LEGAL NOTICE NO. 178

THE ENVIRONMENTAL MANAGEMENT AND CO-ORDINATION ACT

(Cap. 387)

THE ENVIRONMENTAL MANAGEMENT AND CO-ORDINATION (WASTE MANAGEMENT) REGULATIONS, 2024

ARRANGEMENT OF REGULATIONS

Regulation

THE ENVIRONMENTAL MANAGEMENT AND CO-ORDINATION ACT

(Cap. 387)

IN EXERCISE of the powers conferred by section 86(d) of the Environmental Management and Co-ordination Act, the Cabinet Secretary for Environment, Climate Change and Forestry, on the recommendation of the Authority, makes the following Regulations—

THE ENVIRONMENTAL MANAGEMENT AND CO-ORDINATION (WASTE MANAGEMENT) REGULATIONS, 2024

PART I—PRELIMINARY PROVISIONS

Citation.

1. These Regulations may be cited as the Environmental Management and Co-ordination (Waste Management) Regulations, 2024.

Interpretation.

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

"biomedical waste" means any waste which is generated during the diagnosis, treatment or immunization of human beings or animals or in research activities pertaining thereto or in the production or testing of biologicals and includes the category of waste specified in the First Schedule;

"disposal site" means any area of land on which waste disposal facilities are physically located and includes a final waste discharge point without the intention of retrieval but does not mean a re-use or re-cycling plant or site;

"industrial waste" means waste arising from processing and manufacturing industries or trade undertakings and can take the form of liquid, non-liquid, solid and gaseous substances;

Cap. 346

"pesticide" has the meaning assigned to it under the Pesticide Control Act;

"prior informed consent" means the international operation procedure for exchanging, receiving and handling notification information by the competent authority on waste;

"processing" means any operation that changes the physical, chemical or biological properties of a waste to make it easier to dispose of, recovery a resource or transfer waste material;

"radioactive waste" means any radioactive material that has been, or will be discarded as of being of no further use;

"re-use" means waste repurposed with or without cleaning or repairing;

"segregate" or "segregation" means any activity that separates waste materials for processing;

"storage" means placement of waste in a suitable location or facility where isolation, environmental, health protection and human control are provided in order to ensure waste is subsequently retrieved for treatment and conditioning or disposal;

"treatment" means any method and technique or process for altering the biological, chemical or physical characteristics of wastes to reduce the hazards it presents and includes facilities intended to reduce the cost of disposal of such waste and whose treatment objectives include volume reduction, disinfection, neutralization or other change of composition to reduce hazards;

"waste disposal site or plant" includes —

(a) a waste storage site or plant;

(b) a waste processing site or plant;

(c) a waste treatment site or plant;

"waste generator" means any person whose activities or activities under his or her direction produces waste or if that person is not known, the person who is in possession or control of that waste; and

"waste management" means the activities either administrative or operational that are used in handling, packaging, treatment, condition, storage and disposal of waste.

Application.

3. These Regulations shall apply to the handling, storage, transportation, segregation and destruction of waste.

PART II—WASTE DISPOSAL

Restriction on disposal of waste.

4. (1) No person shall dispose hazardous waste on a public highway, street, road, recreational area or in any public place except in a designated waste receptacle.

(2) A person who contravenes sub-regulation (1) commits an offence and shall be liable on conviction to the penalty provided under section 144 of the Act.

Responsibility of waste generators.

5. A waste generator shall collect, segregate and dispose the waste in the manner provided in regulation 6 of these Regulations.

Cleaner production methods.

6. (1) In the discharge of their responsibility under regulation 5, a waste generator shall minimise the waste generated by adopting the following cleaner production methods—

(a) improvement of production process through—

(i) conserving raw materials and energy;

(ii) reducing toxic emissions and wastes;

(b) monitoring the product cycle from beginning to end by—

(c) monitoring the product cycle from beginning to end by—

(i) identifying and eliminating potential negative impacts of the product;

(ii) enabling the recovery and re-use of the product where possible; and

(iii) reclamation and recycling; and

(d) incorporating environmental concerns in the design and disposal of a product.

Segregation of waste.

7. (1) A waste generator shall segregate waste by—

(a) separating hazardous waste from non-hazardous waste; and

(b) segregating non-hazardous waste into organic and non-organic fractions.

(2) The waste segregated under regulation (1) shall be placed in clearly labeled and colour coded receptacles, bins, containers and bags as set out in the Second Schedule.

(3) Any waste segregated in accordance with this regulation shall be disposed of at an appropriate disposal site.

(4) A waste service providers shall collect, handle and transport segregated waste as provided for under this Regulation.

PART III—TRANSPORTATION OF WASTE

Waste transportation licence.

8. (1) Pursuant to section 87 (2) of the Act, no person shall transport any waste without a valid licence to transport waste.

(2) An application for a license to transport waste shall be made to the Authority in Form I set out in the Third Schedule and accompanied by the fee set out in the Fourth Schedule.

(3) Where an application under subregulation (2) is approved, the Authority shall issue a licence to transport waste in form II set out in the Third Schedule.

(4) A licence issue under subregulation (3) shall be valid for a period of one year from the date of issue.

(5) Each vehicle or other means of conveyance used for transportation of waste shall be affixed with a label indicating that it is used for the transportation of waste and the label shall specify the type of waste transported in the vehicle.

Responsibility of waste transporter.

