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THE ENVIRONMENTAL MANAGEMENT AND CO-ORDINATION ACT

(Cap. 387*)*

THE ENVIRONMENTAL MANAGEMENT AND CO-ORDINATION (MANAGEMENT OF TOXIC AND HAZARDOUS CHEMICALS AND MATERIALS) REGULATIONS, 2024

ARRANGEMENT OF REGULATIONS

Regulation

THE ENVIRONMENTAL MANAGEMENT AND CO-ORDINATION ACT

(Cap. 387*)*

IN EXERCISE of powers conferred by section 92 of the Environmental Management and Co-ordination Act, the Cabinet Secretary for Environment, Climate Change and Forestry makes the following Regulations—

THE ENVIRONMENTAL MANAGEMENT AND CO-ORDINATION (MANAGEMENT OF TOXIC AND HAZARDOUS CHEMICALS AND MATERIALS) REGULATIONS, 2024

PART I—PRELIMINARY PROVISIONS

Citation.

1. These Regulations may be cited as the Environmental Management and Co-ordination (Management of Toxic and Hazardous Chemicals and Materials) Regulations, 2024.

Interpretation.

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

"active substance" means a substance that has a general or specific action against harmful organisms or on plants, parts of plants or plant products;

"adverse effect'' means a negative change in the physical environment or biota, including a change in climate, which has a significant deleterious effect on human health or on the composition, resilience and production of natural and managed ecosystems, or on materials useful to mankind;

"article" means an object which during production is given a special shape, surface or design which determines its functions to a greater degree than does its chemical compositions;

"banned chemical" means a chemical all uses of which within one or more categories have been prohibited by final regulatory action, in order to protect human health, the environment or national security;

"bio-accumulation" means the tendency of a chemical substance to accumulate in the tissues of living organisms and to be passed up through the food chain;

"carcinogenic" means a chemical or material that has ability to cause cancer;

"chemical abstract service number" means a unique registry number assigned to a chemical by the chemical abstract service;

"chemicals in products" means chemical substances which are known to be contained in articles or products such as toys, child care items, cosmetics, tattoo inks, appliances, electronics, flooring, piping, furniture, house and sports carpets and others;

"concentration limit" means a threshold of any classified impurity, additive or individual constituent in a substance or in a mixture that may trigger classification of the substance or the mixture, respectively;

"contaminants of emerging concern" means chemicals or toxics including antimicrobials and personal care products that are not commonly monitored but has the potential to enter the environment or have been detected in the environment and may cause known or suspected adverse ecological or human health effects and are not regulated;

"competent authority" means any body or authority designated or otherwise recognized as such under these Regulations;

"differentiation" means distinction within hazard classes depending on the route of exposure or the nature of the effects;

"disposal" means deposit, treatment or recovery of any toxic and hazardous industrial chemicals or materials including their packaging or containers in an environmentally sound manner;

"disposal" means deposit, treatment or recovery of any toxic and hazardous industrial chemicals or materials including their packaging or containers in an environmentally sound manner;

"downstream user" means any natural or legal person established within Kenya, other than the manufacturer or the importer, who uses a substance, either on its own or in a mixture, in the course of his industrial or professional activities with the exclusion of a distributor and a consumer;

"hazard category" means the division of criteria within each hazard class, specifying hazard severity;

"hazardous chemical" means any chemical which can cause a physical or health hazard;

"hazard class" means the nature of the physical, health or environmental hazard;

"hazardous material" means an article or substance or mixture that is capable of posing a hazard to health, safety, property or the environment and includes goods or materials awaiting decontamination, relocation or reuse;

"hazard pictogram" means a graphical composition that includes a symbol plus other graphic elements, such as a border, background pattern or colour that is intended to convey specific information on the hazard concerned;

"hazard statement" means a phrase assigned to a hazard class and category that describes the nature of the hazards of a hazardous substance or mixture, including, where appropriate, the degree of hazard;

"industrial chemical" means any chemical element, compounds or complexes of chemical elements, naturally-occurring chemicals or product either in the gas, liquid or solid state used or intended for industrial use or in industrial operations, or research by industry, government, academia, community, artisan or a person;

"intermediate" means a substance that is manufactured for and consumed in or used for chemical processing in order to be transformed into another substance (hereinafter referred to as 'synthesis');

"intermediate chemical" means a substance formed during a chemical process before the desired product is obtained;

"label" means a written, printed, graphic matter, on, or attached to the chemical or immediate container thereof and outside container or wrapper of the package;

"Lethal Concentration $_{50}$" means the concentration in air or in a solution which causes fifty percent mortality of the test-animal in a specified period through exposure;

"Lethal $Dose_{50}$" means an amount of a substance that, when administered by a defined route of entry (for example oral or dermal) over a specified period of time, it is expected to cause the death of 50 percent of a defined animal population;

"Median Lethal Concentration" also means LC_{50};

"material" means a chemical substance or mixture of substances that constitute an object which can be pure or impure, a singular composite or a complex mix, living or non-living matter, natural or man-made;

"material safety data sheet" means a record containing data regarding the properties of a particular chemical or material including physical and bio-chemical information and safety measures for handling, usage and disposal;

"mercury" means elemental mercury (Hg(O), CAS No. 7439-97-6);

"mercury compound" means any substance consisting of atoms of mercury and one or more atoms of other chemical elements that can be separated into different components only by chemical reactions;

"mercury-added product" means a product or product component that contains mercury or a mercury compound that was intentionally added;

"mutagenic" means chemicals or materials capable of causing genetic changes within living cells;

"package" means the complete product of the packing operation, consisting of the packaging and its contents;

"packaging" means one or more receptacles and any other components or materials necessary for the receptacles to perform their containment and other safety functions;

"prior informed consent" refers to procedure where certain chemicals listed under Rotterdam Convention, or restricted in the country of import, can only be exported if the Country of import consents in writing after notification;

"product" means a primary substance that is formed, including the intermediate and secondary substances, as a result of a chemical reaction, an industrial or manufacturing process;

"restricted chemical" means a chemical virtually all use of which within one or more categories has been prohibited by final regulatory action in order to protect human health or the environment, but for which certain specific uses remain allowed;

"substance" means a chemical element and its compounds in the natural state or obtained by any manufacturing process, including any additive to ensure its stability and any impurity derived from the process used, but excluding any solvents which may be separated without affecting the its stability or composition;

"supplier" means any manufacturer, importer, downstream user or distributor placing on the market a substance, on its own or in a mixture, or a mixture;

"teratogenic" means a chemical or material capable of affecting the normal growth of an embryo or foetus;

"toxic chemical or toxic material" means any substance which on entry into an organism through ingestion, inhalation or dermal contact is injurious, causes physiological or biological disturbances or otherwise causes deterioration of the functions of the organism in any way; and

"unintentional production" means chemicals and toxics that are not voluntarily produced or released into the environment but formed and released from anthropogenic sources such as persistent organic pollutants during incomplete combustion process involving organic matter and chlorine or are created as by-products of manufacturing other chemicals.

Objective.

3. (1) The objective of these Regulations shall be to—

(a) ensure protection of human health and environment from adverse effects of toxic and hazardous industrial chemicals and materials;

(b) reduce risks posed by chemicals and provide for the sound management of chemicals;

(c) ensure the free movement of chemical products; and

(d) give effect to—

(i) the Stockholm Convention;

(ii) the Rotterdam Convention;

(iii) the Minamata Convention; and

(iv) any other relevant provisions of international treaties, agreements and conventions on the management of chemicals.

(2) In this regulation, "sound management of chemicals" means the application of managerial best practices to chemicals throughout their life cycle to prevent, reduce or minimize the potential for exposure of people and the environment to toxic and hazardous chemicals.

Application.

4. (1) These Regulations shall apply to the manufacture, export, import, transport, distribution, storage, handling and disposal of toxic and hazardous industrial chemicals and materials as classified in the First Schedule.

(2) The toxic and hazardous industrial chemicals and materials referred to in sub-regulation (1) include—

any toxic and hazardous industrial chemical and material whose LD_{50}, LC_{50}, and MLC_{50} falls within the moderate, high or extreme classes or category listed in Part II of the First Schedule;

any chemical or material that falls under either group or category 1, 1A, 1B, 2, 2A or 2B of Part IV of the First Schedule; and

any mixture containing chemical or materials in classes, categories or groups mentioned in sub-regulation (a) and (b).

(3) A substance or a mixture fulfilling the criteria relating to physical, health or environmental hazards provided in Part I, II, III, IV and V of the First Schedule is hazardous and shall be classified in relation to the respective hazard classes provided for in the First Schedule.

(4) The Authority may, in consultation with the relevant lead agencies, allow for exemptions from these Regulations in specific cases for certain substances or mixtures, where necessary in the interests of security or other purposes as deemed necessary from time to time.

PART II—CLASSIFICATION AND REGISTRATION

Classification.

5. (1) The Authority shall, in consultation with the relevant lead agencies, implement classification guidelines and undertake verification inspection to ensure compliance.

(2) Notwithstanding the provisions of sub-regulation (1), the Authority may, in collaboration with the lead agencies, propose harmonized classification and labelling of toxic and hazardous chemicals substances in accordance with the criteria set out in the First Schedule for the following categories—

(a) respiratory sensitization, category 1;

(b) germ cell mutagenicity, category 1A, 1B or 2;

(c) carcinogenicity, category, 1A, 1B or 2;

(d) reproductive toxicity, category 1A, 1B or 2; and

(e) active substances used in plant protection products and biocidal products shall be subject to harmonised classification and labelling.

(3) The Authority shall regularly publish and update the list of substances with harmonized classification and labelling.

(4) Manufacturers and importers shall classify chemicals and mixtures in accordance with the criteria set out in the First Schedule before placing them on the market.

(5) Manufacturers, importers and downstream users of a chemical or mixture shall—

(a) take all reasonable steps available to them to make themselves aware of new scientific or technical information that may affect the classification of the substances or mixtures they place on the market;

(b) without undue delay carry out a new evaluation when such information is considered to be adequate and reliable; and

(c) shall evaluate the information identified by applying the criteria for classification for each hazard class or differentiation in the First Schedule to ascertain the hazards associated with the substance or mixture.

(6) Where the manufacturer, importer or downstream user introduces a change to a mixture that has been classified as hazardous, that manufacturer, importer or downstream user shall carry out a new evaluation.

Register.

6. The Authority shall establish and maintain a register of toxic and hazardous industrial chemicals and materials identified as meeting the criteria referred to in regulation 4 in the format set out in the Second Schedule.

Registration.

7. A person shall not manufacture, import or export toxic and hazardous industrial chemicals or materials as specified in regulation 4 unless the chemical or material is registered in accordance with the Second Schedule.

Application for registration.

8. (1) A person who intends to import, export, manufacture, distribute or supply toxic and hazardous industrial chemical or material shall apply for its registration with the Authority in the Form set out in Part 1 of the Third Schedule.

(2) An application under sub-regulation (1) shall be accompanied by a material safety data sheet, risk management plan and hazard chemical and material emergency response plan.

(3) The material safety data sheet form shall consist of information set out in the Fourth Schedule.

(4) The risk management plan and hazard chemical and material emergency response plan form specified in sub-regulation (2) shall consist of information set out in the Fifth Schedule.

Evaluation of application and Registration Certificate.

9. (1) The Authority shall evaluate an application made under regulation 8 and communicate its decision to the applicant within thirty days of the application.

(2) The Authority may issue a Registration Certificate pursuant to the application made under regulation 8 as set out in Part II of the Third Schedule.

Additional information.

10. Where the Authority finds that the information accompanying an application for the registration of a toxic or hazardous chemical is insufficient, the Authority may require the applicant to provide—

(a) an assay of the chemical or material;

(b) a sample of the chemical or the material; or

(c) a sample of the technical or the analytical grade of its active ingredient.

Laboratory analysis.

11. The Authority may carry out a laboratory analysis of the chemical or material sample from any environmental media or submit it to a designated laboratory.

Non-resident applicant.

12. An applicant who is not resident in Kenya shall appoint an agent who is a resident in Kenya to whom any notice or correspondence from the Authority may be sent.

Non-registration.

13. The Authority may refuse to register a chemical or material if—

(a) the application for the registration of the chemical or materials does not comply with the provisions of the Act and these Regulations;

(b) the information provided by the applicant is—

(i) insufficient to enable the chemical or material to be assessed and evaluated; or

(ii) false, misleading or deceptive or is likely to create an erroneous impression regarding the character of the chemical or material; or

(c) the use of the chemicals or materials would lead to an unacceptable risk or harm—

(i) in relation to the use in which is intended; or

(ii) to public welfare including health, plants, animals or the environment.

Deregistration.

14. The Authority may deregister a chemical or a material—

(a) that has been banned by the Authority;

(b) if it comes to the attention of the Authority that the information stated in the application form was incorrect, or misleading; and

(c) if new information has become available to the Authority which renders the chemical or materials substance unsafe or dangerous.

Register review.

15. The Cabinet Secretary may review and update the list of phased-out, restricted or banned chemicals or materials set out in the Sixth Schedule.

PART III—LABELLING AND PACKAGING

Appropriate label.

16. (1) A person shall not store, distribute, transport or sell any toxic and hazardous industrial chemicals or materials without an appropriate label attached to the package or container.

(2) Where a substance or mixture is classified as hazardous, suppliers shall ensure that the substance or mixture is labelled and packaged in accordance with the requirements of these Regulations, before placing it on the market.

(3) Each licensed actor in the supply chain as specified in these Regulations shall comply with the requirements for classification, labelling and packaging.

(4) The label shall contain—

(a) the name of the chemical substance or material as set out in the international chemical nomenclature for chemical names, the CAS number, the trade name, the description of the physical form and its distinctive brand or trade mark, the name, address and telephone number of the suppliers and the identity of all substances in the mixture that contribute to the classification of the mixture as hazardous;

(b) information detailing the nature and degree of hazard inherent in the chemicals or materials identified by the appropriate hazard pictograms, signal words, hazard statements, precautionary statements in the manner set out in the Seventh Schedule and where applicable, hazard statements and the appropriate precautionary statements

(c) a statement directing the user to read the label before use;

(d) a guarantee statement of the concentration of the chemical or material;

(e) the registration number of the chemical or material in the register;

(f) a statement of the net contents of the package for the chemical or material, in accordance with all the units of measure as described under the Weights and Measures Act; Cap. 513.

(g) information on date of manufacture, shelf life and storage conditions;

(h) information indicating any significant hazards in respect to the handling, storage, display, distribution and disposal of the chemical or material and the empty package or container;

(i) information indicating any significant hazards to public health, plants, animals or the environment;

(j) instructions on first aid, which shall—

(i) set out the practical measures to be taken in the event of poisoning or other injury caused by the chemical or material;

(ii) describe the symptoms of poisoning or allergic reactions; and

(iii) state the antidote and other appropriate remedial measures; and

(k) comply with the requirements of the national and globally harmonized system for labeling and classification of chemicals or materials including the relevant Kenyan Standards applicable at the time.

(3) The packaging for the transport of toxic and hazardous industrial chemicals or materials on road and rail transport shall adhere to the requirements of the relevant Kenyan Standards.

(4) The supplier shall ensure that the label is updated, without undue delay, following any change to the classification and labelling of that substance or mixture, where the new hazard is more severe.

