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# THE ENVIRONMENTAL MANAGEMENT AND COORDINATION ACT

# (No. 8 of 1999)

# **FINAL DRAFT**

# ENVIRONMENTAL MANAGEMENT AND COORDINATION (TOXIC AND HAZARDOUS INDUSTRIAL CHEMICALS AND MATERIALS MANAGEMENT) REGULATIONS 2013

In EXERCISE of powers conferred in sections 92 and 147 of the Environmental Management and Coordination Act, the Cabinet Secretary for Environment, Water and Natural Resources makes the following Regulations:

The Environmental Management and Coordination (Toxic and Hazardous Industrial Chemicals and Materials Management) Regulations, 2013.

	PART I: PRELIMINARY		
Citation	1. These Regulations may be cited as the Environmental Management and Coordination (Toxic and Hazardous Industrial Chemicals and Materials Management) Regulations 2013.		
Objective	2. To ensure protection of human health and environment from adverse effects of toxic and hazardous chemicals and materials.		
Scope	3. These regulations shall apply to manufacture, exportation, importation, transportation, handling, usage and disposal of toxic and hazardous industrial chemicals or materials.		
Application	<ul> <li>4. (1) These regulations shall apply to toxic and hazardous industrial chemicals and materials as classified in the First Schedule to these Regulations.</li> <li>(2) The toxic industrial chemicals and materials referred in sub-regulation (1) shall include: <ul> <li>a) any chemical whose LD<sub>50</sub>, LC<sub>50</sub>, and MLC50 falls within the moderate, high or extreme classes or category listed in the First Schedule.</li> <li>b) any chemical or material that falls under either group 1, 2A or 2B of Part V of First Schedule.</li> </ul> </li> </ul>		
Interpretation	<ul> <li>5.In these Regulations unless the context otherwise requires:</li> <li>"Act" means the Environmental Management and Coordination Act, No.8 of 1999;</li> </ul>		
	"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;		
	"Advertise" means making a presentation for the purpose of directly or indirectly promoting the distribution, access and use of toxic and hazardous industrial chemicals or materials;		
	"Applicant" means a person or an organization that applies to the Authority for permission to perform specific activities connected with toxic and hazardous industrial chemicals or materials;		
	"Authority" means the National Environment Management Authority established under section 7 of the Act;		
	"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 or the environment.		
	'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.
"CAS No" means a unique registry number assigned to a chemical by the Chemical
As No means a unique registry number assigned to a chemical by the Chemical Abstract Service
"Disposal" means deposit, treatment and/or recovery of any toxic and hazardous
industrial chemicals or materials in an environmentally sound manner;
"Distribute" means to offer toxic and hazardous industrial chemicals or Materials for sale, sell, transport, expose, display, advertise for sale or supply;
"Eco-toxicity" means ability of a chemical or material to cause ill health, injury or
death to any living organism.
"Environment" includes the physical factors of the surroundings of human beings, including land, water, atmosphere, climate, sound, odour, taste, the biological factors of animals and plants and their social factor of aesthetics and includes both the natural and the built environment;
"Environmentally sound management" means taking all steps to ensure that the toxic and hazardous industrial chemicals or materials and their wastes are managed in a manner, which will protect human health and the environment;
"Export" means sending out toxic and hazardous industrial chemicals or materials by a
licensed person under these Regulations to a place outside Kenya;
"Exporter" means a person licenced under these Regulations to export toxic and
hazardous industrial chemicals or materials to another country;
"Facility" means any location where toxic and hazardous industrial chemicals or
materials are manufactured, collected, received, treated, stored or disposed;
"Import" means bringing into Kenya toxic and hazardous industrial chemicals or
materials by a person authorized by the Authority;
"Importer" means a person who is authorized by the Authority to bring into Kenya toxic and hazardous industrial chemicals or materials;
"Industrial chemical" means any chemical or product used or intended for use in industrial process;
"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;
"Lead Agency" means any government ministry, department, parastatal, state corporation or local authority, in which any law vests functions of control or management of any element of the environment or natural resource;
$LC_{50}$ (Lethal Concentration $_{50}$ ) means the concentration in air or in a solution which causes 50 percent mortality of the test-animal in a specified period through exposure.
" $LD_{50}$ " or "(Lethal Dose <sub>50</sub> )" 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.
MLC <sub>50</sub> , ML <sub>50</sub> (Median Lethal Concentration) also means LC <sub>50</sub>
"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;