9. (1) A person licensed to transport waste under regulation 8 shall ensure that—

(a) the collection and transportation of the waste is conducted in a manner that does not cause scattering, contamination, leakage of the waste;

(b) the vehicle and equipment used for the transportation of waste is in a state that does not cause the scattering of, or flowing out of waste or emission of noxious smells from such waste; and

(c) at all times during the transportation of any waste, he or his agent possess a duly filled tracking note in Form III set out in the Third Schedule to these Regulations and shall produce the tracking note on demand to any law enforcement officer.

(2) Where a licensee fails to comply with sub-regulation (1), the Authority may suspend their licence to transport waste for a period not exceeding six months.

PART IV—WASTE DISPOSAL PLANTS AND SITES

Waste disposal site or disposal licence.

10. (1) Pursuant to section 87(3) of the Act, no person shall operate a waste disposal plant or site without a valid licence for the waste disposal site or plant.

(2) An application for a licence to operate a waste disposal site or plant shall be made to the Authority in Form IV set out in the First Schedule to these Regulations and shall be accompanied by the fees set out in the Second Schedule.

(3) Where an application under sub-regulation (2) is approved, the Authority shall issue a licence to operate a waste disposal site or plant in Form V set out in the Third Schedule subject to such conditions as the Authority may specify for purposes of ensuring waste disposal site or plant operates in an environmentally sound manner.

(4) In issuing a licence under sub-regulation (3), the Authority shall indicate the operation permitted and identified for the particular waste.

(5) A licence to operate a waste disposal site or plant shall be valid for a period of one year from the date of issue and shall be renewed annually on such terms and conditions as the Authority may specify.

(6) A person licensed to operate a waste disposal site or plant under this regulation shall obtain any other licence or approval required under the Act or other relevant law to operate the site or plant.

Records and reports.

11. Every licensed operator of a waste disposal site or plant shall maintain accurate records of the site or plant and make annual reports to the Authority pursuant to the provisions of the Act.

Exemption.

12. The Authority may exempt from the requirement to obtain a transportation licence any person transporting non-hazardous waste intended from direct re-use without any form of processing, including bagasse, sugar filter cake, molasses and demolition waste, if the waste is intended to be transported directly from the waste generator to the re-user.

Treatment of industrial waste.

13. No person shall discharge or dispose of any waste in any state into the environment, unless the waste has been treated in a treatment facility in the manner specified by the Authority in consultation with the relevant lead agency.

Hazardous waste specifications.

14. Pursuant to section 91 of the Act, the categories of waste or any waste having the characteristics specified in the Fifth Schedule shall as classified as hazardous waste.

Requirement for environmental impact assessment.

15. (1) No person shall engage in any activity likely to generate hazardous waste without a valid environmental impact assessment licence issued by Authority in accordance with the Act.

(2) A person who contravenes sub-regulation (1) commits an offence and shall be liable on conviction to the penalty provided under section 144 of the Act.

PART V—HAZARDOUS WASTE

Handling, storing and transportation of hazardous waste.

16. (1) Each waste generator of hazardous waste shall ensure that every container or package for storing such waste is labelled in legible characters, written in English and Kiswahili.

(2) The label of the container or package for storing hazardous waste shall contain the following information—

(a) the identity of the hazardous waste;

(b) the name and address of the generator of waste;

(c) the net contents;

(d) the normal storage stability and methods of storage;

(e) the name and percentage of weight of active ingredients and names and percentages of weights of other ingredients or half-life of radioactive material;

(f) warning or caution statements which may include any of the following as appropriate—

(i) the words "WARNING" or "CAUTION";

(ii) the word "POISON" (marked indelibly in red on a contrasting background); and

(iii) the words "DANGER! KEEP AWAY FROM UNAUTHORIZED PERSONS"; and

(iv) a pictogram of skull and crossbones; and

(g) a statement of first aid measures, including the antidote when waste is inhaled, ingested or dermal contact and a direction that a physician must be contacted immediately.

Treatment of hazardous waste.

17. (1) Each person who generates toxic or hazardous waste shall treat or cause to be treated such hazardous waste using, where applicable, the classes of incinerators specified in the Sixth Schedule to these Regulations or any other appropriate technology approved by the Authority.

(2) Any leachate or other by-products of such treated waste shall be disposed of or treated in accordance with the conditions set out in the licence or as specified by the Authority.

Export permit for hazardous waste.

18. (1) Pursuant to section 91(4) of the Act, no person shall export hazardous wastes out of Kenya without a valid export permit issued by the Authority and a valid prior informed consent document issued by the designated competent authority of the receiving country.

(2) An application for a permit to export hazardous waste shall be made to the Authority in Form VI set out in Third Schedule, accompanied by the fee specified in the Fourth Schedule and a copy of the Prior Informed Consent document from the receiving country and proof of insurance in accordance with regulation 20.

(3) Where the Authority is satisfied that all the requirements have been complied with, it shall issue a permit to export hazardous waste in the Form VII set out in the Third Schedule.

(4) An export permit issued under these Regulations shall relate to the specific export transaction but shall not be valid for any subsequent export transactions or transferable.

Transit of hazardous waste within Kenya.

19. (1) Pursuant to section 91(5), no person shall transit hazardous waste destined for another country through the territory of Kenya without a valid permit issued by the Authority and a valid prior informed consent form.

(2) An application for a permit to transit hazardous waste through Kenya shall be made to the Authority in Form VI set out in Third Schedule, accompanied by a transboundary movement of waste set out in Form VIII set out in the Third Schedule.

(3) Where the Authority is satisfied that all the requirements have been complied with, it shall, in writing, issue a permit to a successful applicant.

Insurance.