(5) In this regulation, "globally harmonized system" includes harmonized criteria for classifying substances and mixtures according their health, environmental and physical hazards; and harmonized hazard communication essentials, including requirements for labeling and safety data sheets.

Label print.

17. (1) The information on every label shall be printed in English and Kiswahili.

(2) All information shown on the label shall be printed in a manner that is conspicuous, legible, durable and indelible.

(3) The colour and presentation of any label shall be such that the hazard pictogram stands out clearly.

(4) Labels shall be firmly affixed to one or more surfaces of the packaging immediately containing the substance or mixture and shall be readable horizontally when the package is set down normally.

(5) Where the physical properties of a chemical or material are such that the presence of the chemicals or materials may not be recognized when it is used, and is likely to expose a person or animal to severe health risk or cause harm to the environment, the chemicals or materials shall be identified by means of colour, odour or such other means as the Authority may approve to provide signal or warning of its presence.

Packaging.

18. (1) Packaging containing hazardous substances or mixtures shall—

(a) be designed and constructed so that its contents cannot escape, except in cases where other more specific safety devices are specified;

(b) ensure that the materials constituting the packaging and fastenings shall not be susceptible to damage by the contents, or liable to form hazardous compounds with the contents;

(c) be strong and solid throughout to ensure that they shall not loosen and shall safely meet the normal stresses and strains of handling;

(d) in the case of packaging fitted with replaceable fastening devices, be designed so that it can be refastened repeatedly without the contents escaping.

(2) Packaging containing a hazardous substance or a mixture supplied to the general public shall not have either a shape or design likely to attract or arouse the active curiosity of children or to mislead consumers, or have a similar presentation or a design used for foodstuff or animal feeding stuff or medicinal or cosmetic products, which would mislead consumers.

Offence.

19. (1) A person shall not store, distribute, transport or handle toxic and hazardous chemicals or materials without the requisite label or in a manner that is inconsistent with directions or limitations shown in the label.

(2) A person shall not handle, store, transport hazardous chemicals or materials in a manner that is inconsistent with the requirements of packaging as provided in these Regulations.

(3) A person who contravenes the sub-regulation (1) or (2) commits an offence and shall, on conviction, be liable to the penalties set out in section 91 and 93 of the Act.

PART IV—MANUFACTURE, IMPORTS AND EXPORTS

Licence requirement.

20. (1) A person shall not manufacture, import or export toxic and hazardous industrial chemicals or material unless the person has a licence issued by the Authority.

(2) A person who intends to manufacture, import or export toxic or hazardous industrial chemicals or materials shall apply to the Authority for the licence in Form 1 set out in the Eighth Schedule.

(3) An application under sub-regulation (1) shall be accompanied by the fee specified in the Fifteenth Schedule.

(4) The Authority may issue a licence to manufacture, import or export toxic or hazardous industrial chemicals or materials in Form 2 set out in the Eighth Schedule.

(5) Where the Authority refuses to issue a licence to an applicant, the Authority shall communicate the refusal, in writing, within thirty days of the decision and state the reason for the refusal.

(6) Where there is a change of name or ownership of an entity licensed to undertake an activity licensed under sub-regulation (4), the person effecting the change of names or to whom ownership is being transferred, and the person transferring it shall jointly notify the Authority, in writing, in respect of the facility to which such licence was issued in Form 3 set out in the Eighth Schedule.

(7) The transferee as well as the transferor of a licence issued under this regulation shall be responsible for the adherence to all obligations imposed by the transfer in respect of the licence transferred under sub-regulation (5), the operating facility and any other matter associated with the facility.

(8) The transferor shall not be responsible for any future liabilities or any obligations imposed with respect to the licence from the date of approval of the transfer.

(9) The Authority shall issue a Certificate of Transfer of Licence to manufacture, import, export, store or distribute toxic or hazardous industrial chemicals or materials in Form 4 as set out in the Eighth Schedule.

(10) A person, an owner or an operator licensed in accordance with this regulation shall inform the Authority, in writing, of any change or variation of the activity or affecting any other detail in the activity to which the licence was issued.

Permit requirement.

21. (1) A person shall not import or export toxic and hazardous industrial chemicals, materials or samples thereof unless the person has a permit issued by the Authority.

(2) A person who intends to export or import toxic and hazardous industrial chemicals or materials or both shall apply to the Authority for the permit in Form 5 as set out in the Eighth Schedule and pay the fee prescribed in the Fifteenth Schedule.

(3) The Authority shall consider an application under sub-regulation (2) and may issue a permit to export or import toxic and hazardous industrial chemicals or materials in Form 6 set out in the Eighth Schedule.

(4) An application for a permit to transport toxic and hazardous industrial chemicals or materials or both through Kenya shall be made to the Authority in Form 13 as set out in the Eighth Schedule and shall be accompanied with—

(a) a copy of the prior informed consent issued by the competent authority of the importing country where applicable; and

(b) the specified deposit bond which shall be refundable.

Permit or licence issuance.

22. The Authority shall process applications for a permit or a licence within twenty-one working days.

Prior informed consent.

23. (1) The Authority shall accept or refuse to issue an export permit of the toxic and hazardous industrial chemicals or materials where consent has been issued or denied by a competent authority of the importing country under the prior informed consent procedure.

(2) The Authority shall accept or refuse to issue an import permit of the toxic and hazardous industrial chemicals or materials where consent has been given or denied by a competent authority of the exporting country through the prior informed consent procedure.

Cancellation or suspension.

24. The Authority may cancel or suspend any permit or licence issued under these Regulations if—

(a) the conditions of the permit or licence, and any other provisions of the Act and Regulations thereunder are contravened;

(b) the permit or licence was granted on the basis of false or misleading information; or

(c) there is new information which affects the safety of the chemical or material.

Register of licences and permits.

25. (1) The Authority shall maintain a register of all the licences and permits issued under these Regulations in the Form set out in the Ninth Schedule.

(2) The register shall be a public document and may be inspected during working hours.

Material safety data sheet.

26. A person shall not store, distribute and transport toxic and hazardous chemicals or materials unless accompanied by the material safety data sheet.

Environment impact assessment, environment audit and chemical safety audit.

27. (1) A person shall not manufacture or store toxic and hazardous chemicals and materials without an environmental impact assessment licence.

(2) Every person manufacturing or operating a storage facility of toxic or hazardous chemicals and materials shall undertake an annual environmental audit and submit the material safety data sheet to the Authority.

(3) A person who manufactures toxic or hazardous chemicals and materials shall undertake workplace monitoring to ensure the safety and health of persons in accordance with the Occupational Safety and Health Act. Cap. 236A.

(4) A person shall not undertake aerial spraying or application of toxic and hazardous chemicals and materials without an environmental impact assessment licence issued by the Authority.

Substances in articles, chemicals in products, mercury-added products.

28. (1) A person who manufactures, imports, exports or distributes articles, materials or products containing toxic and hazardous chemicals and materials or substances shall—

(a) ensure that chemicals used in products do not contain banned toxic and hazardous chemical and materials listed in the Sixth schedule;

(b) ensure that the concentrations of restricted or toxic and hazardous chemicals and materials do not exceed the maximum concentrations in articles, materials or products in accordance with the relevant Kenyan Standards; and

(c) provide sufficient information including the chemical abstract service number, harmonized system number of the chemical and material and material safety data sheet to allow for safe handling, use and disposal by the recipient or the user.

(2) The Authority shall, in consultation with the relevant lead agencies, determine or recommend the maximum concentration limits of toxic and hazardous chemicals and materials in articles, materials or products that can be discharged to the environment.

(3) The Authority shall, in consultation with the relevant lead agencies, ensure that toxic and hazardous industrial chemicals and or materials in articles, materials or products—

(a) do not exceed limits set out in the relevant national regulations and standards;

(b) are reduced and where feasible eliminated;

(c) are not recycled and are not considered in the materials used in recycling articles, materials or products; and

(d) are produced using toxic and hazardous free alternatives.

(4) A person shall not manufacture, import or export mercury-added products after the phase-out dates for these products as set out in the Sixth Schedule except where an exemption is registered and granted by the Authority.

(5) A person who manufactures or imports paint, varnishes, coating and related products shall ensure the maximum permissible content of total lead does not exceed the maximum concentration set out in the relevant Kenyan Standards.

(6) In this regulation, "harmonized system number" means an international nomenclature for classification of products using a six-digit code system.

Extractive industry.

29. (1) The Authority and the relevant lead agencies shall ensure that emissions, releases and discharges of toxic and hazardous chemicals and materials into the environment are minimized and eliminated in the oil and gas, geothermal, mining, dredging and other extractive processes.

(2) A person who intends to construct or operate a facility, processing plant or technology that utilizes toxic and hazardous chemicals and materials for extractive activities shall undertake an environment impact assessment in accordance with the Act.

(3) The owner or operator of an oil and gas, geothermal, mining, dredging or any other extractive facility, processing plant or technology shall apply for a permit to use toxic and hazardous chemicals and materials from the Authority in the Form 7 set out in the Eighth Schedule.

(4) An application under sub-regulation (3) shall be accompanied by the fee specified in the Fifteenth Schedule.

(5) The Authority shall evaluate the application and communicate its decision to the applicant within thirty days of the application.

(6) The Authority may issue a permit to use toxic and hazardous chemical and material for oil and gas, geothermal, mining, dredging, or any other extractive processes listed in the Form 8 set out in the Eighth Schedule.

(7) In the event that the Authority refuses to issue a permit to an applicant, the Authority shall communicate the refusal in writing to the applicant within thirty days of the decisions and state the reason for the refusal.

(8) The Authority and the relevant lead agencies may issue directives for use of toxic and hazardous chemicals and materials management for the extractive sector.

(9) The owner or operator of an extractive facility or process shall ensure the use of mercury or mercury compounds and any other toxic and hazardous industrial chemicals and materials listed in the Sixth Schedule are reduced and where feasible eliminated.

(10) In this regulation, "extractive industry" means any processes that involve the extraction or removal of raw materials from the earth's crust which includes oil and gas extraction, mining, dredging and quarrying.

PART V—DISTRIBUTION, STORAGE, TRANSPORTATION AND HANDLING

Distribution.

30. (1) A person, who sources or purchases, stores and then places on the market toxic and hazardous industrial chemicals or material for another entity or under one's own brand without changing its chemical composition in any way, shall not distribute the toxic and hazardous chemicals or materials without a licence issued by the Authority.

(2) The person shall apply for a licence to distribute toxic and hazardous industrial chemicals or materials in Form 9 set out in the Eighth Schedule.

(3) The Authority may issue a licence to distribute toxic and hazardous industrial chemicals or materials in Form 10 set out in the Eighth Schedule.

(4) The licensed distributor shall be responsible for chemical safety in the supply chain in order to protect human health and the environment from chemical risks by ensuring—

(a) that chemicals or materials meant for distribution are registered;

(b) that information about the use and hazardous properties of chemicals or materials is provided to employers, handlers or

customers through a hazard communication program, labels, material safety data sheets or any other forms of warning;

(c) that containers of toxic chemicals and hazardous material are properly labeled;

(d) that persons who repackage and redistribute imported hazardous chemicals and materials are professionals who have the relevant knowledge on such operations;

(e) the provision of information on emergency response plan;

(f) the safe transportation of chemicals or materials by trained drivers and properly maintained transport equipment;

(g) that the products are stored and handled in accordance with relevant regulations and industry standards;

(h) that contracted storage facilities and transportation equipment meet requirements of the relevant regulations and industry standards;

(i) that waste generated during business operations are contained and disposed in accordance with the relevant regulations; and

(j) the maintenance of relevant documents and records for safe distribution.

Storage.

31. (1) A person shall not store toxic and hazardous chemicals and materials unless the storage facility is licensed by the Authority.

(2) A who person who intends to own or operate a toxic and hazardous chemicals and materials storage facility shall apply for a licence in Form 11 set out in the Eighth Schedule.

(3) The Authority may issue a licence to store toxic and hazardous chemicals and materials in Form 12 set out in the Eighth Schedule.

(4) The owner or operator of toxic and hazardous chemicals and materials storage facility shall comply with the basic storage requirement set out in the Tenth Schedule, the Factories and Other Places of Work (Hazardous Substances) Rules the relevant Kenyan Standard applicable at the time, and any other written law on the storage of hazardous materials.

Sub. Leg.

(5) The Authority shall, in consultation with the relevant lead agencies, give necessary directions or guidelines on the environmentally sound storage of toxic or hazardous industrial chemical or material.

Transportation.

32. (1) A person shall not transport toxic and hazardous chemicals and material without a licence from the Authority.

(2) A person shall apply for a licence to transport toxic and hazardous chemical or material in Form 13 set out in the Eighth Schedule.

(3) An application under sub-regulation (2) shall be accompanied with information on the mode of transport and an inventory of toxic or hazardous chemical or material.

(4) The Authority may issue a licence to transport toxic and hazardous chemicals and materials in Form 14 set out in the Eighth Schedule.

(5) The vehicles used to transport toxic and hazardous chemicals and material shall meet the requirements set in the relevant Kenya Standards applicable at the time for transportation by road and rail.

Transportation safety.

33. A person who transports toxic and hazardous chemicals or materials shall ensure that—

(a) there is safety in carriages by providing pallets, dunnage and appropriate personal protective equipment;

(b) the substances are kept in separate compartments from other luggage;

(c) the transporting vessel has first aid facilities;

(d) appropriate labeling and packaging in accordance to regulation 19;

(e) a duly filled transport emergency card as in accordance with the Eleventh Schedule and the relevant Kenya standard applicable at the time is displayed on the vehicle;

(f) the transporting vessel has appropriate material to contain any spillage, appropriate means of extinguishing fire and danger warning signs on the truck in the Form set out in the Seventh Schedule and the relevant Kenyan Standards applicable at the time;

(g) the driver or any other person authorized in the vehicle has appropriate knowledge and training on transport and safe handling of toxic and hazardous chemicals or materials from an approved training provider;

(h) the driver or any person authorized to handle chemicals in transit shall use personal protective equipment;

(i) chemicals or materials are not exposed to adverse weather conditions;

(j) the transporting vessel when not in motion during transit is parked in designated parking yard along the road highways, rail access and container storage areas, and in the port on sea or water ways;

(k) contracted or sub-contracted transporting companies comply with the licensing conditions and provisions of these Regulations; and

(l) they comply with the requirements set in the relevant Kenyan Standards applicable at the time for emergency information system for rail transport and other relevant

regulations and standards on the transportation of hazardous material and dangerous goods.

Air transport.

34. The transportation of toxic and hazardous chemicals or materials by air shall be in accordance with the provisions of the Civil Aviation Act and the International Civil Aviation Organisation Technical Instructions for the Safe Transport of Dangerous Goods by Air.

Cap. 394.

Sea and inland water transport.

35. The Transportation of toxic and hazardous chemicals and materials by sea and inland navigable waters shall be in accordance with the Merchant Shipping Act.

Cap. 389.

Handling.

36. (1) A manufacturer, importer, exporter, a storage facility operator, user or any person handling toxic and hazardous industrial chemicals and materials shall establish safe handling procedures to prevent risks to human health and environment.