	"Manufacture" includes production, formulation, re-packaging and preparation of toxic		
	and hazardous industrial chemicals or materials for distribution or use;		
	"Mutagenic" means chemicals or materials capable of causing genetic changes within		
	living cells.		
	"Obsolete chemicals or materials" mean chemicals or materials that are no longer in		
	USC. "Operator" means a person licenced under these Degulations to own or operate a		
	"Operator" means a person licenced under these Regulations to own or operate a		
	facility for manufacturing, collection, reception, treatment, storage or disposal of toxic and bazardous industrial chamicals or matarials:		
	<ul><li>and hazardous industrial chemicals or materials;</li><li>"Persistence" means the ability of a chemical or material to remain in the environment</li></ul>		
	without transformation or breakdown into another chemical form.		
	without transformation of breakdown into another chemical form.		
	"Port of entry or exit" has the meaning assigned to it in the Customs and Excise Act		
	"Prior Informed Consent Procedure" 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.		
	"Registrant" means a person in whose name a toxic or hazardous chemical or material is registered;		
	"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.		
	"Teratogenic" means a chemical or material capable of affecting the normal growth of an embryo or foetus:		
	"Toxic Chemical or 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;		
	"Transporter" means a person licenced by the Authority to engage in the off-site transportation of toxic and hazardous industrial chemicals or materials by air, rail, road or water;		
	PART II: Classification and Registration		
Classification	6. The Authority shall in consultation with the relevant lead agencies classify industrial chemicals and materials in accordance with the criteria set out in the First Schedule.		
Register	7.(1)The Authority shall establish and maintain a register of;		
	a) Toxic and hazardous chemical or materials as specified in the Second Schedule.		
	(2) The register shall be a public document that can be inspected during the normal working hours		
Registration	8. No person or firm shall manufacture, import or export highly toxic and hazardous		
	industrial chemicals or materials unless the chemical or material is registered under the Second Schedule.		
Application for	9. Any person intending to import, export, manufacture or supply highly toxic and		
registration	hazardous chemical or material shall apply for its registration with the Authority.		

Application details	10. Any person intending to register toxic or hazardous chemical or material shall make an application to the Authority as set out in the Third Schedule accompanied by Material Safety Data Sheet and the prescribed fee.
Additional information	<ul> <li>11. The Authority may require the applicant to provide: <ul> <li>(1) An assay of the chemical or material;</li> <li>(2) A sample of the chemical or material;</li> <li>(3) A sample of the technical or analytical grade of its active ingredient;</li> <li>(4) any other relevant information.</li> </ul> </li> </ul>
Non-resident applicant	12. An applicant who is not resident in Kenya shall appoint an agent permanently resident in Kenya to whom any notice or correspondence may be sent.
Evaluation of application	13. The Authority shall evaluate the application and communicate its decision to the applicant within thirty (30) days after application.
Non-registration	<ul> <li>14. The Authority may decline to register a chemical or material if in its opinion;</li> <li>(1).The application for the registration of the chemical or materials does not comply with the provisions of the Act and these Regulations;</li> <li>(2). The information provided by applicant is insufficient to enable the chemical or material to be assessed and evaluated.</li> <li>(3). The use of the chemicals or materials would lead to an unacceptable risk or harm <ul> <li>(a) in relation to the use in which is intended; or</li> <li>(b) to public welfare including health, plants, animals or the environment</li> </ul> </li> </ul>
Deregistration	<ul> <li>15. The Authority may deregister a chemical or material due to one or more of the following reasons: <ul> <li>(1) if it has been banned</li> <li>(2) if it is revealed that information stated in the application form was incorrect, misleading or incomplete;</li> <li>if new information has become available which renders the chemical or materials substance unsafe or dangerous;</li> </ul> </li> </ul>
Register review	16. The Authority may review and update the list of restricted and banned chemicals or materials as set out in the Fourth Schedule.