20. (1) An application for an export permit under regulation 18 shall satisfy the Authority that the hazardous waste exporter has obtained to an insurance policy covering the risks likely to arise out of the activity for which the licence is required.

(2) A generator of waste which has been characterised as hazardous waste shall submit to the Authority a deposit bond assessment report and the environmental Impact Assessment Report prior to the commencement of the operations to cover the risks likely to be caused by the waste.

PART VI—NATIONAL WASTE INFORMATION SYSTEM

National waste information system.

21. (1) The Authority shall maintain a national waste information system for recording, collecting, management and analysis of data and information.

(2) Without prejudice to subregulation (1), the system shall contain—

(a) a register of all permits and licences issued under these Regulations;

(b) data on the quantity and type or classification of waste generated, stored, transported, treated, transformed, reduced, reused, recycled, recovered or disposed of;

(c) a register of licensed waste management, recycling and other related activities;

(d) the status of the generation, collection, reduction, reuse, recycling, recovery, transportation, treatment and disposal of waste;

(e) the impact of waste on health and the environment; and

(f) perform such other functions as are incidental or conducive to the exercise of its powers or performance of its functions as best promotes the purpose for which the Authority is established.

(3) Every licensed operator shall submit waste management information data as may be required by the Authority from time to time into the national waste management information system.

PART VII—BIOMEDICAL WASTE

Requirement for environmental impact assessment licence for biomedical waste generator.

22. An owner or operator of a facility that generates bio medical waste without an environmental impact assessment licence issued by the Authority commits an offence.

Approval of biomedical waste generating facility.

23. Every waste generator of biomedical waste shall ensure that the generating facility has been approved by the appropriate lead agency and the relevant county government.

Segregation of biomedical waste.

24. Every waste generator of biomedical waste shall at the point of generation and at all stages thereafter segregate the waste in accordance with the categories specified in the Seventh Schedule to these Regulations.

Securing and packaging of biomedical waste.

25. All biomedical waste shall be securely packaged in biohazard containers which shall be labeled with the symbols set out in Part I and II in the Eighth Schedule to these Regulations.

Treatment of biomedical waste.

26. Every waste generator shall treat or cause to be treated all biomedical waste in the manner set out in the Ninth Schedule to these Regulations, before such biomedical waste is stored or disposed of.

Monitoring by the lead agency.

27. The relevant lead agency shall monitor the treatment of all biomedical waste to ensure that such waste is treated in a manner that will not adversely affect public health and the environment.

Storage of biomedical waste.

28. No person shall store biomedical waste at a temperature above 0º C for more than seven days without the written approval of the relevant lead agency, provided that untreated pathological waste shall be disposed of within forty-eight hours.

Transportation of biomedical waste.

29. (1) No person shall transport biomedical waste without a valid permit issued by the relevant lead agency in consultation with the relevant County government.

(2) No person shall transport or allow to be transported biomedical waste save in a specially designed vehicles or other means of conveyance so as to prevent spillage, leakage or scattering of such waste.

Transfer stations.

30. The provisions of these Regulations relating to storage and transportation of bio-medical waste shall apply to operators of transfer stations.

Standards for biomedical waste disposal sites or plants.

31. No person shall be issued with a licence to operate a biomedical waste disposal site or plant unless such site or plant complies with the requirements set out in the Third and Tenth Schedule to these Regulations.

Requirement for environmental impact assessment for biomedical waste disposal site or plant and license to operate.

32. No person shall own or operate a biomedical waste disposal site or plant without a valid Environmental Impact Assessment licence issued by the Authority under the provisions of the Act and a license to operate such plant issued by the relevant lead agency and the relevant county government.

Requirement for environmental audits.

33. Within six months after the commencement of these Regulations, operators of bio- medical waste disposal sites or plants shall submit Environmental Audit reports and thereafter annual Audit Reports to the Authority.

PART VIII—MISCELLANEOUS PROVISIONS

Transitional provisions for storage, processing, treatment plants and disposal sites.

34. Any person who, before the commencement of these Regulations, was carrying on the business of operating a waste storage, processing, treatment plant or disposal site shall apply to the Authority for a licence within six months after the commencement of these Regulations.

FIRST SCHEDULE

(rr. 2, 10(2))

CATEGORIES OF BIOMEDICAL WASTE

No.	*Category of waste*	*Description*
1.	Infections Waste	Waste suspected to contain pathogens e.g. laboratory cultures, waste from isolation wards, tissues (swabs), materials, or equipment that have been in contact with tubings, catheters, IGS toxins, live or attenuated vaccines, soiled plaster costs and other materials
2.	Pathological waste	contaminated with blood infected patients, excreta.
3.	Sharps	Human and animal tissues or fluids. e.g body parts
4.	Pharmaceutical waste	blood and other body fluids, fetuses, animal carcasses.
5.	Genotoxic Waste	Waste containing substances with genotoxic properties. e.g waste containing cytostatic drug (often used in cancer therapy), genotoxic chemicals.
6.	Chemical waste	Waste containing chemical substances e.g laboratory reagents; film developer, disinfectants,(disinfectants) that are expired or no longer needed solvents
7.	Waste with high content of heavy metals	Batteries, broken thermometers, blood-pressures gauges, etc
8.	Pressurized containers	Gas cylinders, gas cartridges, aerosol cans
9.	Radioactive waste	Waste containing radioactive substances e.g unused liquids from radiotherapy or laboratory research, contaminated glassware, packages, or absorbent paper, urine and excreta from patients treated or tested with unsealed radionuclides, sealed sources.
10.	General solid waste	Waste generated from offices, kitchens, packaging material from stores.
11.	Microorganisms	Any biological entity, cellular or non-cellular capable of replication or of transferring genetic material.

