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

3. **Chemical Treatment**

   Shall 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 be toxic or present environmental hazard.

4. **Long Term Storage**

   Compounds including those containing heavy metals and in particular, organo-mercury compounds cannot be disposed of safely using existing technology. These products shall be contained and stored 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 Slag 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 Solidification/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 waste. Organic waste 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 packed in plastic bags to minimise the risk of exposure during handling. Disposal of these should be carried out by -

(i) burning in an incinerator; and

(ii) burial in an approved landfill.

(b) **Small Packs**

Small packaging shall be well drained, triple-rinsed, shredded or crushed. Combustible packaging material should be incinerated as described in 8 (2*a*).
Non-combustible crushed containers should be buried in a landfill site.

(c) **Large Containers**

The maximum amount of residue from each container must be drained prior to triple rinsing with water or a 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 -

STEEL SMELTING - This is the preferred option.

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 re-use and packed for disposal by burial at approved landfill sites. Large quantities of plastic wastes must not be burned except in licensed incinerators.

8. **Export** -Where no safe disposal facilities exist in Zambia, export of pesticide and toxic waste to another country with facilities shall be done in accordance with these Regulations and the applicable law in that country.

9. **Return to Manufacturer**–if the manufacturer is willing to accept pesticides or toxic substances wastes or expired obsolete stocks.

FOURTEENTH SCHEDULE

(*Regulations* 2 and 43)

DETERMINATION OF ODP CALCULATED LEVELS

Item	*Group*	*Controlled Substances*		*ODP*
1.	Group 1			
	$CFCI_3$	CFC 11 (Trichloroflouromethane)		1.0
	CF_2CI_3	CFC 12 (Dichloroflouromethane)		1.0
	$C_2F_3CI_3$	CFCI 113 (1,1,2-trichloro-1,1,2 trichloroflouromethane)		0.8
	$C_2F_4CI_2$	CFC 114 (1,1,2-Dichlorotetraflouroethane)		1.0
	C_2F_5CI	CFC 115 (Chloropentaflouruethane)		0.6
2.	Group II			
	CF_2BrCl	Halon 1211 (Bromochorodifluoromethane)		3.0
		Halon 1301 (Bromotirfluoromethane)		10.0
		Halon 2402 (Dibromotetrafluoromethane)		6.0
3.	Group I			
	CF_3CI	CFC 13 (Chlorifluoromethane)		1.0
	C_2FCI_5	CFC 111(Pentachlorofluoroethane)		1.0
	$C_2F_2CI_4$	CFC 112 (Tetrachlorodifluoroethane)		1.0
	C_3FCI_7	CFC 211 (Heptachlorofluoropropane)		1.0
	$C_3F_2CI_6$	CFC 212 (Hexachlorodifluoropropane)		1.0
	$C_3F_3CI_5$	CFC 213 (Pentachlorodifluoropropane)		1.0
	$C_3F_4CI_4$	CFC 214 (Tetrachlorotetrafluoropropane)		1.0
	$C_3F_5CI_3$	CFC 215 (Trichloropentafluoropropane)		1.0
	$C_3F_6CI_2$	CFC 216 (Dichlorohexafluoropropane)		1.0
	$C_3F_6CI_2$	CFC 217 (Chloroheptafluoropropane		1.0
4.	Group II			
	CCI_4	Carbon tetrachloride (Tetrachloromethane)		1.1
5.	Group III			
	$C_2H_3CI_3$	1,1,1-Trichloroethane (Methyl Chloroform)		0.1
6.		Partially halogenated fluoro-chemicals (40 compounds including HCFC-21, HCFC-123, HCFC-124, HCFC-141b, HCFC142) all with ODPs of less than).12, are defined as transitional substances.		
	Group 1	Controlled Substances	Number of isomers	ODP
	$CHFCI_2$	HCFC-21	1	0.04
	CHF_2CI	HCFC-22	1	0.055
	CH_2FCI	HCFC-31	1	0.02
	C_2HFCI	HCFC-121	2	0.01 – 0.04
	$C_2HF_2CI_3$	HCFC-122	3	0.02 – 0.08
	$C_2HF_3CI_2$	HCFC-123	3	0.02 – 0.06
	$CHCI_2CF_3$	HCFC-123 **	-	0.02
	C_2HF_4CI	HCFC-124	2	0.02 – 0.04
	$CHFCICF_3$	HCFC-124 **	-	0.022
	$C_2H_2FCI_3$	HCFC-131	3	0.007 – 0.05
	$C_2H_2F_2CI_2$	HCFC-132	4	0.008 – 0.05
	$C_2H_2F_2CI$	HCFC-133	3	0.02 – 0.06
	$C_2H_2FCI_2$	HCFC-141	3	0.005- 0.07
	CH_3CFCI_2	HCFC-141	-	0.11