	PART III: Labeling.			
Appropriate	17(1) No person shall store, distribute, or sell any toxic and hazardous industrial			
label	chemicals or materials without an appropriate label attached to the container.			
	(2) The label shall contain the following information:			
	a. Globally harmonized system for labeling and classification of chemicals or			
	materials;			
	b. The name of the chemical or material, which shall be descriptive of the physical			
	form and its distinctive brand or trade mark;			
	c. information detailing the nature and degree of hazard inherent in the chemicals			
	or materials identified by the appropriate precautionary symbol and signal words as set out under Fifth Schedule;			
	d. A statement directing the user to read the label before use;			
	e. A guarantee statement of the concentration of the chemical or material;			
	f. The registration number of the chemical or material in the register.			
	g. A statement of the net contents of the package for the chemical or material,			
	which shall be in accordance with all the units of measure as described under the			
	Weights and Measures Act.			
	h. Information giving date of manufacture, shelf life and storage conditions.			
	i. Information identifying any significant hazards in respect to the handling,			
	storage, display, distribution and disposal of the chemical or material and the			
	empty package;			
	j. Information identifying any significant hazards to public health, plants, animals			
	or the environment,;			
	k. Instructions on first aid, which shall set out;			
	i. the practical measures to be taken in the event of poisoning or other			
	injury caused by the chemical or material and shall;			
	ii. describe the symptoms of poisoning			
	iii. state antidote and remedial measures			
T 1 1 · ·	1. Any other information that may be required by the Authority.			
Label print	18 (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) 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, 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.			
	19. No person shall store, distribute, transport or handle toxic and hazardous chemicals			
	or materials in a manner that is not consistent with directions or limitations shown in			
	the label.			

	PART IV: Advertising	
Advertising	20. Any person who advertises any toxic and hazardous industrial chemicals or materials shall ensure that the advertisement contains information warning that the toxic or hazardous industrial chemicals or materials may be harmful to human health and the environment.	
Advertisement limitation	21. No person shall 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.	
	PART V: Manufacture, Imports and Exports	
Permit requirement	<ul><li>22. (1) No person shall export or import toxic and hazardous industrial chemicals or material unless the person has a permit issued by the Authority.</li><li>(2) Any person intending to export or import toxic and hazardous industrial chemicals or materials shall apply to the Authority for the permit in the prescribed form, under the Sixth schedule accompanied by the prescribed fee.</li></ul>	
License requirement	<ul> <li>23. (1) No person shall manufacture toxic and hazardous industrial chemicals or material unless the person has a license issued by the Authority.</li> <li>(2) Any person intending to manufacture toxic or hazardous industrial chemicals or materials shall apply to the Authority for the license in the prescribed form, under the Sixth schedule accompanied by the prescribed fee.</li> </ul>	
Permit or license issuance	24. The Authority shall process dully filled application for permit or license within 21 working days.	
Prior Informed Consent	25. The Authority shall decline to issue an export permit of the toxic and hazardous industrial chemicals or materials where consent has been denied by the importing country under the Prior Informed Consent Procedure.	
Cancellation or suspension	<ul> <li>26. The Authority may cancel or suspend any permit or license issued under these Regulations if;</li> <li>(a) the conditions of the permit or license, and any other provisions of the Act and Regulations thereunder are contravened.</li> <li>(b) the permit or license was granted on the basis of false or misleading information.</li> <li>(c) There is new information which affects the safety of the chemical or material.</li> </ul>	
Register of licenses and permits	27. The Authority shall maintain a register of all the licenses and permits issued under these regulations. The register shall be a public document and may be inspected at reasonable hours	