SECOND SCHEDULE

(rr. 7(2), 10(2))

NATIONAL WASTE COLOUR CODE

S/No	*Type of Waste*	*Colour Coding Scheme*
1.	Organic Waste	Green
2.	General waste	Black
3.	Recyclable waste	Blue

THIRD SCHEDULE

FORMS

FORM I (r. 8(2))

APPLICATION/RENEWAL FOR A LICENCE FOR TRANSPORTATION OF WASTE

I hereby apply for a license to transport waste, of which particulars are given below:
Name and address of applicant …….....

……

PIN Number ……..……

Registration number and type of vehicle to transport waste (include prime mover and trailer/tanker)
……..…….....

Quantity of waste per vehicle to be transported ……..……..

……..……...

Licensed sites/plant to which waste is to be transported ……..……

……

Any other information …….…….....

……

Is Application for:

☐ Initial license ☐ Renewal

Previous License Number ……

Date ……..…… Full Name ……..…… ID No. ……

Designation/Title:……..…

National Environment Management Authority

FORM II (r.8(3))

LICENCE TO TRANSPORT WASTE

Application Ref:…… Licence No.…… Serial No.……..…

Name……..……

Address ……..……

You are hereby licensed to transport (Type of waste) : ……...……

……

.. () from……..……

To (Name and location of the receiving facility) ……..

……

Type and registration number of vehicle license ……

……

……

This license is valid from (date)…….....

To (date)…….……

This license is granted subject to the following conditions: ……...……..

……

……

……

Date:…… Signature……

……...……

Director General National Environment Management Authority

FORM III (r.9(1)(c))

TRACKING NOTE

(To be completed in triplicate)

A Transporter	Serial No. of the Registered Name of Transporter ……..…….……. Usual Municipality/Ward/Sub County/County of operation …….…….. NEMA License Number ……
CONSIGNMENT NOTE FOR THE CARRIAGE AND DISPOSAL OF SOLID WASTE	
B Description of the waste	(1) Area collected. (Ward/ Subcounty/ County) …….……..……. (2) Type of Waste …….…… (3) Description and physical nature of waste …….……..… (4) Quantity/size of waste ……..
C Disposer's Certificate	I certify that I have received the waste as described in A and B above.
	The waste was delivered in vehicle _____ (Registration No.) at_____(time) on_____(date) and the carrier gave his/her name as _____ on behalf of _____ The waste shall be disposed of as per the disposal license issued by the Authority. Signed:_____ Name:_____ Position:_____ Date:_____ On behalf of:

FORM IV (r. 10(3))

APPLICATION/RENEWAL OF A LICENCE TO OPERATE A WASTE DISPOSAL SITE OR PLANT

I hereby apply for a license to own/operate a waste storage, processing, treatment plant and disposal site, of which particulars are given below:—

Name of Applicant……...……..

Address …… Email Address ……..……...

Phone No…….. Contact Person……...……..

PIN Number……..……..……

Location of plant/site ……..…..

GPS Co-ordinates……..

Recycling Technology applied……..……

Types of waste to be treated/recycled at plant/site…….....

Installed Capacity (tonnes/annum) ……..……..

Quantity of electrical and electronic equipment waste treated/recycled during the previous year (tonnes/kg) ……..

Estimated life span of plant/site……

……..……..……

Proposed hectarage/area of plant/site (include plan or designs)…… …….……

..……

Executive summary of environmental impact statement (please attach)

Is Application for: □ Initial license □ Renewal

Previous License Number……..……

E.I.A. License Number…..……

Additional information……...…

Date: …… Signature:…… ……..

Designation/Title: ……..……

Quantity being handled of/per annum: tonnes/kg ……..……..

..……

plant, County/sub-county, estimated quantity, add recycling,

Type of operation to be carried on at plant/site:

a. Transfer Station……

b. Material Recovery Facility (MRF)……...……

c. Compost……..……..

d. Biological decomposition ……...……

e. Recycling ……

f. Autoclave/Microwave ……

g. Incinerator ……..……..

h. Landfill ……...……...……

Other (specify)……..……

Estimated life span of plant/site……..……...……

Proposed acreage/area of plant/site ……

……..……

Is Application for: ☐ Initial license ☐ Renewal

E.I.A. License Number (for initial applications)……..……

Previous License Number (for renewal only)……...……

E.A acknowledgement letter (for renewal only) ……..……

Any other information……..……

...…… ……

…….....

Date:…… Full Name:……..…… ID No..……..

Designation/Title:……..……

Director General
National Environment Management Authority

FORM V (r. 10(3))

LICENCE TO OPERATE A WASTE DISPOSAL SITE OR PLANT

Application Ref:…… Licence No..…… Serial No..……..……

Name……..…..…

Address……..……

You are hereby licensed to own/operate (type of facility):……...……

……

This license is valid from…… Date……..… to…..... Date……..

This license is subject to the following overleaf conditions: ……..……..

.....

.....

.....

.....

.....