(2) Subject to sub-regulation (1), safe handling procedures shall include—

(a) the maintenance of an inventory of chemicals or materials being used or stored are kept well and the risks associated with them documented;

(b) the use of appropriate personal protective equipment;

(c) ensuring handlers have sufficient knowledge and hazards of the industrial chemical or material from labels and material safety data sheets;

(d) ensuring that the workplace has a chemical spill kit, that is appropriate for the type of chemicals;

(e) ensuring that surplus chemicals and materials, and hazardous waste are dealt with in accordance with the information provided in the safety data sheet;

(f) ensuring the availability of a first aid equipment at all times;

(g) cleaning the workplace regularly ensuring no chemical spills on floor;

(h) ensuring that a standard operating procedure for chemicals or materials requiring special handling, treatment or precaution is available or developed;

(i) ensuring that risk reduction measures that promote use or substitution to less hazardous chemicals or materials are applied; and

(j) conducting safety audits.

Incidents reports and management.

37. (1) In the event of a chemical or material incident, the owner, operator, handler or agent of the plant, storage facility, motor vehicle or vessel shall report the incident to the relevant emergency response authorities.

(2) The owner, operator, handler, agent or any person of a process facility, plant, storage facility, motor vehicle or vessel or in possession of the toxic and hazardous chemical and material at the time of an incident, shall—

(a) institute all reasonable measures to decontaminate, immediately clean-up, restore and remediation of the contaminated site to the recommended national environmental clean-up standards; and

(b) in addition, undertake any other actions as directed by the Authority including the costs to mitigate the impact arising there-of as provided for in the Act and any other applicable Kenyan law.

(3) Notwithstanding the provisions of sub-regulation (2), the Authority shall, in collaboration with the relevant lead agencies, take appropriate measures to ensure the owner, operator, handler, agent or any other person responsible for the chemical or material incidents shall respond, manage and mitigate the impact of the chemical or material incident to protect human health and environment.

(4) The incident responder shall ensure that adequate safety precautions, use of appropriate personal protective equipment and reliance on the relevant emergency response guidelines and procedures are used during response and incident mitigation.

Liability.

38. (1) The owner or operator of a facility that discharges toxic and hazardous chemical or materials or their products or mixtures into the environment during manufacture, transport, storage, distribution or handling or any other activity commits an offence and shall, on conviction, be liable to the penalties set out under section 141 of the Act.

(2) In addition to the penalty imposed under sub-regulation (1), the owner or operator of a facility shall be liable to the penalties set out under section 93 of the Act.

(3) The owner or operator of a facility that discharges toxic and hazardous chemicals and materials shall provide a guarantee or pay a deposit bond to the Authority to ensure good environmental practices and compliance with remediation obligations as prescribed in the Act.

PART VI—DISPOSAL OF CHEMICAL AND MATERIAL WASTES

Waste disposal.

39. (1) A person in possession of obsolete, expired, surplus or any other toxic and hazardous industrial chemical or material declared by any law to be disposed shall notify the Authority on the type, quantity, physical and chemical status and any other information that may be required by the Authority.

(2) A person intending to transport or dispose any toxic and hazardous chemical or material waste under sub-regulation (1), shall do so in accordance with the Act and any other relevant law.

(3) Notwithstanding sub-regulation (2), the Authority shall, in collaboration with the relevant lead agencies, issue necessary directives

under this regulation that shall provide for the management and disposal of stockpiles and wastes from—

(a) toxic and hazardous chemicals and materials including those unintentionally produced, expired or obsolete;

(b) materials contaminated directly or indirectly by toxic and hazardous chemicals;

(c) chemicals in products; and

(d) decommissioned or obsolete equipment and production facilities.

(4) A person shall not re-use or recycle materials and containers used to package toxic and hazardous chemicals and materials to package food, beverage and drinks meant for human consumption, household use or any other domestic purpose.

(5) The materials and containers referred to in sub-regulation (4) shall be disposed in accordance to the Act and any other relevant law.

(6) A manufacturer, importer, exporter, distributor and end-user shall implement the take-back scheme and other waste management strategies including extended producer responsibility to manage and dispose waste from toxic and hazardous chemicals and materials.

Monitoring and assessment of impacts.

40. 1) The Authority shall, in consultation with the relevant lead agencies, monitor and assess the hazards, exposure, risks and impacts of toxic and hazardous chemicals and materials to human health and the environment throughout their life cycle.

(2) Subject to sub-regulation (1), the Authority and relevant lead agencies shall—

(a) promote research, capacity building and develop strategies for sound management of toxic and hazardous chemicals and materials;

(b) encourage the use and information sharing on technical and economically available toxic and hazardous chemical free products and processes, best available technologies and best environmental practices;

(c) monitor emissions and releases of toxic and hazardous industrial chemicals and materials including those unintentionally produced;

(d) reduce or eliminate the impacts of toxic and hazardous chemicals and materials to human health and environment;

(e) monitor contaminants of emerging concern in environmental and biological media to determine their toxicity and hazards, and risks to human health and environment; and

(f) develop and maintain a national publicly available inventory, database and or portal of toxic and hazardous chemicals and materials with information on the name including the molecular formula; chemical abstract service number;

harmonized system code number; the purpose, application and or use; quantity; hazard characteristic and regulatory status.

(3) A person, facility, plant or chemical process shall not discharge, emit or release into the environment toxic and hazardous chemicals and materials in excess of recommended standards for any environmental media.

(4) The owner, operator or an agent licensed to manufacture, distribute, store, transport, handle, import, export or use toxic and hazardous chemicals and materials in an industrial, extractive or any other activity shall undertake a hazard and risk assessment as guided by the relevant lead agency.

(5) The Authority shall, in consultation with the relevant lead agencies, implement guidelines for—

(a) assessment, identification, characterization, remediation, monitoring and use of chemically contaminated sites; and

(b) aerial spraying or application of toxic and hazardous chemicals.

Dual–use chemicals and intermediate chemicals.

41. (1) The Authority shall, in consultation with the relevant lead agencies, monitor compliance of production, import, export, transport, storage, distribution and disposal of toxic and hazardous dual-use chemicals and materials, and their chemicals precursors, in accordance with the provisions of the Act, these Regulations or any other relevant law.

(2) Subject to sub-regulation (1), any person who owns, keeps under storage, distributes, transports, operates or contracts a plant, chemical process or production facility shall in accordance sub-regulation (1) and any other relevant law, monitor and undertake a hazard and risk assessment of the toxic and hazardous dual-use chemicals and materials, or toxic and hazardous intermediate chemicals and materials on human-health and the environment.

Pollutant release and transfer register.

42. (1) The Authority shall establish and maintain a pollutant release and transfer register for all facilities handling toxic and hazardous industrial chemical and materials.

(2) The pollutant release and transfer register shall consist of information relating to—

(a) the facility and its geographical location;

(b) the activity;

(c) the owner or operator or company;

(d) the pollutant or waste, as appropriate;

(e) each of the environmental media into which the pollutant is released; and

(f) the destination of the transfer and the disposal or recovery operation for waste.

(3) A manufacturer of any chemical or material shall submit to the authority all data referred to under the pollutant release and transfer register form set out in the Twelfth Schedule within three months after the end of a reporting year.

(4) The data submitted under sub-regulation (2) shall be in electronic form.

(5) The pollutant release and transfer register shall be available to the public on the Authority's website.

(6) The owner or operator of a facility that releases or discharges toxic and hazardous industrial chemicals and materials into the environment above the recommended limits applicable to water, air, soil, sediment or applicable environmental matrix shall report to the Authority within six hours of the release or discharge.

Restriction and Banning.

43. The Authority shall advise the Cabinet Secretary to restrict or ban a chemical or material based on the criteria set out in the Thirteenth Schedule.

Offence.

44. (1) A person shall not manufacture, export, import, distribute, store or handle any banned chemical or material listed in the Sixth Schedule.

(2) A person shall not manufacture, export, import, distribute, store or handle any restricted chemical or material listed in the Sixth Schedule without a valid licence from the Authority.

PART VII—RECORDS AND REPORTS

Records.

45. (1) The exporter, importer, manufacturer or supplier shall keep a record of all toxic and hazardous industrial chemicals or materials handled indicating the quantities received or manufactured, balances in stock, and information described in the First Schedule and shall be availed to the Authority on request.

(2) The record referred to in sub-regulation (1) shall indicate the recipient, quantity, date and place of use.

(3) The recipient or the user shall keep a record or inventory of the toxic and hazardous industrial chemicals and materials acquired, purchased or supplied and disposed that comprises—

(a) chemical name;

(b) product or trade name;

(c) material safety data sheet;

(d) manufacturer or supplier name, registration and contact details;

(e) hazard characteristics;

(f) uses; and

(g) disposal.

Reports.

46. A person handling a toxic and hazardous chemical or material registered under these Regulations shall—

(a) in case of an incident notify the Authority within six hours; and

(b) submit to the Authority a report in the format set out under the Fourteenth Schedule within seven days.

Reporting.

47. (1) The national focal point to the relevant Convention shall, in consultation with the Authority, report to the Secretariat of the relevant Conventions on the measures taken to implement the provisions of Agreements or Conventions on the management of toxic and hazardous chemicals and material in fulfilment of the national obligations.

(2) The reporting format shall be in accordance with the requirements provided by the applicable Convention with respect to the toxic and hazardous chemicals and materials.

(3) In this regulation, "national focal point" means a national entity or authority designated by a State Party and charged with facilitating the State Party's compliance with international agreements at the national level.

PART IX—MISCELLANEOUS PROVISIONS

Offences and Penalties.

48. (1) A person who manages toxic and hazardous industrial chemicals or materials for the purposes other than those specified in a manner likely to cause adverse effects to human health and environment commits an offence.

(2) A person who contravenes any provision of these Regulations commits an offence and shall, on conviction, be liable to the penalty set out in section 141 of the Act.

(3) In addition to the penalty imposed under sub-regulation (2), a person shall be liable to the penalties set out under section 93 of the Act.

Transitional.

49. Within six months after the commencement of these Regulations, a manufacturer, distributor, storage handler or user of toxic and hazardous industrial chemicals or materials covered under these Regulations shall submit initial Environmental Audit Reports and thereafter annual Audit Reports to the Authority.

Advertising.

50. A person who advertises any toxic and hazardous industrial chemicals or materials shall ensure that the advertisement contains a warning that the toxic and hazardous chemicals or materials may be harmful to human health and the environment.

Advertisement limitation.

51. A person shall not use words, packages or labels stating, implying or inferring that a chemical or material is approved, accepted or recommended by the government or by any department or agency thereof in any advertisement in respect to a chemical or material.

FIRST SCHEDULE

(r. 4(1)(2)(a)(b)(3),5(2)(4)(5)(c),45(1))

CRITERIA FOR CLASSIFICATION OF INDUSTRIAL CHEMICALS AND MATERIALS

PART I—CLASSIFICATION BASED ON PHYSICAL HAZARDS

Classification			Hazard statement	Hazard statement codes	General description
Hazard Class	Hazard category				
Explosives	Unstable explosive		Unstable explosives	H200	Capable by chemical reaction to produce gas at such a temperature and pressure, and at such speed that causes damage to the surrounding.
	Division 1.1		Explosive; mass explosion hazard	H201	
	Division 1.2		Explosive; severe projection hazard	H202	
	Division 1.3		Explosive; fire blast or projection hazard	H203	
	Division 1.4		Fire blast or projection hazard	H204	
	Division 1.5		May mass explode in fire	H205	
	Division 1.6		No hazard statement	None	
Flammable gases	1A	Flammable gas	Extremely flammable gas	H220	Ability to ignite (catch fire) easily and the main hazards are fire or explosion.
		Pyrophoric gas	Extremely flammable gas	H220	
			May ignite spontaneously if exposed to air	H232	
		Chemically unstable gas	Extremely flammable gas	H220	
			May react explosively even in the absence of air	H230	
			Extremely flammable gas	H220	
			May react explosively even in the absence of air at elevated pressure and / or temperature	H231	
	1B		Flammable gas	H221	
	2		Flammable gas	H221	

Classification		Hazard statement	Hazard statement codes	General description
Hazard Class	Hazard category			
Aerosols	1	Extremely flammable gas Pressurized container: may burst if heated.	H222 H229	Aerosol dispensers containing a gas compressed, liquefied or dissolved under pressure with a release device allowing contents to be ejected in suspension in a gas as foam, paste or powder or liquid state or gaseous state.
	2	Flammable gas Pressurized container: may burst if heated.	H223 H229	
	3	Pressurized container: may burst if heated.	H229	
Oxidising gases	1	May cause or intensify fire; oxidizer	H270	Can cause or intensify a fire or cause a fire or explosion.
Gases under pressure	Compressed gas	Contains gas under pressure; may explode if heated	H280	Due to the high pressure inside the cylinder or container, it may explode if heated. Refrigerated liquefied gases are very cold and can cause severe cold (cryogenic) burns or injury
	Liquefied gas	Contains gas under pressure; may explode if heated	H280	
	Refrigerated liquefied gas	Contains refrigerated gas; may cause cryogenic burns or injury	H281	
		Contains gas under pressure; may explode if heated	H280	
Flammable Liquids	1	Extremely flammable liquid and vapour	H224	Liquids with a flash point of not more than 93°C.
	2	Highly flammable liquid and vapour	H225	
	3	Flammable liquid and vapour	H226	
	4	Combustible liquid	H227	
Flammable Solids	1	Flammable solid	H228	Solids readily combustible or may cause or contribute to fire through friction.
	2	Flammable solid	H228	
Self-reactive substances and mixtures	Type A	Heating may cause an explosion	H240	May react on their own to cause a fire or explosion, or may cause a fire or explosion if
	Type B	Heating may cause a fire or explosion	H241	

Classification		Hazard statement	Hazard statement codes	General description
Hazard Class	Hazard category			
	Type C and D	Heating may cause a fire	H242	heated even without oxygen (air).
	Type E and F	Heating may cause a fire	H242	
	Type G	No hazard statement	None	
Pyrophoric liquids	1	Catches fire spontaneously if exposed to air	H250	Liquids that can catch fire very quickly even in small quantities after coming into contact with air within 5 minutes.
Pyrophoric solids	1	Catches fire spontaneously if exposed to air	H250	Solids which even in small quantities is liable to ignite within 5 minutes after coming into contact with air.
Self-heating substances and mixtures	1	Self-heating; may catch fire	H251	May catch fire if exposed to air and without energy supply. They differ from pyrophoric liquids or solids that will ignite only after a longer period of time or when in large amounts.
	2	Self-heating in large quantities; may catch fire	H252	
Substances and mixtures which, in contact with water, emit flammable gases	1	In contact with water releases flammable gases which may ignite spontaneously	H260	Substances that react with water to release flammable gases. In some cases, the flammable gases may ignite very quickly (spontaneously).
	2	In contact with water releases flammable gases	H261	
	3	In contact with water releases flammable gases	H261	
Oxidising liquids	1	May cause fire or explosion; strong oxidizer	H271	Liquid which in itself may not be combustible, may, generally by yielding oxygen, cause, or contribute to, the combustion of other material.
	2	May intensify fire; oxidizer	H272	
	3	May intensify fire; oxidizer	H272	

Classification		Hazard statement	Hazard statement codes	General description
Hazard Class	Hazard category			
Oxidising solids	1	May cause fire or explosion; strong oxidizer	H271	Solid which in itself may not be combustible, may, generally by yielding oxygen, cause, or contribute to, the combustion of other material.
	2	May intensify fire; oxidizer	H272	
	3	May intensify fire; oxidizer	H272	
Organic peroxides	Type A	Heating may cause an explosion	H240	May cause a fire or explosion if heated/may undergo exothermic self-accelerating decomposition:
	Type B	Heating may cause a fire or explosion	H241	
	Type C and D	Heating may cause a fire	H242	
	Type E and F	Heating may cause a fire	H242	
	Type G	No hazard statement	None	
Corrosive to metals	1	May be corrosive to metals.	H290	May be corrosive (chemically damage or destroy) to metals.
Densensitized explosives	1	Fire, blast projection hazard; increased risk of explosion if desensitizing agent is reduced	H206	An explosive that has had an agent added to stabilize (or desensitize) it to suppress their explosive properties so that they do not mass explode and do not burn too rapidly and exempted from hazard class 'Explosives'.
	2	Fire or projection hazard; increased risk of explosion if desensitizing agent is reduced	H207	
	3	Fire or projection hazard; increased risk of explosion if desensitizing agent is reduced	H207	
	4	Fire hazard; increased risk of explosion if desensitizing agent is reduced	H208	
Simple asphyxiants	Gases that may displace oxygen in air and cause rapid suffocation			
Physical hazards not	It covers any physical hazards that are not covered in any other physical hazard class. The hazard statement on the label and MSDS will describe			

Classification		Hazard statement	Hazard statement codes	General description
Hazard Class	Hazard category			
otherwise classified	the nature of the hazard.			