$C_2H_3F_2CI$	HCFC-142	3	0.008-0.07
$C_{H3}CF_2CI$	HCFC-142b **	-	0.065
C_2H_4FCI	HCFC-151	2	0.003 – 0.005
C_3HFCI_6	HCFC-221	5	0.015 – 0.07
$C_3HF_2CI_5$	HCFC-222	9	0.01 – 0.09
$C_3HF_3CI_4$	HCFC-223	12	0.01 – 0.08
$C_3HF_4CI_3$	HCFC224	12	0.01 – 0.09
$C_3HF_5CI_3$	HCFC225	9	0.02 – 0.07
$CF_3CF_2CHCI_2$	HCFC-225ca **	-	0.025
CF_2CICF_2CH CIF	HCFC-225cb **	-	0.035
C_3HF_6CI	HCFC-226	5	0.02- 0.10
$C_3H_2FCI_5$	HCFC-231	9	0.05- 0.09
$C_3H_2F_2CI_4$	HCFC-232	16	0.008 – 0.10
$C_3H_2F_3CI_3$	HCFC-233	18	0.007 – 0.23
$C_3H_2F_4CI_2$	HCFC-234	16	0.01 – 0.28
$C_3H_2F_5CI$	HCFC-235	9	0.03 – 0.52
$C_2H_3FCI_4$	HCFC-241	12	0.004 – 0.09
$C_3H_3F_2CI_3$	HCFC-242	18	0.005 – 013
$C_3H_3F_3CI_2$	HFCF-243	18	0.007 – 0.12
$C_3H_3F_4CI$	HCFC244	12	0.009 – 0.14
$C_3H_4FCI_3$	HCFC-251	12	0.001 – 0.01
$C_3H_4F_2CI_2$	HCFC-252	16	0.005 – 0.04
$C_3H_4F_3CI$	HCFC-253	12	0.003-0.03
$C_3H_5FCI_2$	HCFC-261	9	0.002 – 0.02
$C_3H_5F_2$	HCFC-262	9	0.002 – 0.02
C_3H_6FCI	HCFC-271	5	0.001 – 0.03

*Where a range of ODP is indicated, the highest value in the range shall be used for the purposes of these Regulations. The ODP listed as a single value have been determined from calculations based on laboratory measurements. Those listed as a range are based on estimates and are less certain. The range pertains to an isomeric group. The upper value is the estimate of ODP of the isomer with the highest ODP, and the lower value is estimate of the ODP of the isomer with the lowest ODP.

** Identifies the most commercially viable substances with ODP values listed against them to be used for the purpose of these Regulations.

7.		Hydrobromofluorocarbons (34 compounds with ODP estimated to vary from around) 1 to 1.00.		
	Group II	*Controlled Substances*	*Number of isomers*	*ODP*
	$CHFBr_2$	HBFC-22BI	1	1.0
	CHF_2Br		1	0.74
	CH_2HFBr_4		1	0.73
	$C_2HF_2Br_3$		2	0.3-0.8
	$C_2HF_3Br_3$		3	0.5-1.8
	$C_2HF_3Br_2$		3	0.4-1.6
	C_2HF_4Br		2	0.7-1.2
	$C_2H_2FBr_3$		3	0.1-1.1
	$C_2H_2F_2Br$		4	0.2-1.5
	$C_2H_2F_3Br$		3	0.7-1.6
	$C_2H_3FBr_2$		3	0.1-1.7
	$C_2H_3F_2Br$		3	0.2-1.1
	C_2H_4FBr		2	0.07-0.1
	C_2HFBr_6		5	0.3.1-5
	$C_3HF_2Br_5$		9	0.2-1.9
	$C_3HF_3Br_4$		12	0.3-1.8
	$C_3HF_4Br_3$		12	0.5-2.2
	$C_3HF_5Br_2$		9	0.9-2.0
	C_3HF_6Br		5	0.7-3.3
	$C_3H_2FBr_5$		9	0.1-1.9
	$C_3H_2F_2Br_4$		16	0.2-2.1
	$C_3H_2F_3Br_3$		18	0.2-5.6
	$C_3H_2F_4Br_2$		16	0.3-7.5
	$C_3H_2F_5Br$		8	0.9-1.4
	$C_2H_3FBr_4$		12	0.08-1.9
	$C_3H_3F_2Br_3$		18	0.1-3.1
	$C_3H_3F_3Br_2$		18	0.1-2.5
	$C_3H_3F_4Br$		12	0.3-4.4
	$C_3H_4FBr_3$		12	0.03-0.3
	$C_3H_4F_2Br_2$		16	0.1-1.0
	$C_3H_4F_3Br$		12	0.07-0.8
	$C_3H_5FBr_2$		9	0.04-0-4
	$C_3H_5F_2Br$		9	0.07-0.8
	C_3H_6FBr		5	0.02-0.7

*Where a range of ODPs is indicated, the highest value in the range shall be used for the purposes of the Cartagena Protocol. The ODPs listed as a single value have been determined from calculations based on laboratory measurements. Those listed as arrange are based on the estimates and are less certain. The range pertains to an isomeric group. The upper value is the estimate of the ODP of the isomer with the highest ODP, and the lower value is the estimate of the ODP of the isomer with the lowest ODP.