Date:…… Signature……

Director General
National Environment Management Authority

FORM VI

NOTIFICATION DOCUMENT FOR TRANSBOUNDARY MOVEMENTS/SHIPMENTS OF WASTE

1. Exporter - notifier Registration No: Name: Address: Contact person: Tel: Fax: E-mail:	3. Notification No: Notification concerning A.(i) Individual shipment: (ii) Multiple shipments: B.(i) Disposal *(1)*: (ii) Recovery : C. Pre-consented recovery facility *(2;3)* Yes c No c
	4. Total intended number of shipments:
	5. Total intended quantity *(4)*: Tonnes (Mg): m^3:
2. Importer - consignee Registration No: Name: Address: Contact person: Tel: Fax: E-mail:	6. Intended period of time for shipment(s) *(4)*: First departure: Last departure:
	7. Packaging type(s) *(5)*: Special handling requirements *(6):* Yes: c No: c
	11. Disposal / recovery operation(s) *(2)* D-code / R-code *(5)*: Technology employed *(6)*: Reason for export *(1;6)*:
8. Intended carrier(s) Registration No: Name *(7)*: Address: Contact person:Tel: Fax: E-mail: Means of transport *(5)*:	12. Designation and composition of the waste *(6)*:
9. Waste generator(s) - producer(s) *(1;7;8)* Registration No: Name: Address: Contact person: Tel: Fax: E-mail: Site and process of	13. Physical characteristics *(5)*: 14. Waste identification *(fill in relevant codes)* (i) Basel Annex VIII (or IX if applicable): (ii) OECD code (if different from (i)):

generation *(6)*	(iii) EC list of wastes:
10. Disposal facility *(2)*: c or c recovery facility *(2)*:Registration No: Name: Address: Contact person: Tel: Fax: E-mail: Actual site of disposal/recovery:	(iv) National code in country of export: (v) National code in country of import: (vi) Other (specify): (vii) Y-code: *(viii)* H-code *(5):* UN class *(5):* UN Number: UN Shipping name: Customs code(s) (HS):

15. (a) Countries/States concerned, (b) Code no. of competent authorities where applicable, (c) Specific points of exit or entry (border crossing or port)

State of export - dispatch	State(s) of transit (entry and exit)	State of import - destination
(a)		
(b)		
(c)		

16.Customs offices of entry and/or exit and/or export (European Community):

Entry: Exit: Export:

17. Exporter's - notifier's / generator's - producer's *(1)* declaration:

I certify that the information is complete and correct to my best knowledge. I also certify that legally enforceable written contractual obligations have been entered into and that any applicable insurance or other financial guarantee is or shall be in force covering the transboundary movement.

Exporter's - notifier's name: Date: Signature:

Generator's - producer's name: Date: Signature:

18. Number of annexes attached

FOR USE BY COMPETENT AUTHORITIES

19. Acknowledgement from the relevant competent authority of countries of import - destination / transit *(1)* / export - dispatch *(9)*: Country: Notification received on: Acknowledgement sent on: Name of competent authority: Stamp and/or signature:	20. Written consent *(1;8)* to the movement provided by the competent authority of (country): Consent given on: Consent valid from: until:

	Specific conditions: No: c If Yes, see block 21 (6): c Name of competent authority: Stamp and/or signature:
21. Specific conditions on consenting to the movement document or reasons for objecting	

(1) Required by the Basel Convention

(2) In the case of an R12/R13 or D13-D15 operation, also attach corresponding information on any subsequent R12/R13 or D13-D15 facilities and on the subsequent R1-R11 or D1-D12 facilit(y)ies when required

(3) To be completed for movements within the OECD area and only if B(ii) applies

(4) Attach detailed list if multiple shipments

(5) See list of abbreviations and codes on the next page

(6) Attach details if necessary

(7) Attach list if more than one

(8) If required by national legislation

(9) If applicable under the OECD Decision

LIST OF ABBREVIATIONS AND CODES USED IN THE NOTIFICATION DOCUMENT

DISPOSAL OPERATIONS

D1 Deposit into or onto land, (e.g., landfill, etc.)

D2 Land treatment, (e.g., biodegradation of liquid or sludgy discards in soils, etc.)

D3 Deep injection, (e.g., injection of pumpable discards into wells, salt domes or naturally occurring repositories, etc.)

D4 Surface impoundment, (e.g., placement of liquid or sludge discards into pits, ponds or lagoons, etc.)

D5 Specially engineered landfill, (e.g., placement into lined discrete cells which are capped and isolated from one another and the environment, etc.)

D6 Release into a water body except seas/oceans

D7 Release into seas/oceans including sea-bed insertion

D8 Biological treatment not specified elsewhere in this list which results in final compounds or mixtures which are discarded by means of any of the operations in this list

D9 Physico-chemical treatment not specified elsewhere in this list which results in final compounds or mixtures which are discarded by means of any of the operations in this list (e.g., evaporation, drying, calcination, etc.)

D10 Incineration on land

D11 Incineration at sea

D12 Permanent storage, (e.g., emplacement of containers in a mine, etc.)

D13 Blending or mixing prior to submission to any of the operations in this list

D14 Repackaging prior to submission to any of the operations in this list

D15 Storage pending any of the operations in this list

RECOVERY OPERATIONS

R1 Use as a fuel (other than in direct incineration) or other means to generate energy (Basel/OECD) - Use principally as a fuel or other means to generate energy (EU)

R2 Solvent reclamation/regeneration

R3 Recycling/reclamation of organic substances which are not used as solvents R4 Recycling/reclamation of metals and metal compounds

R5 Recycling/reclamation of other inorganic materials R6 Regeneration of acids or bases

R7 Recovery of components used for pollution abatement

R8 Recovery of components from catalysts

R9 Used oil re-refining or other reuses of previously used oil

R10 Land treatment resulting in benefit to agriculture or ecological improvement

R11 Uses of residual materials obtained from any of the operations numbered R1-R10

R12 Exchange of wastes for submission to any of the operations numbered R1-R11

R13 Accumulation of material intended for any operation in this list.