Material Safety Data Sheet	28. (1) No person shall store, distribute, transport toxic and hazardous chemicals or materials unless accompanied by the Material Safety Data Sheet.	
	Indertais uness decompanied by the Material Safety Data Sheet.	
Environment Impact Assessment and Environment Audit	<ul><li>29. (1) No person shall manufacture toxic or hazardous chemicals and materials without an Environmental Impact Assessment license.</li><li>(2) Every person manufacturing toxic or hazardous chemicals and materials shall undertake annual Environmental Audit and submit to the Authority</li></ul>	
Transportation safety	<ul> <li>30. Any person transporting toxic or hazardous industrial chemicals or materials shall ensure that: <ul> <li>(1) there is safety in carriages by providing pallets, danage, appropriate personal protective equipment</li> <li>(2) the substances are kept in separate compartments from other luggage;</li> <li>(3) the transporting vessel has first aid facilities;</li> <li>(4) a dully filled Transport Emergency Card as per Seventh Schedule is displayed on the vehicle;</li> <li>(5) the transporting vessel has appropriate material to contain any spillage, means of extinguishing fire and danger warning signs on the truck as set out in the Sixth Schedule;</li> <li>(6) the driver or any other person authorized in the vehicle has appropriate knowledge in safe handling of chemicals or materials;</li> <li>(7) chemicals or materials are not exposed to adverse weather conditions.</li> </ul> </li> </ul>	
Air transport	31. Transportation of toxic and hazardous chemicals or materials by air shall be done in accordance with the relevant provisions of Civil Aviation Act.	
Sea transport		
	PART VI: Disposal of chemical and material wastes.	
Waste disposal	<ul> <li>32(1) Any 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.</li> <li>(2)Any person intending to transport or dispose any toxic and hazardous industrial chemical or material waste under sub regulation (1) shall do so in accordance with the Act and Environmental Management and Coordination (Waste Management) Regulations.</li> </ul>	
Monitoring impacts	33(1) The Authority in consultation with the relevant Lead Agencies shall monitor the impacts of toxic and hazardous industrial chemicals and materials and their residues to human health and the environment	

Restriction and banning	<ul> <li>34 (1) The Authority shall advise the cabinet secretary to restrict or ban a chemical or material based on the criteria set out in the Eighth schedule.</li> <li>(2) The Cabinet Secretary shall declare by gazette notice that the chemical or the material has been restricted or banned.</li> <li>35. No person shall manufacture, export, import or handle any banned chemical or material listed in the Fourth Schedule</li> <li>36. No person shall manufacture, export or import restricted chemical or material</li> </ul>
	registered under the Fourth schedule without a valid license from the Authority.         PART VIII: Records and reports
Records	37. 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 under the First Schedule and shall be availed to the Authority on demand.
Reports	<ul> <li>38. Any person handling a chemical or material registered under these regulations shall;</li> <li>(a) in case of an incident notify the Authority within six hours</li> <li>(b) submit to the Authority a report in the format set out under the Ninth Schedule within 7 days;</li> </ul>
	PART IX: Offences
Offences	<ul> <li>39(1) Any person who knowingly misuses chemicals or materials that are likely to cause adverse effects to human health and environment commits an offence</li> <li>(2) Any person who contravenes any provision of these regulations commits an offence and upon conviction shall be liable to the penalty prescribed under the Act.</li> </ul>
	PART X TRANSITIONAL CLAUSE
Transitional clause	40. Any manufacturer, importer, exporter or distributor of toxic chemicals or materials covered under these regulations before coming into force of the regulation shall comply with these regulations within six months after coming into force.

## FIRST SCHEDULE

# CRITERIA FOR CLASSIFICATION OF INDUSTRIAL CHEMICALS AND MATERIALS

CLASSES	DESCRIPTION	
Class 1	Explosives	
Class 2	Gases-compressed, liquefied or dissolved under pressure.	
Class 3	Flammable Liquids	
Class 4	Flammable Solids or Substances.	
Class 5	Oxidizing Substances	
Class 6	Poisonous and Infectious Substances	
Class 7	Corrosive Substances	
Class 8	Miscellaneous Dangerous Substances	

## PART II CLASSIFICATION BASED ON MAMMALIAN TOXICITY

Toxicity class	LD <sub>50</sub> (Oral) mg/kg	LD <sub>50</sub> Dermal mg/kg	LC <sub>50</sub> Inhalation mg/l
Extreme	<5	<40	< 0.5
High	5 to < 50	40 < 200	0.5 -2
Moderate	50 to <500	200 to < 2000	2-10
Low	500 to < 5000	> 2000	> 10