** Identifies the most commercially viable substances with ODP values listed against them to be used for the purposes of these Regulations.

8.		*Controlled substance*	*ODP*
	Group 1		
	MeBr	Methyl Bromide	0.6

*ODP values are estimates based on the information available when these chemicals were added to the CartagenaProtocol and they were used to calculate compliance quotas.

FIFTEENTH SCHEDULE

(*Regulation* 44)

GROUP OF CONTROLLED SUBSTANCE, CONTROLLED SUBSTANCE AND DATE OF PROHIBITION

Item	*Group of controlled Substance*	*Controlled substance*	*Date of Prohibition*
1.	Group 1		
	$CFCI_3$	CFC 11 (Trichloroflouromethane)	Jan 1, 2010
	CF_2CI_3	CFC 12 (Dichloroflouromethane)	
	$C_2F_3CI_3$	CFCI 113 (1,1,2-trichloro-1,1,2trichloroflouromethane)	
	$C_2F_4CI_2$	CFC 114 (1,1,2-Dichlorotetraflouroethane)	
	C_2F_5CI	CFC 115 (Chloropentafloruethane)	
2.	Group II		
	CF_2BrCl	Halon 1211 (Bromochorodifluoromethane)	Jan 1, 2010
3.	Group I		
	CF_3CI	Halon 1301 (Bromotirfluoromethane)	Jan 1, 2010
	C_2FCI_5	Halon 2402 (Dibromotetrafluoromethane)	
	$C_2F_2CI_4$	CFC 13 (Chlorifluoromethane)	
	C_3FCI_7	CFC 111 (Pentachlorofluoroethane)	
	$C_3F_2CI_6$	CFC 112 (Tetrachlorodifluoroethane)	
	$C_3F_3CI_5$	CFC 211 (Heptachlorofluoropropane)	
	$C_3F_4CI_4$	CFC 212 (Hexachlorodifluoropropane)	
	$C_3F_5CI_3$	CFC 213 (Pentachlorodifluoropropane)	
	$C_3F_6CI_2$	CFC 214 (Tetrachlorotetrafluoropropane)	
	$C_3F_6CI_2$	CFC 215 (Trichloropentafluoropropane)	
4.	Group II		
	CCI_4	CFC 216 (Dichlorohexafluoropropane)	Jan 1, 2010
5.	Group III		
	$C_2H_3CI_3$	CFC 217 (Chloroheptafluoropropane)	Jan 1,2015
		Carbon tetrachloride (Tetrachloromethane)	Jan 1, 2040
6.	Group I		
	CHFCI	1,1,1-Trichloroethane (Methyl Chloroform)	Jan 1, 1996
7.	Group II		
	CH_2FBr	$HCFC_5$	Jan 1, 2015
	Group I	$HBFC_5$	
	CH_3Br	Methyl bromide	

SIXTEENTH SCHEDULE
(*Regulation* 75)

PRESCRIBED FEES

PART I
EMISSION LICENCE

Levels of emission and fees payable for discharge of a pollutant or contaminant into the environment

1. **Emission to Atmosphere**

Class of pollutant oncontainment	*Fee Units*
I	84000
II	50000
III	17000
IV	3000

2. **Discharge into the Environment**

Class	*Fee Units*
I	84000
II	50000
III	17000
IV	3000

PART II
WASTE MANAGEMENT LICENCE

1. **Waste Management**

Description	*Fee Units*		
	Class I (7201 tonnes per annum and above)	*Class II* (5401-7200 tonnes per annum)	*Class III* (5400 tonnes per annum and below)
Reclaim	15 000	10 000	5 000
Re-use	15 000	10 000	5 000
Recover	20 000	15 000	10 000
Trade in	20 000	15 000	10 000
Export	30 000	25 000	20 000
Recycle	25 000	20 000	15 000
Transport (Municipal and Industrial)	15 000	10 000	5 000

2. **Waste Disposal Sites**

Description	*Maximum rate of deposition*	*Fee units*		
		Class I	*Class II*	*Class III*
Tailings Dam/Dump	NA	83 334	50 000	30 000
Overburden	NA	50 000	25 000	15 000
Slag	NA	50 000	25 000	15 000
Waste rock	NA	50 000	35 000	20 000
Communal	< 25 tonnes per day	10 000	7 500	5 000
Small	> 25 < 150 tonnes per day	20 000	15 000	10 000
Medium	>150 < 500 tonnes per day)	25 000	15 000	10 000
Large	>500 tonnes per day	30 000	25 000	20 000