PACKAGING TYPES (block 7)	H-CODE AND UN CLASS (block 14)		
1. Drum			
2. Wooden barrel	UN Class	H-code	Characteristics
3. Jerrican	1	H1	Explosive
4. Box	3	H3	Flammable liquids
5. Bag	4.1	H4.1	Flammable solids
6. Composite packaging	4.2	H4.2	Substances or wastes liable to spontaneous combustion
7. Pressure receptacle	4.3	H4.3	Substances or wastes which, in contact with water, emit flammable gases
8. Bulk			
9. Other (specify)			

MEANS OF TRANSPORT (block 8) R = Road T = Train/rail S = Sea A = Air W = Inland waterways		
PHYSICAL CHARACTERISTICS (block 13) 1. Powdery/powder 2. Solid 3. Viscous/paste 4. Sludgy 5. Liquid 6. Gaseous 7. Other (specify)		
	5.1 H5.1	Oxidizing
	5.2 H5.2	Organic peroxides
	6.1 H6.1	Poisonous (acute)
	6.2 H6.2	Infectious substances
	8 H8	Corrosives
	9 H10	Liberation of toxic gases in contact with air or water
	9 H11	Toxic (delayed or chronic)
	9 H12	Ecotoxic
	9 H13	Capable, by any means, after disposal of yielding another material, e. g., leachate, which possesses any of the characteristics listed above

Further information, in particular related to waste identification (block 14), i.e. on Basel Annexes VIII and IX codes, OECD codes and Y-codes, can be found in a Guidance/Instruction Manual available from the OECD and the Secretariat of the Basel Convention.

FORM VII (r. 18(3))

PERMIT TO EXPORT WASTE

(To be filled in triplicate)

Permit No…….....

Name and address of exported/notifier…….....

…….....

……

(Physical and Mailing Address)

You are hereby granted permission to export/transit the following waste:

1.....

2.....

3. .....

4. .....

5. .....

6. .....

7. .....

8. .....

To the following address: *(Name, Physical and Mailing Address of the Importer)*

.....

.....

This export shall be made through Border/custom control post. This Permit is valid from (date) ..…… to ..…….……

(date) ……

This permit is subject to the following conditions: (*Attach a copy of authorization by the state to which the export is to be made)*

...……

……..……

Date:……

Signature:……

...……

Director General
National Environment Management Authority

FORM VIII (*r. 18(4)*)

MOVEMENT DOCUMENT FOR TRANSBOUNDARY MOVEMENTS/SHIPMENTS OF WASTE

<table>
<tr><td colspan="3">1. Corresponding to notification No:</td><td colspan="3">2. Serial/total number of / shipments:</td></tr>
<tr><td colspan="3">3. Exporter - notifier Registration No: Name:
Address:
Contact person:
Tel: Fax:
E-mail:</td><td colspan="3">4. Importer - consignee Registration No: Name:
Address:
Contact person: Tel: Fax:
E-mail:</td></tr>
<tr><td colspan="3">5. Actual quantity: Tonnes (Mg):m3:</td><td colspan="3">6. Actual date of shipment:</td></tr>
<tr><td colspan="6">7. Packaging Type(s) (1): Number of packages:
Special handling requirements: (2) Yes: c No: c</td></tr>
<tr><td colspan="2">8.(a) 1st Carrier (3):
Registration No: Name:
Address:
Tel:
Fax:
E-mail:</td><td colspan="2">8.(b) 2nd Carrier:
Registration No: Name:
Address:
Tel:
Fax:
E-mail:</td><td colspan="2">8.(c) Last Carrier:
Registration No: Name:
Address:
Tel:
Fax:
E-mail:</td></tr>
<tr><td colspan="4">- - - - - - - To be completed by carrier's representative - - - - - -
---------- ----------</td><td colspan="2">More than 3 c carriers (2)
----------</td></tr>
<tr><td colspan="2">Means of transport (1):
Date of transfer: Signature:</td><td colspan="2">Means of transport (1):
Date of transfer: Signature:</td><td colspan="2">Means of transport (1):
Date of transfer:
Signature:</td></tr>
<tr><td colspan="3" rowspan="3">9. Waste generator(s) - producer(s) (4;5;6):
Registration No:
Name:
Address:
Contact person:
Tel: Fax:
E-mail:
Site of generation (2):</td><td colspan="3">12. Designation and composition of the waste (2):</td></tr>
<tr><td colspan="3">13. Physical characteristics (1):</td></tr>
<tr><td colspan="3">14.Waste identification (fill in relevant codes)
(i) Basel Annex VIII (or IX if applicable):
(ii) OECD code (if different from (i)):
(iii) EC list of wastes:
(iv) National code in country of export:</td></tr>
<tr><td colspan="3">10. Disposal facility c or recovery facility c
Registration No:
Name:</td><td colspan="3"></td></tr>
</table>

Address: *Contact person:* *Tel: Fax:* *E-mail:* *Actual site of disposal/recovery (2)*	*(v) National code in country of import:* *(vi) Other (specify):* *(vii) Y-code:* *(viii) H-code (1):* *(ix) UN class (1):* *(x) UN Number:*
11. Disposal/recovery operation(s) *D-code / R-code (1):*	*UN Shipping name:* *Customs code(s) (HS):*