NB: Hazard statements are assigned alphanumerical code consisting of one letter and three numbers: Hn*xx* where H stands for "hazard statement" where n=2 stands for physical hazards. *xx* is a sequential numbering of hazards arising from the intrinsic properties of the substance or mixture.

PART II—CLASSIFICATION BASED ON HEALTH HAZARDS

Classification			Hazard statement	Hazard statement codes	General description
Hazard Class	Hazard Category				
Acute toxicity	1	Oral	Fatal if swallowed	H300	Fatal, toxic or harmful if inhaled, skin contact, or if swallowed. (*Refer to table below on ATE Values and Criteria*)
		Dermal	Fatal in contact with skin	H310	
		Inhalation	Fatal if inhaled	H330	
	2	Oral	Fatal if swallowed	H300	
		Dermal	Fatal in contact with skin	H310	
		Inhalation	Fatal if inhaled	H330	
	3	Oral	Toxic if swallowed	H301	
		Dermal	Toxic in contact with skin	H311	
		Inhalation	Toxic if inhaled	H331	
	4	Oral	Harmful if swallowed	H302	
		Dermal	Harmful in contact with skin	H312	
		Inhalation	Harmful if inhaled	H332	
	5	Oral	May be harmful if swallowed	H303	
		Dermal	May be harmful in contact with skin	H313	
		Inhalation	May be harmful if inhaled	H333	
Skin corrosion / irritation	1		Causes severe skin burns and eye damage	H314	Cause severe skin burns and skin irritation.
	2		Causes skin irritation	H315	

Classification			Hazard statement	Hazard statement codes	General description
Hazard Class	Hazard Category				
	3		Causes mild skin irritation	H316	
Serious eye damage / irritation	1		Causes serious eye damage	H318	Cause serious eye damage and eye irritation.
	2/2A		Causes serious eye irritation	H319	
	2B		Causes eye irritation	H320	
Sensitization (Respiratory or Skin)	Respiratory	1	May cause allergy or asthma symptoms or breathing difficulties if inhaled	H334	A respiratory sensitizer may cause allergy or asthma symptoms or breathing difficulties if inhaled. Skin sensitizer may cause an allergic skin reaction.
		1A	May cause allergy or asthma symptoms or breathing difficulties if inhaled	H334	
		1B	May cause allergy or asthma symptoms or breathing difficulties if inhaled	H334	
	Skin	1	May cause an allergic skin reaction	H317	
		1A	May cause an allergic skin reaction	H317	
		1B	May cause an allergic skin reaction	H317	
Germ Cell Mutagenicity	1 (both 1A and 1B)		May cause genetic defects	H340	Genetic defects - permanent changes (mutations) to body cells may pass to future generations. (*Refer to table in the First Schedule Part IV a*)
	2		Suspected of causing genetic defects	H341	
Carcinogenicity	1 (both 1A and 1B)		May cause cancer	H340	May cause or suspected of causing cancer. (*Refer to table in the First Schedule Part* IV b)
	2		Suspected of causing cancer	H341	
Reproductive Toxicity	1		May damage fertility or the unborn child	H360	May damage or suspected to damage

Classification		Hazard statement	Hazard statement codes	General description
Hazard Class	Hazard Category			
	(1A and 1B)			fertility or the unborn child (baby). (*Refer to table in the First Schedule Part IV c*)
	2	Suspected of damage fertility or the unborn child	H361	
	Effects on or via lactation	May cause harm to breast-fed children	H362	
Specific target organ toxicity (STOT)—single exposure	1	Can cause damage to organs	H370	Can or may cause damage to organs (e.g., liver, kidneys, or blood) following a single exposure.
	2	May cause damage to organs	H371	
	3	May cause respiratory irritation or May cause drowsiness or dizziness	H335 or H336	
Specific target organ toxicity (STOT)—repeated exposure	1	Cause damage to organs	H372	Can cause or may cause damage to organs (e.g., liver, kidneys, or blood) following prolonged or repeated exposure.
	2	May cause damage to organs	H373	
Aspiration hazard	1	May be fatal if swallowed and enters airways	H304	May be fatal if they are swallowed and enter the airways.
	2	May be harmful if swallowed and enters airways	H305	
Biohazardous infectious materials	These substances or materials known or reasonably expected to contain pathogens which can cause disease in humans or animals. The pathogens include microorganisms, nucleic acids or proteins (prions) while the infectious substances include biological products, cultures, patient specimens and medical or clinical wastes.			
Health hazards not otherwise classified	Covers products that are not included in any other health hazard class. These hazards have the characteristic of occurring following acute or repeated exposure and have an adverse effect on the health of a person exposed to it.			

NB: Hazard statements are assigned alphanumerical code consisting of one letter and three numbers: Hn*xx* where H stands for "hazard statement" where n=3 stands for health hazards. *xx* is a sequential numbering of hazards arising from the intrinsic properties of the substance or mixture.

Acute Toxicity Estimate (ATE) Values and Criteria

Toxicity category	Exposure routes				
	LD_{50} Oral	LD_{50} Dermal	LC_{50} Inhalation		
	(mg/kg bodyweight)	(mg/kg bodyweight)	Gases (ppmV)	Vapours (mg/l)	Dusts and Mists (mg/l)
Extreme	≤ 5	≤50	≤ 100	≤ 0.5	≤ 0.05
High	5 < to ≤ 50	50 < to ≤ 200	100 < to ≤ 500	0.5 < to ≤ 2.0	0.05 < to ≤ 0.5
Moderate	50 < to ≤ 300	200 < to ≤ 1000	500 < to ≤ 2500	2.0 < to ≤ 10.0	0.5 < to ≤ 1.0
Low	300 < to ≤ 2000	1000 < to ≤ 2000	2500 < to ≤ 20000	10.0 < to ≤ 20	1.0 < to ≤ 5.0

NB: Acute toxicity estimate (ATE) for the classification of a substance and a mixture derived using LD_{50} or LC_{50}. A mixture may be derived by appropriate conversion value relating to classification category e.g. high, or range test 5<to≤50. Inhalation cut-off values are based on 4 hour testing exposures. Gas concentration expressed in parts per million per volume *(ppmV).* Dust is solid particles of a substance or mixture suspended in air; Mist is liquid droplets of a substance or mixture suspended in air, while, Vapour is the gaseous form of a substance or mixture released from its liquid or solid state.

"cut-off value" means a threshold of any classified impurity, additive or individual constituent in a substance or in a mixture, above which threshold these shall be taken into account for determining if the substance or the mixture, respectively, shall be classified.

PART III—CLASSIFICATION BASED ON ENVIRONMENTAL HAZARDS

Classification		Hazard statement	Hazard statement codes	General description
Hazard Class	Hazard Category			
Hazardous to the Aquatic Environment (Acute aquatic toxicity)	Extreme / Acute 1	Very toxic to aquatic life	H400	Intrinsic property of a substance to be injurious to an aquatic organism in the Short term. (*See criteria in Part III: Table A below*)
	High / Acute 2	Toxic to aquatic life	H401	
	Moderate Acute 3	Harmful to aquatic life	H402	
Hazardous to the Aquatic Environment (Chronic-Long-term)	Chronic 1	Very toxic to aquatic life with long lasting effects	H410	Intrinsic property of a substance to cause adverse effects to aquatic organisms during exposure determined in relation to life-cycle of the organism.
	Chronic 2	Toxic to aquatic life with long lasting effects	H411	
	Chronic 3	Harmful to aquatic life with long lasting effects	H412	
	Chronic 4	May cause long lasting effects	H413	
Hazardous to the ozone layer	1	Harms public health and the environment by destroying ozone in the upper atmosphere	H420	Substances or mixture that depletes ozone layer in the stratosphere. *(See criteria in Part III: Table B below)*

NB: Hazard statements are assigned alphanumerical code consisting of one letter and three numbers: Hn*xx* where H stands for "hazard statement" where n=4 stands for environmental hazards. *xx* is a sequential numbering of hazards arising from the intrinsic properties of the substance or mixture.

A. Hazardous to the Aquatic Environment (Acute Ecotoxicity / Acute Aquatic Hazard) Classification Criteria

Toxicity category	96 hr LC_{50} (for fish)	48 hr LD_{50} (for crustacea)	72 or 96 hr ErC_{50} (for algae or other aquatic plants)
	(mg/l)	(mg/l)	(mg/l)
Extreme / Category Acute 1	≤ 1	≤ 1	≤1
High / Category Acute 2	1< to ≤ 10	1 < to ≤ 10	1< to ≤ 10
Moderate / Category Acute 3	10 < to ≤ 100	10 < to ≤ 100	10< to ≤ 100

NB: ErC_{50} is the concentration of test substance which results in a 50 percent reduction in growth rate.

B. Hazardous to the Ozone Layer Classification Criteria

Category	Criteria
1	Any controlled substances listed in Annexes to the Montreal; or Any mixture containing at least one ingredient listed in the Annexes to the Montreal Protocol and Environment Management and Coordination (Controlled Substances) Regulations, 2007, at a concentration ≥ 0.1 %

PART IV—CLASSIFICATION BASED ON CARCINOGENIC, MUTAGENIC AND TERATOGENIC (TOXIC FOR REPRODUCTION) / (CMR) EFFECTS

a) Classification Criteria for Carcinogenicity

Group	Description	Definition
Group 1	Carcinogenic to humans	• The chemical or material (mixture) is definitely carcinogenic to humans. The exposure circumstance entails exposures that are carcinogenic to humans.
Group 2A	Probably carcinogenic to humans	• The chemical or material (mixture) is probably carcinogenic to humans. The exposure circumstance entails exposures that are probably carcinogenic to humans. • Limited evidence of carcinogenicity in human and sufficient evidence of carcinogenicity in experimental animals.
Group 2B	Possibly carcinogenic to humans	• The chemical or material (mixture) is possibly carcinogenic to humans. The exposure circumstance entails exposures that are possibly carcinogenic to humans. • Limited evidence of carcinogenicity in humans and less than sufficient evidence of carcinogenicity in experimental animals.
Group 3	Not classifiable as to its carcinogenicity to humans	• The chemical or material (mixture or exposure circumstance) is not classifiable as to its carcinogenicity to humans. • Evidence of carcinogenicity is inadequate in humans and inadequate or limited in experimental animals.
Group 4	Probably not carcinogenic to humans	• The chemical or material (mixture or exposure circumstance) is probably not carcinogenic to humans. • Evidence suggesting lack of carcinogenicity in humans and in experimental animals.

NB: Probably carcinogenic and possibly carcinogenic are descriptors with no quantitative significance with probably carcinogenic signifying a higher level of evidence than possibly carcinogenic.

b) Classification Criteria for Germ Cell Mutagenicity

Category	Classification Criteria	Description
Category 1A	Chemicals known to induce or regarded as if they induce heritable mutations in human germ cells.	• Positive evidence from human epidemiological studies
Category 1B	Chemicals known to induce or regarded as if they induce heritable mutations in human germ cells	• Positive results from in vivo heritable germ cell mutagenicity tests in mammals; or • Positive results from in vivo somatic cell mutagenicity tests in mammals, in combination with some evidence that the substance has potential to cause mutations to germ cells.
Category 2	Chemicals that may induce heritable mutations in humans germ cells	• Positive evidence obtained from experiments in mammals and/or in some cases from in vitro experiments, obtained from somatic cell mutagenicity test in vivo, in mammals; or other in vivo somatic cell genotoxicity test which are to be supported by positive results from in vitro mutagenicity assays

NB: (1) Germ cells are those cells that are involved in the reproductive process and can give rise to a new organism. (2) Somatic cells are all body cells except the reproductive germ cells. (3) In vitro (latin: in glass): study tests performed outside a living organism (4) In vivo (latin: in the living): study tests performed in living organisms.

c) Classification Criteria for Reproductive Toxicity

i	Category	Classification Criteria	Description
Adverse Effects on Sexual Function and Fertility	1	Known or presumed human reproductive toxicant	• Includes substances known to have produced an adverse effect on sexual function and fertility or on development in human or for which there is evidence from animal studies supplemented with other information on the capacity of the substance to interfere with reproduction in humans.

i	Category	Classification Criteria	Description
	1A	Known human reproductive toxicant	• The evidence is largely based from humans
	1B	Presumed human reproductive toxicant	• The evidence is largely based from experimental animals.
	2	Suspected human reproductive toxicant	• There is some evidence from humans or experimental animals, possibly supplemented with other information and where the evidence is not sufficiently convincing to place the substance in Category 1.

ii	Category	Classification Criteria	Description
Adverse Effects on the development of the offspring	1 (Only one category)	Effects on or via Lactation	Substances which are absorbed by humans and shown to interfere with lactation or may be present (including metabolites) in breast milk in sufficient amounts to cause health concern of the breastfed child. • Absorption, metabolism, distribution and excretion studies that would indicate substance present in potentially levels in breast milk; and/or • Results of one or two generation studies in animals provide clear evidence of adverse effect in the offspring due to transfer in the milk or adverse effects on the quality of the milk; and/or • Human evidence indicating a hazard to babies during the lactation period.

PART V—CLASSIFICATION CRITERIA FOR MIXTURES OF TOXIC AND HAZARDOUS INDUSTRIAL CHEMICALS AND/OR MATERIALS

Test Data on the Mixture	Criteria
Sufficient data / test data available on the hazards of the complete / similar mixtures to estimate classification hazards	• Test data for that mixture is used to classify the hazards of the mixture.

Test Data on the Mixture	Criteria
Data / test data not available on the hazards of the complete mixture	• Apply "Bridging principles" on similar tested mixtures– the available data for the substances and/or ingredients that make up the mixture is used to characterize the hazards of the mixture
Data / test data not available on the hazards of the complete mixture; and available information not sufficient to apply bridging principles.	• The agreed method for estimating the hazards based on the information known will be applied to classify the mixture.
Data / test data only available on the hazards of all ingredients	• Apply "Summation method"—summation of components / ingredient concentrations based on their hazard categories. • Applicable examples include estimating acute toxicity, germ cell mutagenicity, carcinogenicity and reproductive toxicity hazard classes.
Data not available for one or more ingredients of the mixture; or, Other data available to estimate conversion values for classification	• Additivity formula - summation of components concentrations based of the hazard parameter being investigated e.g. acute toxicity. • Available information can provide a derived conversion value which can be applied in a formula.