# PART III CLASSIFICATION BASED ON ACUTE ECOTOXICITY

Toxicity category	LC <sub>50</sub> (96 hr) mg/l
Extreme	<1
High	1 to <10
Moderate	10 to <100
Low	100 to <1000

Key

(a) A chemical with a median lethal dose  $(LD_{50})$  of 50 milligrams or Less per kilogram of bodyweight when administered orally to Albino rats weighing between 200 and 300 grams each; or

(b) a chemical with a median lethal dose (LD<sub>50</sub>) of 200 milligrams Or less per kilogram of body weight when administered by Continuous contact for 24 hours (or less if death occurs within 24 Hours) with the bare skin of albino rabbits weighing between 2 And 3 kilograms each; or

(c) A chemical that has a median lethal concentration (ML50) in air Of 200 parts per million by volume or less of gas or vapor, or 2 Milligrams per liter or less of mist fume or dust, when Administered by continuous inhalation for I hour (or less if death Occurs within I hour) to albino rats weighing between 200 and 300 grams each;

(d) a chemical that has a median lethal concentration (ML50) in air of 100 parts per million by volume 2 milligrams per liter or less when administered by continuous exposure for I hour (or less if death occurs within I hour) to fish weighing between 200 and 300 grams each;

### PART IV CLASSIFICATION BASED ON CARCINOGENIC, MUTAGENIC AND TERATOGENIC EFFECTS

- <u>Group 1</u>: The chemical or material (mixture) is definitely carcinogenic to humans. The exposure circumstance entails exposures that are carcinogenic to humans.
- <u>Group 2A</u>: The chemical or material (mixture) is probably carcinogenic to humans. The exposure circumstance entails exposures that are probably carcinogenic to humans.
- <u>Group 2B</u>: The chemical or material (mixture) is possibly carcinogenic to humans. The exposure circumstance entails exposures that are possibly carcinogenic to humans.
- <u>Group 3</u>: The chemical or material (mixture or exposure circumstance) is not classifiable as to its carcinogenicity to humans.
- <u>Group 4:</u> The chemical or material (mixture or exposure circumstance) is probably not carcinogenic to humans

#### SECOND SCHEDULE

# **REGISTER OF TOXIC AND HAZARDOUS INDUSTRIAL CHEMICALS AND MATERIALS**

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

# THIRD SCHEDULE

# APPLICATION FOR REGISTRATION OF A CHEMICAL OR MATERIAL:

(To be submitted in triplicate and a soft copy)

### PART A – personal details

Name of Applicant
Business Address (Physical and Postal)
PIN:
Certificate of Registration:
E-mail:
Telephone:
Fax:
Status of applicant (Manufacturer/ Agent/Exporter/Importer)
Name & Address of Manufacturer (where applicable)

# **PART B- Chemical Details**

Approved common name(s)
Chemicals or materials name(s) and structural formula of the major active ingredient
CAS No
Intended use

# **PART C – Chemical Characteristics**

1. Toxicity of chemicals and materials to test animals (oral, dermal and inhalation LD <sub>50</sub> and LC <sub>50</sub> )
(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
<ul> <li>4. Safety measures <ul> <li>(a) Antidote(s)</li> <li>(b) Safety precautions</li> <li>(c) First Aid measures</li> <li>(d) Any other relevant safety measures</li> </ul> </li> </ul>
5. Registration numbers and references of the product in the country of origin and any other country(s) where it is marketed
6. 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.

#### FIFTH SCHEDULE: RESTRICTED AND BANNED CHEMICALS AND MATERIALS

#### **Part I: Restricted Chemicals**

Code	Chemical Name	CAS. No.	Status	Remarks
1.	Asbestos			Kemarks
	Crocidolite	12001-28-4	Restricted	
	Actinolite	77536-66-4	Restricted	
	Anthophyllite	77536-67-5	Restricted	
	Amosite	12172-73-5	Restricted	
	Tremolite	77536-68-6	Restricted	
2.	Polybrominated	36355-01-8 (hexa-)	Restricted	
	biphenyls(PBB)	27858-07-7(octa-)	Restricted	
		13654-09-6 (deca-)	Restricted	
3.	Polychlorinated biphenyls (PCB)	1336-36-3	Restricted	
4	Polychlorinated terphenyls (PCT)	61788-33-3	Restricted	
5.	Tetraethyl lead	78-00-2	Restricted	
6.	Tetramethyl lead	75-74-1	Restricted	
7.	Tris (2,3-dibromopropyl) phosphate	126-72-7	Restricted	
8	Commercial octabromodiphenyl ether including: -Hexabromodiphenyl			
	ether	36483-60-0	Restricted	
	-Heptabromodiphenyl ether	68928-80-3	Restricted	