15. Exporter's - notifier's / generator's - producer's (4) declaration:
I certify that the above information is complete and correct to my best knowledge. I also certify that legally enforceable written contractual obligations have been entered into, that any applicable insurance or other financial guarantee is in force covering the transboundary movement and that all necessary consents have been received from the competent authorities of the countries concerned.
Name: Date: Signature:

16. For use by any person involved in the transboundary movement in case additional information is required

17. Shipment received by importer - consignee (if not facility): Signature:
Date: Name:

TO BE COMPLETED BY DISPOSAL / RECOVERY FACILITY

18. Shipment received at disposal facility c or recovery facility c *Date of reception: Accepted: c* *Rejected*: c* *Quantity received: Tonnes (Mg): m3:* **immediately contact competent authorities* *Approximate date of disposal/recovery:* *Disposal/recovery operation (1):* *Name:* *Date:* *Signature:*	*19. I certify that the disposal/recovery of the waste described above has been completed. Name:* *Date:* *Signature and stamp:*

(1) See list of abbreviations and codes on the next page

(2) Attach details if necessary

(3) If more than 3 carriers, attach information as required in blocks 8 (a,b,c).

(4) See list of abbreviations and codes on the next page

(5) Attach details if necessary

(6) If more than 3 carriers, attach information as required in blocks 8 (a,b,c).

(7) Required by the Basel Convention

(8) Attach list if more than one

If required by national legislation

FOURTH SCHEDULE
(rr. 8(2), 18(2))

Fees

Item	*Fee (Ksh.)*
1. Application for licence/permit:	
(a) For transportation of waste	5,000
(b) To own/operate a waste storage, processing, treatment plant and disposal site	5,000.00,
(c) to export waste	5, 000.00
2. License/Permit	
For a license/permit to:	
(a) Transport waste	10, 000.00
(b) Own/operate a waste storage and processing plant/site…	80, 000.00
(c) Own/operate a waste treatment plant and disposal plant/site	100, 000.00
(d) to export waste per consignment	50,0000.00

FIFTH SCHEDULE *(r. 14)*

PART I – WASTES CONSIDERED HAZARDOUS

Category	*Description*
Y0	All wastes containing or contaminated by radio-nuclides the concentration of properties of which result from human activity
Y2	Wastes generated from medical care and/or medical examination in hospitals, clinics, elderly medical care centers and maternity wards and in medical care centers and wastes from medical examination in medical examination laboratories.
Y3	Waste pharmaceutical, drugs and medicines.
Y4	(a) Wastes generated from the production and import of the chemicals including germicides, fungicides, bactericides, ratcides, herbicides and other chemicals for prevention of the breeding and extermination of animals, plants and viruses; and growth promoting chemicals, germination control and other chemicals for the promotion and suppression of physiological activities of plants (hereafter referred to as "biocides etc.").
	(b) Wastes generated from formulation of biocides etc. for sales and grant.
	(c) Wastes generated from sales and use of biocides etc.
Y5	(a) Wastes generated from the production and import of decay-preventing agents, insect control agents and other chemicals for wood preservation (hereafter referred to as "wood preserving chemicals").
	(b) Wastes generated from formulation of wood preserving chemicals for sales and grant.
	(c) Wastes generated from sales and use of wood preserving chemicals.
Y6	(a) Wastes generated from the production and import of organic solvents.
	(b) Wastes generated from formulation of organic solvents for sales and grants.
	(c) Wastes generated from sales and use of organic solvents.
Y7	Wastes from heat treatment and tempering operations containing cyanides.
Y8	Waste mineral oils unfit for their originally intended use.
Y9	Waste oils/water, hydrocarbons/water mixtures, emulsions.
Y10	Waste substances and articles containing or contaminated with Polychlorinated Biphenyls:(PCBs) and/or Polychlorinated Triphynyls (PCTs) and/or Polybrominated Biphenyls (PBBs)

Y11	Waste tarry residues arising from refining, distillation and any parlytic treatment (b) Wastes generated from formulation of inks, etc. for sales and grant.
Y12	(a) Wastes generated from the production and import of inks, dyes, pigment paints, lacquers and varnishes (hereafter referred to as "inks, etc.").
	(b) Wastes generated from formulation of inks, etc. for sales and grant.
Y13	(a) Wastes generated from production and import of resins, latex, plasticizers, glues/adhesives (hereafter referred to as "resins, etc.").
	(b) Waste generated from formulation of resins, etc. for sales and grant.
	(c) Wastes generated form sales and use of resins, etc.
Y14	Waste chemical materials arising from research and development or teaching activities, in the following facilities, which are not identified and/or are new and whose effects on man and/or the environment are not known:
	(a) research and examination institutions owned by central and local governments;
	(b) universities, colleges, junior colleges, professional schools and their subsidiary research and study institutions, and;
	(c) institutions for research and development of products and technologies.
Y15	Wastes of an explosive nature not subject to the Explosives Act, Cap 115
Y16	(a) Wastes generated from the production and import of sensitive chemicals and materials for photographs (hereafter referred to as "photographic chemicals, etc.").
	(b) Wastes generated from the formulation of photographic chemicals, etc. for sales and grant.
	(c) Wastes generated from the sales and use of photographic chemicals, etc.
Y17	Wastes resulting from the surface treatment of metals and plastics.
Y18	Residues arising from industrial waste disposal operations.
Y19	Wastes containing metal carbonyls listed as follows:
	(a) Wastes containing 0.1% or more by weight or any of the following metal carbonyls:
	(b) Iron-pentacarbonyl, Nickel-tetracarbonyl, Methyl cyclopentadienyl manganese- tricarbonyl.
	(c) Wastes containing other metal carbonyls.