SECOND SCHEDULE

(rr. 6, 7)

REGISTER OF TOXIC AND HAZARDOUS INDUSTRIAL CHEMICALS AND MATERIALS

No.	Registration Number	Chemical Name	Product / Trade Name	HS No.	CAS No.	Hazard Characteristics	Quantity	Uses
1								
2								
3								
4								
5								

THIRD SCHEDULE

(rr. 8(3), 9(2))

PART 1

APPLICATION FOR REGISTRATION OF A TOXIC AND HAZARDOUS INDUSTRIAL CHEMICAL OR MATERIAL

(To be submitted in triplicate and a soft copy)

Application Reference No. .....

PART A—Personal details

Name of Applicant (Individual/Company): .....

Postal Address: .....

Physical Address: .....

Fax: .....

Telephone: .....

E-mail Address: .....

Certificate of Incorporation/Registration: .....

PIN: .....

Category of applicant (Manufacturer/Agent/Exporter/Importer/Distributor): .....

Name and Address of Manufacturer (where applicable): .....

PART B— Chemical Details

Common name(s): .....

Chemical or Material name(s) and structural formula of the major active ingredient: .....

CAS Registry No.: .....

HS No.: .....

Intended use: .....

PART C—Chemical Characteristics

1. Toxicity of toxic and hazardous industrial chemicals and materials to test animals (oral, dermal and inhalation LD_{50} and LC_{50})
   (a) Toxicity to bees: ……
   (b) Toxicity to fish: ……
   (c) Toxicity to birds: ……
   (d) Toxicity to soil micro-organisms: ……
   (e) Toxicity to others: ……...
2. Persistence in the environment: ……..

3. Safety measures
   (a) Antidote(s): ……
   (b) Safety precautions: ……
   (c) First Aid measures: ……
   (d) Any other relevant safety measures: ……...
4. Registration numbers and references of the product in the country of origin and any other country(s) where it is marketed:
   ……
   ……
5. Is the product authorized to be on the market in the country of origin? If yes, attach evidence:
   ……
   ……

PART IV—Other relevant Information

1. Handling, storage and transportation information: ……
2. Indicate type of the packaging materials: ……...
3. Methods of disposal: ……..

The information contained herein is correct to the best of my knowledge and belief.

Name of Legally Authorized person: ……

Designation (if company) (Chairman, Secretary, etc.): ……

Signature of Applicant: ……

Date: ……

Seal/Stamp: ……

NOTE: a) A separate application is required for each product

b) If the space provided is not sufficient, attach a separate sheet.

PART 2

Registration Certificate No.: .....

Application Ref. No.: .....

REGISTRATION CERTIFICATE OF TOXIC AND HAZARDOUS INDUSTRIAL CHEMICALS AND OR MATERIALS

Application Ref. No.: .....

Name: .....

Address: .....

Tel. No.: .....

This Certificate is granted to (name of the applicant): .....

Address: .....

to Manufacture /Import/ Export / Distribute Toxic and Hazardous Chemicals and / or Materials as follows:

Chemicals and / or Materials: .....

Quantity: .....

Registration No.: .....

Purpose: .....

Conditions: .....

This registration is valid from: ……..……. to .....

Signed: …….. Date: ……

(Official seal)

Director General
National Environment Management Authority

FOURTH SCHEDULE

(r. 8(3))

MATERIAL SAFETY DATA SHEET OUTLINE

Information on MSDS should be provided in the order provided below:

1. Identification;
2. Hazard identification;
3. Composition / information of ingredients;
4. First-aid measures;
5. Fire-fighting measures;
6. Accidental release measures;
7. Handling and storage;
8. Exposure controls / personal protection;
9. Physical and chemical properties;
10. Stability and reactivity;
11. Toxicological information;
12. Ecological information;
13. Disposal considerations;
14. Transport information;
15. Regulatory information;
16. Other information.

FIFTH SCHEDULE

(r. 8(4))

CONTENTS OF RISK MANAGEMENT PLAN AND TOXIC AND HAZARDOUS CHEMICALS (HAZCHEM) AND MATERIALS (HAZMAT) EMERGENCY RESPONSE PLAN

A. Risk Management Plan

- Identification of the chemicals hazards / estimation of exposure.
- Hazard assessment and characterization including those affected and the how they are affected.
- Evaluation of the risks (the actions and pre-cautions needed).
- Decision criteria to determine acceptable levels of risk.
- Documentation and implementation.
- Any other relevant requirement as may be determined by the Authority.

B. Chemicals (HAZCHEM) and Materials (HAZMAT) Emergency Response Plan

- Notification procedures—persons and authorities to contact and how to contact.
- Emergency procedures to contain and decontaminate spills—immediate actions to be taken by driver or responsible staff, and the company when informed).
- Emergency equipment to be carried on the vehicle and on site such as personal equipment, absorbents, neutralizing solutions and salvage drums.
- Material safety data sheets of hazardous substance manufacture or transported.
- Site map indicating where hazardous chemicals are stored.
- Responsibilities of key persons in managing emergencies including on-site emergency response teams.
- Circumstances to activate the HAZCHEM and/or HAZMAT plan.
- Systems for raising the alarm.
- Estimating the extent of the emergency.
- Summoning emergency services authorities in the event of an emergency.
- Protection of all persons including detailed evacuation procedures and methods for accounting for all people at the workplace.
- Isolation of the emergency area to prevent entry by non-essential personnel.
- Incident Command System and Lead Agency.
- Hazardous Chemicals and/or Material Incident Classification.
- Fire-water retention procedures to ensure that contaminated fire-water cannot enter waterways, drains or ground water.
- Disconnection of power supplies and other energy sources except when required to maintain safety of a critical operation or to run emergency.

- Prevention of hazardous chemicals or contaminated material of any kind from entering drains or waterways.
- Provision of relevant information and assistance to the emergency services authority, both in anticipation of emergencies and when they occur.
- Maintenance of site security throughout the emergency.
- Provision for dealing with the public and the press.
- Waste management, site rehabilitation, restoration, and remediation requirements.
- Apply or Use *Kenya Standard Emergency Response Guide* where applicable.
- Any other relevant requirement as may be determined by the Authority.

SIXTH SCHEDULE

(r. 15,28(1)(a)(4),29(9),44(1)(2))

RESTRICTED AND BANNED CHEMICALS AND MATERIALS

Part I: Restricted Chemicals

No.	Chemical Name	CAS. No.	Category and Status	Remarks
1.	Asbestos Crocidolite Actinolite Anthophyllite Amosite Tremolite	12001-28-4 77536-66-4 77536-67-5 12172-73-5 77536-68-6	Industrial Restricted *(Annex III listed Rotterdam Convention)*	PIC procedure requirement
2.	Commercial octabromodiphenyl ether including: Hexabromodiphenyl ether Heptabromodiphenyl ether	36483-60-0 68928-80-3	Industrial Restricted *(Annex III listed Rotterdam Convention)*	PIC procedure requirement
3.	Commercial pentabromodiphenyl ether including: Tetrabromodiphenyl ether Pentabromodiphenyl ether	40088-47-9 32534-81-9	Industrial Restricted *(Annex III listed Rotterdam Convention)*	PIC procedure requirement
4.	Hexabromocyclododecane (HBCDD)	25637-99-4 3194-55-6 134237-50-6 134237-51-7 134237-52-8	Industrial Restricted *(Annex III listed Rotterdam Convention)*	PIC procedure requirement
5.	Perfluorooctane sulfonic acid, Perfluorooctane sulfonates, Perfluorooctane sulfonamides and Perfluorooctane sulfonyls including: - Perfluorooctane sulfonic acid - Potassium perfluorooctane sulfonate - Lithium perfluorooctane sulfonate - Ammonium perfluorooctane sulfonate - Diethanolammonium perfluorooctane sulfonate	 1763-23-1 2795-39-3 29457-72-5 29081-56-9 70225-14-8	Industrial Restricted *(Annex III listed of the Rotterdam Convention)*	PIC procedure requirement

No.	Chemical Name	CAS. No.	Category and Status	Remarks
	- Tetraethylammonium perfluorooctane sulfonate - Didecyldimethylammonium perfluorooctane sulfonate - N-Ethylperfluorooctane sulfonamide - N-Methylperfluorooctane sulfonamide - N-Ethyl-N-(2-hydroxyethyl) perfluorooctane sulfonamide - N-(2-Hydroxyethyl)-N-methylperfluorooctane Sulfonamide - Perfluorooctane sulfonyl fluoride	56773-42-3 251099-16-8 4151-50-2 31506-32-8 1691-99-2 24448-09-7 307-35-7		
6.	Perfluorooctane sulfonyls fluoride Perfluorooctane sulfonic acid, its salts below: - Potassium perfluorooctane sulfonate - Lithium perfluorooctane sulfonate - Ammonium perfluorooctane sulfonate - Diethanolammonium perfluorooctane sulfonate - Tetraethylammonium perfluorooctane sulfonate Didecyldimethylammonium perfluorooctane sulfonate	307-35-7 1763-23-1 2795-39-3 29457-72-5 29081-56-9 70225-14-8 56773-42-3 251099-16-8	Industrial Restricted *(Annex A listed of the Stockholm Convention)*	Acceptable purposes or as an intermediate in production of chemicals with acceptable purpose. Without specific exemptions for production. With specific exemptions on uses: Metal plating (hard-metal plating) only in closed-loop systems. Fire-fighting foam for liquid fuel vapour suppression and liquid fuel fires (Class B fires) in installed systems, including both mobile and fixed systems.
7.	Polybrominated biphenyls (PBB)	36355-01-8 (hexa-) 27858-07-7(octa-) 13654-09-6 (deca-)	Industrial Restricted *(Annex III listed Rotterdam Convention)*	PIC procedure requirement
8.	Polychlorinated biphenyls (PCB)	1336-36-3	Industrial Restricted *(Annex III listed Rotterdam*	PIC procedure requirement

No.	Chemical Name	CAS. No.	Category and Status	Remarks
			Convention)	
9.	Polychlorinated terphenyls (PCT)	61788-33-3	Industrial Restricted *(Annex III listed Rotterdam Convention)*	PIC procedure requirement
10.	Short-chain chlorinated paraffins (SCCP)	85535-84-8	Industrial Restricted *(Annex III listed Rotterdam Convention)*	PIC procedure requirement
11.	Tetraethyl lead	78-00-2	Industrial Restricted *(Annex III listed Rotterdam Convention)*	PIC procedure requirement
	Tetramethyl lead	75-74-1	Industrial Restricted *(Annex III listed Rotterdam Convention)*	PIC procedure requirement
13.	Tris (2,3-dibromopropyl) phosphate	126-72-7	Industrial Restricted *(Annex III listed Rotterdam Convention)*	PIC procedure requirement
14.	All Tributyl tin compounds including: – Tributyltin oxide – Tributyltin fluoride – Tributyltin methacrylate – Tributyltin benzoate – Tributyltin chloride – Tributyltin linoleate – Tributyltin naphthenate	56-35-9 1983-10-4 2155-70-6 4342-36-3 1461-22-9 24124-25-2 85409-17-2	Industrial Restricted *(Annex III listed Rotterdam Convention)*	PIC procedure requirement
15	Decabromodiphenyl ether (decaBDE)	1163-19-5	Industrial Restricted *(Annex A listed Stockholm Convention for Elimination)*	With specific exemptions for production as allowed by parties upon request to the Conference of Parties of the Rotterdam Convention. Specific exemptions for uses: Parts for use in vehicles

No.	Chemical Name	CAS. No.	Category and Status	Remarks
				specified. Aircraft for which type approval has been applied for before December 2018 and has been received before December 2022 and spare parts for those aircraft. Textile products that require anti-flammable characteristics, excluding clothing and toys. Additives in plastic housings and parts used for heating home appliances, irons, fans, immersion heaters that contain or are in direct contact with electrical parts or are required to comply with fire retardancy standards, at concentrations lower than 10 per cent by weight of the part. Polyurethane foam for building insulation.
16.	Hexabromocyclododecane	-	Industrial Restricted *(Annex A listed Stockholm Convention for Elimination)*	With specific exemptions for production for Parties listed in the Register in accordance with the provisions of Part VII of this Annex. With specific exemptions for expanded polystyrene and extruded polystyrene in buildings in accordance with the provisions of Part VII of Annex A of the Stockholm Convention.

No.	Chemical Name	CAS. No.	Category and Status	Remarks
17.	Hexabromodiphenyl ether and Heptabromodiphenyl ether	-	Industrial. Restricted *(Annex A listed Stockholm Convention for Elimination).*	Without specific exemptions for production. With specific exemptions for use recycling of articles that contain or may contain hexabromodiphenyl ether and heptabromodiphenyl ether, and the use and final disposal of articles manufactured from recycled materials that contain or may contain hexabromodiphenyl ether and heptabromodiphenyl ether.
18.	Perfluorooctanoic acid (PFOA), its salts and PFOA-related compounds "Perfluorooctanoic acid (PFOA), its salts and PFOA-related compounds" means the following: (i) Perfluorooctanoic acid (PFOA; CAS No. 335-67-1), including any of its branched isomers; (ii) Its salts; (iii) PFOA-related compounds which, for the purposes of the Convention, are any substances that degrade to PFOA, including any substances (including salts and polymers) having a linear or branched perfluoroheptyl group with the moiety (C7F15)C as one of the structural elements	335-67-1	Industrial. Restricted *(Annex A listed Stockholm Convention for Elimination)*	Without specific exemptions for production. With specific exemptions for use in fire-fighting foam.
19.	Polychlorinated biphenyls (PCB)	-	Industrial. Restricted *(Annex A listed Stockholm Convention for Elimination)*	Without specific exemptions for production. With specific exemptions for use in equipment (e.g. transformers, capacitors or other receptacles containing

No.	Chemical Name	CAS. No.	Category and Status	Remarks
				liquid stocks) by 2025, subject to review by the Conference of the Parties.
20.	Polychlorinated naphthalenes (PCNs) including dichlorinated naphthalenes, trichlorinated naphthalenes, tetrachlorinated naphthalenes, pentachlorinated naphthalenes, hexachlorinated naphthalenes, heptachlorinated naphthalenes, octachlorinated naphthalene.	-	Industrial. Restricted. *(Annex A listed Stockholm Convention for Elimination)*	With specific exemptions for production: Intermediates in production of polyfluorinated naphthalenes, including octafluoronaphthalene With specific exemptions for use in the production of polyfluorinated naphthalenes, including octafluoronaphthalene
21.	Short-chain chlorinated paraffins (SCCP) (Alkanes, C10-13, chloro) + : straight-chain chlorinated hydrocarbons with chain lengths ranging from C10 to C13 and a content of chlorine greater than 48 per cent by weight	85535-84-8; 68920-70-7; 71011-12-6; 85536-22-7; 85681-73-8; 108171-26-2.	Industrial. Restricted *(Annex A listed Stockholm Convention for Elimination)*	Production: As allowed for the parties listed in the Secretariat Register. With specific exemptions for Use: Additives in the production of transmission belts in the natural and synthetic rubber industry. Spare parts of rubber conveyor belts in the mining and forestry industries. Leather industry, in particular fatliquoring in leather. Lubricant additives, in particular for engines of automobiles, electric generators and wind power facilities, and for drilling in oil and gas exploration, petroleum refinery to produce diesel oil. Tubes for outdoor decoration bulbs.