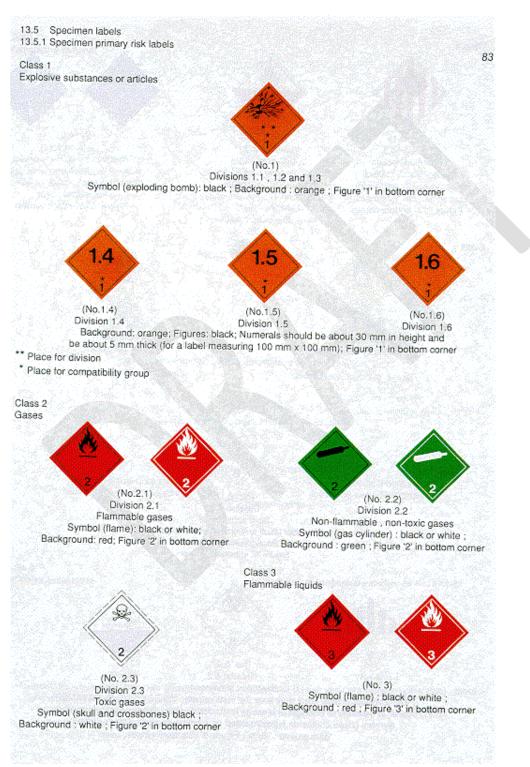
9	Commercial pentabromodiphenyl ether including: -Tetrabromodiphenyl ether - Pentabromodiphenyl ether	40088-47-9 32534-81-9	Restricted Restricted	
10	Perfluorooctane sulfonic acid, perfluorooctane sulfonates, perfluorooctane sulfonamides and perfluorooctane sulfonyls including: -Perfluorooctane sulfonic			
	acid	1763-23-1	Restricted	
	- Potassium perfluorooctane sulfonate - Lithium perfluorooctane	2795-39-3	Restricted	
	sulfonate	29457-72-5	Restricted	
	- Ammonium perfluorooctane sulfonate - Diethanolammonium	29081-56-9	Restricted	
	perfluorooctane sulfonate	70225-14-8	Restricted	
	<ul> <li>Tetraethylammonium</li> <li>perfluorooctane sulfonate</li> <li>-</li> </ul>	56773-42-3	Restricted	
	Didecyldimethylammonium perfluorooctane sulfonate	251099-16-8	Restricted	
(	- N-Ethylperfluorooctane	4151-50-2	Restricted	
	sulfonamide - N-Methylperfluorooctane sulfonamide	31506-32-8	Restricted	
	<ul> <li>N-Ethyl-N-(2-hydroxyethyl)</li> <li>perfluorooctane</li> <li>sulfonamide</li> <li>N-(2-Hydroxyethyl)-N-</li> </ul>	1691-99-2	Restricted	
	methylperfluorooctane sulfonamide	24448-09	Restricted	
	- Perfluorooctane sulfonyl fluoride	307-35-7	Restricted	

# **Part II: Banned Chemicals**

Code	Chemical Name	CAS. No.	Status	Remarks
1	Hexabromobiphenyl	36355-01-8	Banned	
2	Pentachlorobenzene	608-93-5	Banned	

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

#### FIFTH SCHEDULE HAZARD AND RISK SYMBOLS



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Class 7 Radioactive material



(No. 7A) Category I - White Symbol (trefoil) : black ; Background : white Text (mandatory): black in lower half of label : 'RADIOACTIVE' 'Contents.......' 'Activity.........' Figure '7' in bottom corner





(No. 7C)