3. **Hazardous Waste**

Description	*Fee Units*		
	Class I	*Class II*	*Class III*
Generation	50 000	30 000	20 000
Pretreat /treat	50 000	30 000	20 000
Handle	20 000	15 000	10 000
transport	30 000	20 000	10 000
Storage	50 000	40 000	20 000
Disposal	100 000	75 000	50 000
Transit	35 000	25 000	15 000
Trade in	45 000	40 000	35 000
Export	40 000	35 000	30 000

PART III

PESTCIDE TOXIC SUBSTANCES LICENCE

1. **Pesticides and Toxic Substances**

Description	*Fees Units*
Registration - Patented	25 000
Registration - Generic	17 000
Manufacture	61 000
Blend, process, reprocessing or Change composition	16 000
Importation	11 500
Importation of PTS -(for Research purposes)	250
Importation of PTS - for Research or Academic Institutes	250
Importation of PTS (Experimental/trial purposes)	6 000
Exportation	5 750
Distribution of PTS - for Research or Academic Institutes	1 200
Fumigation	30 000

2. **Management of Pesticides and Toxic Substances**

Description	*Fee units*				
Storage	**Class I** (1,001 tonnes and above)	**Class II** (between 501-1000 tonnes)	**Class III** (101 -500 tonnes per annum)	**Class IV** (51- 100 tonnes per annum)	**Class V** (above 0.2 - 50 tonnes)
	50 000	40 000	20 000	10 000	1 000
Distribution	**Class I**(More than 200 tonnes per annum)	**Class II**(between 100 and 199 tonnes per annum)	**Class III**(between 1 and 99 tonnes)	**Class IV**(between 0.1 and 1 tonnes per annum)	**Class V** (above 0.2 - 50 tonnes)
	30 000	15 000	10 000	5 000	1 000
Pest Control	**Class I** (aerial spray)	**Class II** (handling 200 households or offices per annum)	**Class III** (Handling >5-200 household per annum)	**Class IV**	**Class V**
	30 000	15 000	2 000	N/A	NA
Transportation	**Class I**(More than 200 tonnes per annum)	**Class II**(between 100 and 199 tonnes per annum)	**Class III**(between 1tons and 99 tonnes)	**Class IV**(between 0.1 tonnes and 1 tonnes per annum)	**Class V** (above 0.2 - 50 tonnes)
	30 000	30 000	20 000	10 000	NA

Key: NA stands for Not Applicable

PART IV

OZONE DEPLETING SUBSTANCES

1. **Import/ Export/Sell/Offer for Sale/Recover/Reclaim an Ozone Depleting Substance**

Class	*Ozone Depleting Potential*	*Fees Units*
Class I	0.8-0.9	60000
Class II	0.6-0.7	30000
Class III	0.4-0.5	15000
Class IV	0.1-0.3	10000
Class V	0.001<	5000

2. **Handling of Ozone Depleting Substances**

Description	*Fees Units*
Handling of ozone depleting substances	600

3. **Distribution of Ozone Depleting Substances**

Class	*Fees Units*	*Quantity tonnes per annum*
Class I	30000	More than 200
Class II	15000	Between 100 and 199
Class III	10000	Between 1 and 99
Class IV	5000	Between 0.1 and 1
Class V	1000	Less than 0.1

4. **Storage of Ozone Depleting Substances**

Class	*Fees units*	*Quantity tonnes per annum*
Class I	50000	1,001 and above
Class II	40000	501-1,000
Class III	20000	101-500
Class IV	10000	51-100
Class V	1000	above 0.2 - 50

5. **Application/Transfer/Variation and replacement of licence**

Description	*Fees Units*
Transfer of Licence	10000
Alteration and Amendment	5000
Replacement of Licence	1500
Application Forms	100

SEVENTEENTH SCHEDULE

(*Regulation 7*6)

REVOKED STATUTORY INSTRUMENTS

1. The Waste Management (Licensing of Transporters of Wastes and WasteDisposal Sites) Regulations, S.I. No. 71 of 1993.
2. The Water Pollution Control (Effluent andWaste Water) Regulations, S.I. No. 72 of 1993.
3. The Pesticides and Toxic Substances Regulations, S.I. No. 20 of 1994.
4. The Air Pollution Control (Licensing and EmissionStandards) Regulations, S.I. No. 141 of 1996.
5. The Environmental Protection and Pollution Control (Ozone Depleting Substances) Regulations, S.I. No. 27 of 2001.
6. The HazardousWaste Management Regulations, S.I. No. 125 of 2001.

H. KALABA,
Minister of Lands, Natural Resources and Environmental Protection

LUSAKA
1st November, 2013
[ML.64/9/7]