No.	Chemical Name	CAS. No.	Category and Status	Remarks
				Waterproofing and fire-retardant paints. Adhesives. Metal processing. Secondary plasticizers in flexible polyvinyl chloride, except in toys and children's products.
22.	Tetrabromodiphenyl ether and pentabromodiphenyl ether	-	Industrial. Restricted *(Annex A listed Stockholm Convention for elimination)*	Without specific exemptions for production. With specific exemptions for use in recycling of articles that contain or may contain tetrabromodiphenyl ether and pentabromodiphenyl ether, and the use and final disposal of articles manufactured from recycled materials that contain or may contain tetrabromodiphenyl ether and pentabromodiphenyl ether.
23.	Mercury, Mercury compounds, Mercury-added products and Manufacturing processes using mercury or mercury compounds	7439-97-6	Industrial. Restricted *(Annex A listed Minamata Convention)*	Phase-out date for mercury- added products (manufacture, import or export) - Year 2020 Phase-out date for chlor-alkali production using mercury - Year 2025. Phase-out date for acetaldehyde production using mercury or mercury compounds as catalyst - 2018 Vinyl chloride monomer production to reduce use of mercury per unit production by 50% by the 2020 against 2010 use.

No.	Chemical Name	CAS. No.	Category and Status	Remarks
				Sodium or Potassium Methylate or Ethylate production to; phase-out use of mercury within 10 years of entry into force of the Convention, and reduce emissions and releases of mercury per unit production by 50% by 2020 against 2010 use. Polyurethane production to phase-out use of mercury catalysts within 10 years of entry into force of the Convention.

Part II: Banned Chemicals

No.	Chemical Name	CAS. No.	Category and Status	Remarks or Extent of Use
1.	Hexabromobiphenyl	36355-01-8	Industrial Banned	Without specific exemptions for production and use.
2.	Hexachlorobutadiene	87-68-3	Banned.	Without specific exemptions for production and use.
3.	Pentachlorobenzene	608-93-5	Banned	Without specific exemptions for production and use.

NB: Or any other chemical or material that the Cabinet Secretary may gazette

Part III: Unintentional Production

No.	Chemical Name	CAS. No.	Sources	Remarks
1.	Hexachlorobenzene (HCB)	118-74-1	Formed and released unintentionally from anthropogenic sources.	Apply regulations 38 (3) and 39 including Article 5 of the Stockholm Convention
2.	Hexachlorobutadiene	87-68-3		
3.	Pentachlorobenzene (PeCB)	608-93-5)		
4.	Polychlorinated biphenyls (PCB)	-		
5.	Polychlorinated dibenzo-p-dioxins and dibenzofurans (PCDD/PCDF)	-		
6.	Polychlorinated naphthalenes,	-		

No.	Chemical Name	CAS. No.	Sources	Remarks
	including dichlorinated naphthalenes, trichlorinated naphthalenes, tetrachlorinated naphthalenes, pentachlorinated naphthalenes, hexachlorinated naphthalenes, heptachlorinated naphthalenes, octachlorinated naphthalene.			on Measures to reduce or eliminate releases from unintentional Production

SEVENTH SCHEDULE

(r. 16(4)(b),33(f))

HAZARD AND RISK SYMBOLS

Physical, Health and Environmental Hazard Pictograms

Hazard	Pictogram	Code	Hazard class	Hazard categories	Signal Word	Hazard Statement Code	Meaning
Physical		GHS01	Explosives	Unstable explosive	Danger	H200	Unstable explosive.
				Division 1.1		H201	Explosive; mass explosion hazard.
				Division 1.2		H202	Explosive, severe projection hazard
				Division 1.3		H203	Explosive; fire, blast or projection hazard
				Division 1.4	Warning	H204	Explosive; fire, blast or projection hazard.
	None			Division 1.5	Danger	H205	May mass explode in fire.
		GHS02	Flammable gases (including chemical unstable gases)	1	Danger	H220	Extremely flammable gas
	None			2	Warning	H221	Flammable gas;
	None			A (chemically unstable gases)	Danger	H230	Additional hazard statement: May react explosively even in the absence of air
	None			B (chemically unstable gases)	Danger	H231	Additional hazard statement: May react explosively even in the absence of air at elevated pressure and/or temperature
			Flammable liquids	1	Danger	H224	Extremely flammable liquid and vapour
				2		H225	Highly flammable liquid and vapour
				3	Warning	H226	Flammable liquid and vapour
	None			4		H227	Combustible liquid
			Flammable solids	1	Danger	H228	Flammable solid
				2	Warning		
			Aerosols	1	Danger	H222 H229	Extremely flammable aerosol Pressurized container: may burst if heated
				2	Warning	H223 H229	Flammable aerosol Pressurized container: may burst if heated
	None			3	Warning	H229	Pressurized container: may burst if heated

Hazard	Pictogram	Code	Hazard class	Hazard categories	Signal Word	Hazard Statement Code	Meaning
			Self-reactive substances and mixtures	Type A	Danger	H240	Heating may cause an explosion
				Type B	Danger	H241	Heating may cause a fire or explosion
				Type C and D	Danger	H242	Heating may cause a fire
				Type E and F	Warning	H242	Heating may cause a fire
			Pyrophoric liquids	1	Danger	H250	Catches fire spontaneously if exposed to air
			Pyrophoric solids	1	Danger	H250	Catches fire spontaneously if exposed to air
			Self-heating substances and mixtures	1	Danger	H251	Self-heating; may catch fire
				2	Warning	H252	Self-heating in large quantities; may catch fire
			Substances and mixtures, which in contact with water, emit flammable gases	1	Danger	H260	In contact with water releases flammable gases which may ignite spontaneously
				2	Danger	H261	In contact with water releases flammable gases
				3	Warning	H261	In contact with water releases flammable gases
			Organic peroxides	Type A	Danger	H240	Heating may cause an explosion
				Type B	Danger	H241	Heating may cause a fire or explosion
				Type C and D	Danger	H242	Heating may cause a fire
				Type E and F	Warning	H242	Heating may cause a fire
		GHS03	Oxidising gases	1	Danger	H270	May cause or intensify fire; oxidizer

Hazard	Pictogram	Code	Hazard class	Hazard categories	Signal Word	Hazard Statement Code	Meaning
			Oxidising liquids	1	Danger	H271	May cause fire or explosion; strong oxidizer
				2	Danger	H272	May intensify fire; oxidizer
				3	Warning	H272	May intensify fire; oxidizer
			Oxidising solids	1	Danger	H271	May cause fire or explosion; strong oxidizer
				2	Danger	H272	May intensify fire; oxidizer
				3	Warning	H272	May intensify fire; oxidizer
		GHS04	Gases under pressure	Compressed gas	Warning	H280	Contains gas under pressure; may explode if heated
				Liquified gas		H280	Contains gas under pressure; may explode if heated
				Refrigerated liquefied gas		H281	Contains refrigerated gas; may cause cryogenic burns or injury
				Dissolved gas		H280	Contains refrigerated gas; may cause cryogenic burns or injury
Physical		GHS05	Corrosive to metals	1	Warning	H290	May be corrosive to metals.
Health		GHS06	Acute Toxicity				Fatal if swallowed. Fatal in contact with skin. Fatal if inhaled. Toxic if swallowed. Toxic in contact with skin. Toxic if inhaled.
		GHS07	Health Hazard				May cause respiratory irritation; May cause drowsiness or dizziness; May cause an allergic skin reaction; Causes serious eye irritation; Causes skin irritation; Harmful if swallowed; Harmful in contact with skin; Harmful if inhaled; Harms public health and the environment by destroying ozone in the upper atmosphere.
		GHS08	Serious health hazard				May be fatal if swallowed and enters airways; Causes damage to organs; May cause damage to organs; May damage fertility or

Hazard	Pictogram	Code	Hazard class	Hazard categories	Signal Word	Hazard Statement Code	Meaning
							the unborn child; Suspected of damaging fertility or the unborn child; May cause cancer; Suspected of causing cancer; May cause genetic defects; Suspected of causing genetic defects; May cause allergy or asthma symptoms or breathing difficulties if inhaled.
Environmental		GHS09	Hazardous to the environment				Very toxic to aquatic life with long lasting effects. Toxic to aquatic life with long lasting effects.

Hazard	Pictogram	Code	Indication	Meaning
		GHS04	Gas under pressure	Contains gas under pressure; may explode if heated. Contains refrigerated gas; may cause cryogenic burns or injury.
Physical		GHS01	Explosive	Unstable explosive. Explosive; mass explosion hazard. Explosive; severe projection hazard. Explosive; fire, blast or projection hazard. May mass explode in fire.
		GHS03	Oxidising	May cause or intensify fire; oxidiser. May cause fire or explosion; strong oxidiser.
		GHS02	Flammable	Extremely flammable gas; Flammable gas; Extremely flammable aerosol; Flammable aerosol; Highly flammable liquid and vapour; Flammable liquid and vapour; Flammable solid.
Physical / health		GHS05	Corrosive	May be corrosive to metals. Causes severe skin burns and eye damage.
Health		GHS07	Health hazard	May cause respiratory irritation; May cause drowsiness or dizziness; May cause an allergic skin reaction; Causes serious eye irritation; Causes skin irritation; Harmful if swallowed; Harmful in contact with skin; Harmful if inhaled; Harms public health and the environment by destroying ozone in the upper atmosphere.
		GHS06	Acute toxicity	Fatal if swallowed. Fatal in contact with skin. Fatal if inhaled. Toxic if swallowed. Toxic in contact with skin. Toxic if inhaled.

Hazard	Pictogram	Code	Indication	Meaning
		GHS08	Serious health hazard	May be fatal if swallowed and enters airways; Causes damage to organs; May cause damage to organs; May damage fertility or the unborn child; Suspected of damaging fertility or the unborn child; May cause cancer; Suspected of causing cancer; May cause genetic defects; Suspected of causing genetic defects; May cause allergy or asthma symptoms or breathing difficulties if inhaled.
Environmental		GHS09	Hazardous to the environment	Very toxic to aquatic life with long lasting effects. Toxic to aquatic life with long lasting effects.

Transport Pictograms

CLASS 1: EXPLOSIVES

Pictogram	*GHS Hazard*	*Hazard Class & Category*
	Divisions 1.1 to 1.3	Division 1.1: Substances and articles which have a mass explosion hazard Division 1.2: Substances and articles which have a projection hazard but not a mass explosion hazard Division 1.3: Substances and articles which have a fire hazard and either a minor blast hazard or a minor projection hazard or both, but not a mass explosion hazard
	Division 1.4	Substances and articles which are classified as explosives but which present no significant hazard
	Division 1.5	Very insensitive substances which have a mass explosion hazard
	Division 1.6	No hazard statement

CLASS 2: GASES

Division 2.1

Flammable Gases
Gases which at 20 degrees Celsius and a standard pressure of 101.3kPa are either ignitable when in a mixture of 13 percent or less by volume with air, or have a flammable range with air of at least 12 percentage points regardless of the lower flammable limit

Division 2.2

Nonflammable Nontoxic Gases
Gases which are asphyxiants. Gases which dilute or replace the oxygen normally in the atmosphere
Gases which are oxidising: Gases which may, generally by providing oxygen, cause or contribute to the combution of other material more than air does
Gases which do not come under the other divisions

Division 2.3

Toxic Gases
Gases which are known to be so toxic or corrosive to humans as to pose a hazard to health
Gases which are presumed to be toxic or corrosive to humans because they have an LC_{50} value equal to or less than 5,000 ml/m^3 (ppm)

CLASSES 3 AND 4: FLAMMABLE LIQUIDS AND SOLIDS
Class 3- Flammable Liquids
Class 4—Flammable Solids

Pictogram	*GHS Hazard*	*Hazard Class & Category*
	Class 3	Flammable Liquids Liquids which have a flashpoint of less than 60 degrees Celsius and which are capable of sustaining combustion. (There are no subdivisions within this class).

Pictogram	*GHS Hazard*	*Hazard Class & Category*
	Division 4.1	Flammable Solids, Self-reactive Substances and Solid Desensitized Explosives Solids which, under conditions encountered in transport, are readily combustible or may cause or contribute to fire through friction; self-reactive substances which are liable to undergo a strongly exothermic reaction; solid desensitized explosives which may explode if not diluted sufficiently
	Division 4.2	Substances Liable to Spontaneous Combustion Substances which are liable to spontaneous heating under normal conditions encountered in transport, or to heating up in contact with air, and being then liable to catch fire
	Division 4.3	Substances which in Contact with Water Emit Flammable Gases Substances which, by interaction with water, are liable to become spontaneously flammable or to give off flammable gases in dangerous quantities

OTHER GHS TRANSPORT CLASSES

Class 5—Oxidizing Substances
Class 6—Toxic and Infectious Substances
Class 7—Radioactive Material
Class 8—Corrosives
Class 9—Miscellaneous Dangerous Goods

	Division 5.1	Oxidizing Substances Substances which, while in themselves not necessarily combustible, may, generally by yielding oxygen, cause, or contribute to, the combustion of other material
	Division 5.2	Organic Peroxides Organic substances which contain the bivalent -0-0- structure and may be considered derivatives of hydrogen peroxide, where one or both of the hydrogen atoms have been replaced by organic radicals

OTHER GHS TRANSPORT CLASSES

Class 5—Oxidizing Substances
Class 6—Toxic and Infectious Substances
Class 7—Radioactive Material
Class 8—Corrosives
Class 9—Miscellaneous Dangerous Goods

Pictogram	*GHS Hazard*	*Hazard Class & Category*

		Toxic Substances
	Division 6.1	Substances with an LD_{50} value ≤ 300mg/kg (oral) or ≤ 1,000 mg/kg (dermal) or an LC_{50} value ≤ 4,000 ml/m^3 (inhalation of dusts or mists)
		Radioactive Material
	Class 7	Any material containing radionuclides where both the activity concentration and the total activity exceeds certain pre-defined values. (There are no subdivisions within this class).
		Corrosive Substances
	Class 8	Substances which cause full thickness destruction of intact skin on exposure time of less than 4 hours Substances which exhibit a corrosion rate of more than 6.25 mm per year on either steel or aluminum surfaces at 55 degrees Celsius (There are no subdivisions within this class).
No Pictogram within this Class		Miscellaneous Dangerous Goods
	Class 9	Substances and articles that present a danger or hazard during transport which are not covered by other classes. The class comprises but not limited to, environmentally hazardous substances, substances transported at elevated temperatures, miscellaneous articles and substances, genetically modified organisms and micro-organism, magnetized materials and aviation regulated substances. (There are no subdivisions within this class).

EIGHTH SCHEDULE

(r. 20(2)(4)(6)(9),21(2)(3)(4),29(3)(6),30(2)(3),31(2)(3),32(2)(4))

FORM 1

ENVIRONMENT MANAGEMENT AND COORDINATION ACT

APPLICATION FOR LICENCE TO MANUFACTURE/ IMPORT/ EXPORT TOXIC AND HAZARDOUS INDUSTRIAL CHEMICALS OR MATERIALS

(To be submitted in triplicate and a soft copy)

Contact details

Applicant's full name: .....