(No. 7B) Category II - Yellow Symbol (trefoil) : black ; Background : upper half yellow with white border, lower half white ; Text (mandatory) : black in lower half of label : "RADIOACTIVE" 'Contents......' 'Activity.......' In a black outlined box -Transport Index' Two red vertical bars should to be word 'Radioactive';

follow the word 'Radioactive'; Figure '7' in bottom corner

Class 8 Corrosive substances



(No. 8) Symbol (liquids, spilling from two glass vessels and attacking a hand and a metal) : black ; Background : upper half white, lower half black with white border ; Figure '8' in white in bottom corner Class 9 Miscellaneous dangerous substances and articles



(No.9) Symbol (seven vertical stripes in upper half) : black ; Background : white ; Figure '9' underlined in bottom corner

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# FORM A

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

Personal details				
Applicant's full name				
AddressTel. No				
Cellphone No				
E-mail Fax				
Full Name and Address of the Exporter or importer				
Product information				
1. Registration numberDate of Expiry				
<ol> <li>Country of Manufacture.</li> </ol>				
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) Value (Free On Board) Kshs				
(14) Licenses (Environmental Impact Assessment, etc)				
DECLARATION BY APPLICANT				
I hereby certify that the particulars given above are correct or true to the best of my knowledge.				
Name				
SignatureDateDate				
For Official use only:				
Receipt No				

#### FORM B

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

Application Ref. No
Name
Address
Tel:
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
Signed Date
(Official seal)
Note: This Permit is valid from to

#### FORM C

# APPLICATION FOR LICENCE TO MANUFACTURE TOXIC AND HAZARDOUS INDUSTRIAL CHEMICALS OR MATERIALS

#### **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, str	reet,)	
L.R. No		
G.P.S. Coordinates		

#### **Product information**

1. Registration number
2. Common names
3. Chemicals or materials name
4. Trade name
5. Formulation
6. Concentration
7. State of product (technical or formulated)
8. Purpose for Manufacture
9. 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-----

SignatureDateDateDate
-----------------------

For Official use only:

Receipt No. -----

#### FORM D

# LICENCE TO MANUFACTURE TOXIC AND HAZARDOUS INDUSTRIAL CHEMICALS OR MATERIALS

Application Ref. No
Name
Address Tel:
This Licence is granted to (name of the applicant)
Address
to manufacture Chemicals or materials as follows:
Chemicals or materials
Quantity
Registration No
For sale /export /own use
Signed Date
(Official seal)

Note: This Licence is valid from ------ to -----

#### **SEVENTH SCHEDULE**

#### TRANSPORT EMERGENCY (TREM) CARDS

#### **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.

### EIGHTH SCHEDULE

# CRITERIA FOR RESTRICTING OR BANNING OF TOXIC CHEMICALS AND MATERIALS.

- 1) Physico-chemical, 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 in 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
  - (f) Accessibility
- 11) Positive and/or Negative Impacts on Society
  - (a) Health, including public, environmental and occupational
  - (b)Agriculture and Forestry
  - (c)Biodiversity
  - (d)Economic Aspects
  - (e)Social Costs
  - (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.

# NINTH SCHEDULE

# INCIDENT REPORT FORMAT

# Particulars

Name of Facility
E-mail:
Telephone:
Fax:
Date/Time of incident
Incident Type (Explosion, spillage/leakages, gas/dust/fumes release, others)
Material/Chemical released (Quantity)
Physical state
Incident location
Physical Address; CountyTownStreetGPS Coordinate
Impact (Human health, Environment, property and others)
Activity (manufacture/storage/transport/others)
Cause
Response/Control measures undertaken
Decontamination and disposal
Future preventive measures employed
Name of PersonDesignation
SignDateDate

## **TENTH SCHEDULE**

# PRESCRIBED FEES

Application for registration	.Kshs. 5,000.
Application for permit to Import/ Export/Transit	KShs. 5,000.
Permit to Import / Export/ Transit (per Consignment)	KShs.30, 000.
Application for license to Manufacture	KShs. 5,000.
License to Manufacture (annual)	KShs.30, 000.

Cabinet Secretary for Environment, Water & Natural Resources