Address: .....

Tel. No.: .....

Cell phone No.: .....

E-mail: …… Fax: .....

Full Name and Address of the Manufacturer: .....

Manufacturing site information;

Physical Location (county, town, street,): .....

L.R. No.: .....

G.P.S. Coordinates: .....

Environment Impact Assessment Licence: .....

Product information

a. Registration number: ……

b. Common names: ……...

c. Chemicals or materials name: ……..

d. Trade name: ……..

e. Formulation: ……

f. Concentration: ……..

g. State of product (technical or formulated): ……..

h. Purpose for Manufacture: ……

i. Quantity (Weight, Volume): .....

DECLARATION BY APPLICANT

I hereby certify that the particulars given above are correct or true to the best of my knowledge.

Name: ……

Signature: …… Date: ……..

FOR OFFICIAL USE ONLY

Approved/Not approved: ……
Comments: ……

Receipt No.: ……..... Amount (KSh): .....

Officer's Name: ……

Signature: ……..… Date: ……

FORM 2

Licence No.: ……

Application Ref. No.: ……

ENVIRONMENT MANAGEMENT AND COORDINATION ACT

LICENCE TO MANUFACTURE/ IMPORT/ EXPORT TOXIC AND HAZARDOUS INDUSTRIAL CHEMICALS OR MATERIALS

Application Ref. No.: .....

Name: .....

Address: .....

Tel. No.: .....

This Licence is granted to (name of the applicant): .....

Address: .....

to Manufacture Chemicals and / or Materials as follows:

Chemicals and / or Materials: .....

Quantity: .....

Registration No.: .....

For sale /export /own use:

This Licence is valid from: ……..…….. to ……..……

Signed: …….. Date: ……..

(Official seal)

Director General
National Environment Management Authority

FORM 3

Application Reference No.: …….

Licence No.: …….

ENVIRONMENT MANAGEMENT AND COORDINATION ACT

NOTIFICATION OF TRANSFER OF LICENCE TO MANUFACTURE/ IMPORT/ EXPORT/ TRANSPORT/ DISTRIBUTE/ STORAGE OF TOXIC AND HAZARDOUS INDUSTRIAL CHEMICALS OR MATERIALS

PART A: DETAILS OF CURRENT LICENCE

A1: Name of the current licence holder: ……..…

A2: PIN No.: ……

A3: Tel. No.: ……

A4: E-mail Address: ……

A5: Application Number of the Current Licence: ……

A6: Date of issue of the Current Licence: ……

A7: Licensed activity: ……

PART B: DETAILS OF THE TRANSFEREE

B I: Name (Individual/Firm): ……...

B2: PIN No.: ……

B3: Address:
……..

B4: Tel. No.: ……

B5: E-mail Address: …….....

B6 Name of contact person: ……..

B7: Capacity of transferee to run the licence activity (financial, technological, manpower):
……
……

……

PART C: REASON(S) FOR TRANSFER OF LICENCE
……
…….……...……
……..……

PART D: DECLARATION BY TRANSFEROR AND TRANSFEREE

It is hereby notified that (Transferor) ……..of (Postal Address) ……..…….has on this…… day of…… 20…… transferred the Manufacture/ Import/ Export/ Transport/ Distribute/ Storage licence No: ……. to (Transferee) ……. of (Postal Address) ……..who will assume his responsibility for all liability under this project.

Transferor	Transferee
Name: ……..	Name: ……..…….
Postal Address: ……..	Postal Address: ……..
Signed: ……..	Signed: ……..
Date: ……	Date: ……..….

PART E: FOR OFFICIAL USE

Approved/Not approved: ……..…….……

Comments: ……

Receipt No.: ……..... Amount (KSh): .....

Officer's Name: ……

Signature: ……..… Date: ……..……

FORM 4

Application Reference No.: ……..

Certificate No.: ……

The Environmental Management and Coordination Act

CERTIFICATE OF TRANSFER OF LICENCE TO MANUFACTURE/ IMPORT/ EXPORT/ TRANSPORT/ DISTRIBUTE/STORAGE OF TOXIC AND HAZARDOUS INDUSTRIAL CHEMICALS OR MATERIALS

This is to certify that the Licence to Manufacture/ Import/ Export/ Distribute/ Transport/ Storage of Toxic and Hazardous Industrial Chemicals or Materials number…….. (Licence No.) issued on ……..……. (date) to …… (name of previous holder) of ……..……. (Postal address) …… regarding …… (licenced activity) whose objective is to ……..……..…… (briefly describe purpose) located at ……. (Title No., Locality and County) has been transferred to ……... (name of new holder) of …… (Postal address) with effect from ……. (date of transfer) in accordance with the provisions of the Act.

Dated this……. day of…… (Month) 20 …… (Year)

Signature ……

(Seal)

Director General
National Environment Management Authority

Form 5

Application Reference No.: …….

ENVIRONMENT MANAGEMENT AND COORDINATION ACT

APPLICATION FOR PERMIT TO IMPORT/ EXPORT TOXIC AND HAZARDOUS INDUSTRIAL CHEMICALS OR MATERIALS

(To be submitted in triplicate and a soft copy)

Personal details

Applicant's full name: .....

Address: ..... Tel. No.: .....

Cellphone No: ..... E-mail: .....

Fax No.: .....

Full Name and Address of the Exporter or Importer: .....

.....

.....

Nature of Business (Importer / Exporter / Wholesaler /Retailer /Distributor / Research / Other): .....

Product information

1. Registration number: …… Date of Expiry: .....
2. Country of Manufacture: .....
3. Country of origin (if being imported): .....
4. Country of destination (if being exported or re-exported): .....
5. Common names: .....
6. Chemical or material name: .....
7. Trade name: .....
8. Formulation: .....
9. Concentration/Purity: .....
10. State of product (technical or formulated): .....
11. Purpose of export/import: .....
    a. For resale: .....
    b. For manufacturing purpose: .....
    c. For importers own use: .....
    d. Others (specify): .....
12. Quantity (weight or volume): .....
13. Annual usage (weight or volume): .....

14. Value (Free On Board) Ksh.: .....

15. Licences (Environmental Impact Assessment, etc): .....

DECLARATION BY APPLICANT

I hereby certify that the particulars given above are correct to the best of my knowledge.

Name: .....

Signature: Date: .....

FOR OFFICIAL USE ONLY

Approved / Not Approved: .....

Comments: .....

Receipt No.: ..... Amount (KSh): .....

Officer's Name: .....

Signature: ..... Date: .....

Form 6

Permit No.: .....

Application Ref. No.: .....

PERMIT TO IMPORT/ EXPORT TOXIC AND HAZARDOUS INDUSTRIAL CHEMICALS OR MATERIALS

Name: .....

Address: .....Tel. No.: .....

This Permit is granted to (name of the applicant): .....

.....

.....

Address : .....

To import /export/manufacture Chemicals or Materials as follows:

Chemicals or Materials: .....

Quantity: .....Registration No.: .....

For resale / manufacture /export/import/own use: .....

This Permit is valid from: ..... to .....

Signed: ..... Date: .....

(Official seal)

Director-General
National Environment Management Authority

Form 7

APPLICATION FOR PERMIT TO USE TOXIC AND HAZARDOUS INDUSTRIAL CHEMICALS OR MATERIALS FOR MINING / EXTRACTIVE ACTIVITIES

Contact details

Applicant's full name: .....

Address: ..... Tel. No.: .....

Cell phone No.: ..... E-mail: .....

Fax: .....

Full Name and Address of the Manufacturer: .....

.....

.....

Mining site information;

Physical Location (county, town, street,): .....

L.R. No.: ..... G.P.S. Coordinates: .....

Environment Impact Assessment Licence: .....

Product information .....

Registration number: .....

Common names: .....

Chemicals or materials name: .....

Trade name: .....

Concentration: .....

State of product (technical or formulated): .....

Purpose for use in mining: .....

Quantity (Weight, Volume): .....

Onsite / Mining site storage facility: .....

DECLARATION BY APPLICANT

I hereby certify that the particulars given above are correct / true to the best of my knowledge.

Name: .....

Signature: ..... Date: .....

FOR OFFICIAL USE ONLY

Approved/Not approved: .....

Comments: .....

Receipt No.: ..... Amount (KSh): .....

Officer's Name: .....

Signature: ..... Date: .....

Form 8

Permit No.: ……

Application Ref. No.: ……..

ENVIRONMENT MANAGEMENT AND COORDINATION ACT

PERMIT TO USE TOXIC AND HAZARDOUS INDUSTRIAL CHEMICALS OR MATERIALS IN MINING / EXTRACTIVE ACTIVITIES

Name: .....

Address: ..... Tel. No.: .....

This Permit is granted to (name of the applicant): .....

.....

.....

Address: .....

To use toxic and hazardous industrial chemicals and / or materials for Mining / Other Extractive Activities as follows:

Chemicals or Materials	Registration No.	CAS No.	HS No.	Quantity	Purpose: Mining / Other Extractive Activities

Location of mining site (LR. No./ County/ Town/ Other): .....

.....

GPS Coordinates: .....

This Permit is valid from: ..... to .....

This permit is subject to the following conditions: .....

.....

.....

Signed: ..... Date: .....

(Official seal)

Director General
National Environment Management Authority

Form 9

Application Ref. No.: ……..

ENVIRONMENT MANAGEMENT AND COORDINATION ACT

APPLICATION FOR LICENCE TO DISTRIBUTE TOXIC AND HAZARDOUS INDUSTRIAL CHEMICALS OR MATERIALS

(To be submitted in triplicate and a soft copy)

A. Person/ Firm/ Agent Information

Name of the applicant: .....

PIN No.: .....

Tel. No.: ..... E-mail Address: .....

Licenced activity: .....

B: Storage Facility/ies

Location (County, Town): .....

GPS Coordinates: .....

Type (Warehouse/ Drum Store/ Tanks / Others): .....

Capacity: .....

Description of the neighbourhood / surrounding environment: .....

.....

.....

Environment Impact Assessment Licence: .....

C. Inventory of Chemicals or Materials under Storage

Name of Chemicals or Material	UN Hazard Class	CAS No.	HS No.	Unit Capacity of Container	Total weight or volume	Purpose: For resale / Manufacture / Export/ Import/ Own Use/ Other

D. Details of Mode of Transport

Mode of transport (road, water, air): .....

Type of Transport (vehicles/ ship / vessel/ aircraft/ other): .....

Registration number: .....

Approval licence/ permit/ other to transport: .....

Origin and destination: .....

Proposed transport route on a scaled map: .....

Frequency and duration: .....

E. Inventory of Chemicals or Materials in Transit

Name of Chemicals or Material	UN Hazard Class	CAS No.	HS No.	Unit Capacity of Container	Total weight or volume

F. Hazard Assessment

Describe the hazards of substance under storage (flammable/toxic/ explosive/ corrosive/ other): .....

.....

.....

List fire protection, spillage, release and pollution prevention / mitigation equipment in the vehicle, vessel or aircraft:

1.....

2.....

Describe the hazards of substance under storage (flammable/toxic/ explosive/ corrosive/ other): .....

.....

.....

List fire protection, spillage, release and pollution prevention / mitigation equipment in the vehicle, vessel or aircraft:

1.....

2.....

Employees and emergency response team and their qualifications (attach document proof):

Name	Training and Qualification

Specific action to be taken by emergency response staff in the event of an incident (spill/ release/ fire / other): .....

.....

.....

G. Storage Requirement

Applicant meets the storage safety requirements set out the Tenth Schedule of the toxic and hazardous industrial chemicals and materials regulations:

Yes ☐ No ☐ (Tick as appropriate)

H. Emergency Response Plan

Emergency and response plan with contents set out in the Fifth Schedule submitted:

Yes ☐ No ☐ (Tick as appropriate)

I. Quality Assurance

Provide certification of approval of the design, construction and testing of warehouse, storage and container tanks for bulk toxic and hazardous chemical or material transportation: .....

.....

J. Any other information

.....

.....

.....

Date: ..... Signature: .....

Designation / Title: .....

FOR OFFICIAL USE ONLY

Approved/Not approved:

.....

Comments: .....

.....

Receipt No.: ..... Amount (KSh): .....

Officer's Name: .....

(Official Seal)

Signature: ..... Date: .....

Form 10

Licence No.: ……

Application Ref. No.: ……..

ENVIRONMENT MANAGEMENT AND COORDINATION ACT

LICENCE TO DISTRIBUTE TOXIC AND HAZARDOUS INDUSTRIAL CHEMICALS OR MATERIALS

Name: .....

Address: ..... Tel. No.: .....

This Licence is granted to (name of the applicant): .....

.....

.....

Address: .....

to distribute the following toxic and hazardous industrial chemicals or materials

Name of Chemicals or Material	UN Hazard Class	CAS No.	HS No.	Unit Capacity of Container	Total weight or volume	Purpose: For resale / Manufacture / Export/ Import/ Own Use/ Other

This licence applies to the following storage and transportation facilities:

Storage

Location (County, Town): .....

GPS Coordinates: .....

Type (Warehouse/ Drum Store/ Tanks / Others): .....

Capacity: .....

Transport

Mode of transport (road, water, air): .....

Type of transport (vehicles/ ship / vessel/ aircraft/ other): .....

Registration number: .....

Origin and destination: .....

Proposed transport route/s on a scaled map: .....

This licence is valid from ..... to .....

This licence is subject to the following conditions:

Hazard assessment and mitigation measures: .....

Emergency Response Plan: .....

Transports and Storage Certification Approvals / Requirements: .....

.....

.....

Trained employees and emergency response team: .....

.....

.....

Any other conditions: .....

.....

.....

.....

Signed: ..... Date: .....

(Official seal)

Director General
National Environment Management Authority

Form 11

Application Ref. No.: ……..

ENVIRONMENT MANAGEMENT AND COORDINATION ACT

APPLICATION FOR LICENCE TO STORE TOXIC AND HAZARDOUS INDUSTRIAL CHEMICALS OR MATERIALS

(To be submitted in triplicate and a soft copy)

A. Person/ Firm/ Agent Information

I hereby apply for a licence to store toxic and hazardous industrial chemicals or materials of which particulars are given below:

Name of the applicant: .....

PIN No.: .....

Tel. No.: .....

E-mail Address: .....

Licenced activity: .....

B: Storage Facility

Location (County, Town): .....

GPS Coordinates: .....

Type (Warehouse/ Drum Store/ Tanks / Others): .....

Capacity: .....

Description of the neighbourhood / surrounding environment: .....

.....

Environment Impact Assessment Licence: .....

.....

C. Inventory of Chemicals or Materials

Name of Chemicals or Material	UN Hazard Class	CAS No.	HS No.	Unit Capacity of Container	Total weight or volume	Purpose: For resale / Manufacture / Export/ Import/ Own Use/ Other

D. Hazard Assessment

Describe the hazards of substance under storage (flammable/toxic/ explosive/ corrosive/ other): .....

.....

List fire protection, spillage, release and pollution prevention / mitigation equipment in the vehicle, vessel or aircraft:

1.....

2.....

Employees and emergency response team and their qualifications (attach document proof):

Name	Training and Qualification

Specific action to be taken by emergency response staff in the event of an incident (spill/ release/ fire / other): .....

.....

E. Storage Requirement

Applicant meets the storage safety requirements set out the Tenth Schedule of the toxic and hazardous industrial chemicals and materials regulations:

Yes ☐ No ☐ (Tick as appropriate)

G: Emergency Response Plan

Emergency and response plan with contents set out in the Fifth Schedule submitted:

Yes ☐ No ☐ (Tick as appropriate)

H. Quality Assurance

Provide certification of approval of the design, construction and testing of warehouse, storage and container tanks for bulk toxic and hazardous chemical or material transportation: .....

.....

.....

I. Any other information .....

.....

Attach recommendation document(s) from the relevant lead agency.

Date: ..... Signature: .....

Designation / Title: .....

FOR OFFICIAL USE ONLY

Approved/Not approved: .....

.....

Comments: .....

.....

Receipt No.: ..... Amount (KShs): .....

Officer's Name: .....

(Official Seal)

Signature: ..... Date: .....

Form 12

Licence No.: ……

Application Ref. No.: ……..

ENVIRONMENT MANAGEMENT AND COORDINATION ACT

LICENCE TO STORE TOXIC AND HAZARDOUS INDUSTRIAL CHEMICALS OR MATERIALS

Name: .....

Address: .....Tel. No.: .....

This Licence is granted to (name of the applicant): .....

.....

.....

Address : .....

.....

to store the following toxic and hazardous industrial chemicals or materials:

Chemicals or Materials	Registration No.	CAS No.	HS No.	Quantity	Purpose: For resale / Manufacture / Export/ Import/ Own Use/ Other

Location (LR. No./ County/ Town/ Other): .....

GPS Coordinates: .....

Type (Warehouse/ Tanks / Others): .....

Capacity: .....

This licence is valid from ..... to .....

This licence is subject to the following conditions: .....

.....

.....

Signed: ..... Date: .....

(Official seal)

Director General
National Environment Management Authority

Form 13

Application Ref. No.: ……..

ENVIRONMENT MANAGEMENT AND COORDINATION ACT

APPLICATION FOR LICENCE / PERMIT TO TRANSPORT AND / OR TRANSIT THROUGH KENYA TOXIC AND HAZARDOUS INDUSTRIAL CHEMICALS OR MATERIALS

(To be submitted in triplicate and a soft copy)

A. Person/ Firm/ Agent Information

I hereby apply for a licence to transport toxic and hazardous industrial chemicals or materials of which particulars are given below:

Name of the applicant: .....

PIN No.: ..... Tel. No.: .....

E-mail Address: .....

Licenced activity: .....

Exporter Registration No: .....

Name: .....

Address: .....

Contact Person: .....

Telephone No.: ..... Fax: .....

E-mail Address: .....

Importer Registration No: .....

Name: .....

Address: .....

Contact Person: .....

Telephone No.: ..... Fax: .....

E-mail Address: .....

B. Details of Mode of Transport / Intended carrier (s)

Name: .....

Address: .....

Contact Person: .....

Telephone No.: ..... Fax: .....

E-mail Address: .....

Mode of transport (road, water, air): .....

Type of Transport (vehicles/ ship / vessel/ aircraft/ other): .....

Registration number: .....

Approval documents from relevant agency: .....

Origin and destination: .....

Proposed transport route on a scaled map: .....

Frequency and duration: .....

Intended period of time for transit: .....

(Expected entry date:..... Expected exit date: .....)

C. Inventory of Chemicals or Materials to be transported and / or on transit

Name of Chemicals or Material	UN Hazard Class	CAS No.	HS No.	Unit Capacity of Container	Total weight or volume

D. Hazard Assessment

Describe the hazards of substance being transported (flammable/toxic/ explosive/ corrosive/ other): .....

.....

.....

.....

List fire protection, spillage, release and pollution prevention / mitigation equipment in the vehicle, vessel or aircraft:

1. .....
2. .....
3. .....
4. .....

Training received by driver and emergency response team (attach document proof):

Name Training and Qualification

Specific action to be taken by driver and or emergency response in the event of an incident (spill/ release/ fire / other): .....

.....

.....

.....

E. Transport Safety

Applicant meets the transport safety requirements provided under regulation 36 of the toxic and hazard industrial chemicals and materials regulations:

Yes ☐ No ☐ (Tick as appropriate)

G: Emergency Response Plan

Emergency and response plan with contents set out in the Fifth Schedule submitted:

Yes ☐ No ☐ (Tick as appropriate)

H. Quality Assurance

Certification of approval of the design, construction and testing of tank and tank containers for bulk toxic and hazardous chemical or material transportation: .....

.....

.....

I. Written Prior Informed Consent (PIC) from relevant Competent Authority of country of import: Has consent been given?

Yes ☐ No ☐ (Tick as appropriate)

[If "Yes", attach copy of PIC]

J. Any other information

.....

.....

Attach recommendation document(s) from the relevant lead agency.

I / We ..... Hereby confirm that the above information and particulars is true and correct.

Date: ..... Signature: .....

Designation / Title: .....

FOR OFFICIAL USE ONLY

Approved/Not approved: .....

.....

Comments: .....

.....

Receipt No.: ..... Amount (KSh): .....

Deposit bond—15% of Cost, Insurance and Freight value (CIF) (Refundable) (KSh): .....

.....

Application received by (Officer's Name): .....

.....

Signature: ..... Date: .....

Form 14

Licence No.: .....

Application Ref. No.: .....

ENVIRONMENT MANAGEMENT AND COORDINATION ACT

LICENCE / PERMIT TO TRANSPORT AND / OR TRANSIT TOXIC AND HAZARDOUS INDUSTRIAL CHEMICALS OR MATERIALS

Name: .....

Address: ..... Tel. No.: .....

This Licence is granted to (name of the applicant): .....

.....

Address: .....

to transport the following toxic and hazardous industrial chemicals or materials:

Registration No.	Chemicals or Materials	Trade Name	CAS No.	HS No.	Approved / Licensed Quantity (Kgs)	Quantity to be Imported / Exported (Kgs)	Balance of Quantity to be Imported / Exported (Kgs)	Purpose: For resale / Manufacture / Export/ Import/ Own Use/ Transit / Other

Mode of transport (road, water, air): .....

Type of transport (vehicles/ ship / vessel/ aircraft/ other): .....

Registration number: .....

Origin and destination: .....

Country of origin and Country of destination: .....

.....

.....

Proposed transport route/s on a scaled map: .....

Frequency and duration: .....

This licence /Permit is valid from: ..... to .....

This licence / Permit is subject to the following conditions: .....

.....

Signed: ..... Date: .....

(Official seal)

Director General
National Environment Management Authority

NINTH SCHEDULE

(r. 25(1))

REGISTER OF LICENCES AND PERMITS

Name of Applicant / Company	Licence / Permit No.	Date of issue	Activity Licenced (Manufacture, Import, Export, Transport, Storage)	Product Information Chemical / Material	Trade Name	Country of Manufacture/ Origin / Destination / Storage	HS No. and CAS No.	Quantity	Location and Contact Address	Status of licence	Remarks

TENTH SCHEDULE

(r. 31(4*)*

REQUIREMENTS OF HAZARDOUS AND TOXIC CHEMICALS OR MATERIAL STORAGE FACILITY

a. Storage and labeling is done in accordance with the instructions on the safety data sheet.

b. An up-to-date inventory should be maintained and available for inspection at any time.

c. Segregation and storage should be done according to chemical family or hazard classification.

d. A manual is prepared and maintained with instructions of the basic storage requirements and procedures specific to chemicals or materials in storage facility.

e. The storage area should be well lit and ventilated. The path ways, doorways, exits and entryways shall be clear of any obstruction.

f. Ensure the storage facility does not pose danger or risk to the environment including those staying near the facility and surrounding environment.

g. Chemicals and / or materials must not be stored together with inflammable materials and gas cylinders.

h. Acids and alkalis are not stored together.

i. Strong acids and organic substances are not stored together.

j. Strongly oxidising substances are not stored together with oxidisable substances.

k. Ethers and other peroxide-building substances must be stored in dark and cool, in tightly sealed containers.

l. Certified and approved containers should be used for storage.

m. Containers must be stored with closed lids when they are not being used.

n. Refrigerators and freezers for storage of chemicals and materials must be specially made for this purpose and not intended to store food.

o. Chemicals and / or materials stores should not have open floor drains.

p. Leakages and / or spillages are prevented at all times. In the event of an accident, adequate storage capacity is provided that is able to contain the volume of chemical displaced.

q. Equipment for handling and cleaning up spillage must be readily available and suitable for the chemicals being stored.

r. Fire classification of storage lockers and rooms should match the types and amounts of chemicals or materials being stored.

s. Combustible materials must be stored in fireproof cupboards or in separate spaces.

t. Emergency equipment should be provided, also easy to access and are kept in good working condition

u. Personal safety measures during working and in the event of an accident should be

provided such as use of personal protective devices and first-aid kits.

v. Storage facilities should be inspected regularly.

w. Any other relevant requirement as may be determined by the Authority.

ELEVENTH SCHEDULE

(r. 33(e))

TRANSPORT EMERGENCY (TREM) CARDS

Description of Cargo: .....

Transporter (Name and physical address): .....

Name of products: .....

Telephone Number: ..... Cell phone Number: .....

Consignor (Name, physical address): .....

Fax: ..... Telephone No: ..... Cell phone: .....

Consignee (Name and physical address): .....

Telephone No.: ..... Cell phone: ..... Fax: .....

Load Details

No. of packages: .....

Registration No.: .....

HD Substance / Article: .....

Total Quantity: .....

Special Comments: .....

Emergency Action:

Notify police, Fire brigade and NEMA immediately. If possible, move vehicle to open ground and stop the engine.

No naked lights. No smoking.

Mark road and warn road users.

Keep public away from danger area.

Avoid making sparks. Use non-sparking hand tools or avoid direct metal to metal contact.

Spillage

Do not touch.

Consult an expert.

Do not expose to electric current or heat.

Do not repack—but protect material from accidental ignition. Reseal where necessary.

Warn everybody—EXPLOSION HAZARD.

Fire

For small fire on cab, tires or engine which can be extinguished quickly before it reaches the cargo, use vehicle extinguisher, water, dry powder, earth or sand.

In case of extensive fire which is spreading to the cargo, do not attempt to extinguish.

Evacuate area within a radius of 100 metres.

First Aid

Keep patient warm.

In case of burns, immediately cool affected skin as long as possible with cold water.

Seek immediate medical help.

Additional information provided by manufacturer or sender.

TWELFTH SCHEDULE

(r. 42(3))

POLLUTANT RELEASE AND TRANSFER REGISTER

Pollutant		Thresholds WHO			Threshold, Kenya				
CAS Number	Pollutant Name	Release to Air (Kg/year)	Release to Water (Kg/year)	Release to Land (Kg/year)	Release to Air (Kg/year)	Release to Water (Kg/year)	Release to Land (Kg/year)	Manufacture, Process or Use (Kg/year)	Off-Site Transfer
Polycyclic aromatic hydrocarbons (PAHs)									
120-12-7 etc	Anthracene								
Other organic substances									
71-43-2 etc	Benzene								
Chlorinated and brominated organic substances									
107-06-2	1,2-Dichloroethane								
Persistent Organic Pollutants (POPs)									
309-00-2 57-74-9 Etc.	Aldrin Chlordane								
VOCs									
Ozone Depleting Substances									
LCL-65 etc	Halons								
Green House Gases									
124-38-9 74-82-8 Etc	Carbon dioxide Methane								
Metals									

LCL-7 Etc	Arsenic and compounds								
Inorganic substances									
1332-21-4 Etc	Asbestos								

NB: The entries in the table are for guidance purposes. A comprehensive list of pollutants is expected from the emitting and / or discharging facility. Etc indicates that more pollutants can added under the respective category.

THIRTEENTH SCHEDULE
(r. 43)

CRITERIA FOR RESTRICTING OR BANNING OF TOXIC CHEMICALS AND MATERIALS.

1) Physicochemical, toxicological and eco-toxicological information from internationally recognized sources.
2) Information on alternatives and their relative risks to human health and environment.
3) Proven evidence of hazards and risks posed by the chemical or material to human health, wildlife, livestock and the environment from national and international risks evaluation.
4) Evidence that the half-life of the chemical or material in water is greater than 2 months, or that its half-life in soil is more than 6 months.
5) Bio-accumulation evidence in food chain from scientific recognized sources.
6) Potential for long range environmental transport in air, water and migratory species.
7) Credible evidence that the chemical or material has been banned or restricted in other countries, or under relevant Multilateral Environmental Agreements (MEAs).
8) Available data on chemical or material which is generated and documented according to scientifically recognized methods.
9) Information on incidents related to the chemical or material from other countries or internationally recognized sources such as the Guidance Documents on chemicals.
10) Socio economic considerations:
    a. Alternatives for products and processes;
    b. Costs, including environmental and health costs;
    c. Efficacy;
    d. Risks;
    e. Availability; and
    f. Accessibility;
11) Positive and/or Negative Impacts on Society: and
    a. Health, including public, environmental and occupational;
    b. Agriculture and Forestry;
    c. Biodiversity;
    d. Economic Aspects;
    e. Social Costs; and
    f. Any national, regional or international control actions taken and other relevant risk management information;
12) Where a chemical or material should be banned, and there are no suitable alternatives, the Authority shall institute restrictive measures to the use of that chemical or material.
13) Any other relevant requirement as may be determined by the Authority.

FOURTEENTH SCHEDULE

(r. 46(b))

ENVIRONMENT MANAGEMENT AND COORDINATION ACT

INCIDENT REPORT FORMAT

Particulars

Name of the Facility: .....

E-mail Address: .....

Telephone Number: .....

Fax No.: .....

Date/Time of Incident: .....

Incident Type (Explosion/ Fire/ Spillage/ Leakage / Gas / Dust/ Fumes Release/ Others):

.....

Material / Chemical released (Quantity): ..... Physical state: .....

.....

Incident location

Physical Address: - County: ..... Town: .....

Street: ..... GPS Coordinate: .....

Impact (Human health, Environment, Property Damage and Others): .....

Activity (Manufacture/ Storage/ Transport / Others): .....

Cause: .....

Response/ Control measures undertaken: .....

Decontamination and disposal: .....

Future / preventive measures employed: .....

Name of Person: .....

Designation: .....

Sign: ..... Date: .....

FIFTEENTH SCHEDULE

(r. 20(3),21(2),29(4))

FEES	AMOUNT (Ksh)
Application for registration of a toxic and hazardous chemical	1000
Application for licence to Manufacture, Distribute or Store toxic and hazardous chemicals	10,000
Application for licence to Transport toxic and hazardous Chemicals	10,000
Application for licence to Import, Export or Transit through Kenya toxic and hazardous chemical	10,000
Application for permit to Import, Export or Transit through Kenya toxic and hazardous chemical	10,000
Application for permit to use toxic and hazardous chemical in extractive industrial or processes	10,000
Permit to Import / Export/ Transit through Kenya (per Consignment) toxic and hazardous chemicals	40,000
Permit to use toxic and hazardous industrial chemical in extractive industrial/ processes	40,000
Annual Licence to Transport toxic and hazardous chemical	40,000
Annual Licence to Manufacture / Import/ Export/Distribute/ Store toxic and hazardous chemical or materials	100,000
Application for Transfer of a toxic and hazardous chemical Licence	100,000

Made on the 14th October, 2024.

ADEN DUALE,
Cabinet Secretary for Environment,
Climate Change and Forestry.

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