Y20 Wastes containing beryllium and/or beryllium compounds listed as follows:

(a) Wastes containing 0.1% or more by weight of any of the following beryllium and/or beryllium compounds:

Beryllium, Beryllium chloride, Beryllium oxide, Beryllium nitrate, Beryllium hydroxide, Beryllium flouride, Beryllium sulfate.

(b) Wastes containing other beryllium and/or beryllium compounds.

Y21 Wastes containing hexavaleut chromium compounds listed as follows:

(a) Wastes containing 0.1% or more by weight of any of the follow hexavalent chromium compounds:

Chromium oxychloride, Chromic acid solution, zinc chromate, Potassium zinc chromate, Potassium chromate, Silver chromate, Strontium chromate, Sodium chromate, Lead chromate, Barium chromate, Bismuth chromate, chromosulphuric acid, chromium trioxide, anhydroulic, Ammonium dichromate, Potassium dichromate, Sodium dichromate, Lead chromate molybdate sulfate.

(b) Wastes containing other hexavalent chromium compounds.

(c) Wastes to be exported for the purpose of DI to D4 or R10 of Annex IV of the Basel Convention which cannot meet the following criteria:

(i) Wastes in solid form, which cannot meet the Ambient Soil Quality Standards determined by the relevant lead agency.

Y22 Wastes containing copper compounds listed as follows:

(a) Wastes containing 0.1% or more by weight of any of the following copper compounds:

Copper acetoarsenite, Copper N, N = Ethylenebis (saricylideneaminate), Cuprous chloride, Cupric chloride, Copper cyanide, Sodium cuprocyanide, Cupriethylenediamine solution, Copper arsenate, and Copper sulfate.

(b) Waste containing 1% or more by weight of any of the following compounds:

Copper (II) diammonium chloride dihydrate, Potassium cupric chloride, Copper acetate, Potassium cuprocyanide, Cupric nitrate, Cupric carbonate, Cuprous thiacyanate, Copper pyrophospate, Cupric fluoride and Cuprous iodide.

(c) Wastes containing copper compounds other than those listed in a) and b) above.

(d) Wastes in solid form to be exported for the purpose of RI0 of Annex IV of the Basel Convention, which cannot meet the Ambient Soil Quality Standards in terms of copper compounds.

Y23 Wastes containing zinc compounds listed as follows:

(a) Wastes containing 0.1% or more by weight of any of the following zinc compounds: Zinc dithionite, Zinc arsenite, Zinc chloride, Zinc cyanide, Zinc arsenate.

(b) Wastes containing 1% or more by weight of any of the following zinc compounds:

Zinc chlorate, Zinc peroxide, Zinc permanganate, Zinc chromate, zinc fluorosilicate, Zinc acetate, Diethlyl zinc, 2,5-Diethoxy 4-morpholinobenzenediazonium zinc chloride, Dimethyl zinc, 4-Dimethylamino-6-(2-dimethyaminoethoxy) toluence -2-diazonium zinc chloride, zinc oxalate, Zinc bromate, Zinc nitrate, zinc thiocyanate, 3-(2-Hydroxyethoxy) 4-pyrrolidin- 1–ylbenzenediazonium zinc chloride, zinc pyrophosphate, Zinc Fluoride, 4-{Benzyl(ethyl) amino}-3-ethoxybenzenediazonium zinc chloride 4-{ Benzyl9methyl) amino}-3-etlioxybenzenediazonium zinc chloride, zinc methylthiocarbamate, zinc sulfate, Zinc phosphide, Zinc phosphate.

(c) Wastes containing zinc compounds other than those listed in (a) and (b) above.

(d) Wastes containing arsenic and/or arsenic compounds listed as follows:

(i) Wastes in solid form, which cannot meet the standards determined by the relevant lead agency in terms of arsenic and/or arsenic compounds.

(ii) Wastes in liquid form, which cannot meet the effluent quality standards in terms of arsenic and/or arsenic compounds.

Y25 Wastes containing selenium and/or selenium compounds listed as follows

(a) Wastes containing 0.1% or more by weight of any of the following selenium and/or selenium compounds:

Selenium, Sodium selenite, Selenium oxychloride, Selenium chloride, Selenic acid, Sodium selenite, Selenium dioxide, Selenium disulphide, cadmium red.

(b) Wastes containing 1% or more by weight of any of the following selenium and/or selenium compounds:

Selenious acid, Barium selenite, Ferrous selenide.

(c) Wastes containing selenium and/or selenium compounds other than those listed in (a) and(b) above.

Y26 Wastes containing cadmium and/or cadmium compounds listed as follows:

(a) Wastes containing 0.1% or more by weight of any of the following cadmium and/or cadmium compounds:

Cadmium, Cadmium Chloride, Cadmium acetate, dihydrate, Cadmium oxide, Cadmium cyanide, Dimethyl cadmium, Cadmium bromide, Cadmium nitrate, Cadmium hydroxide, Cadmium stearate, Cadmium carbonate, Cadmium iodide, Cadmium laurate, Cadmium sulfate, Cadmium yellow, Cadmium red.

(b) Wastes containing cadmium and/or cadmium compounds other than those listed in the (a) above.

(c) Wastes to be exported for the purpose of D) 1 to D4 or RI0 of Annex IV of the Basel Convention, which cannot meet the following criteria:

(i) Wastes in solid form, which cannot meet the Ambient Soil Quality Standards in terms of cadmium and/or cadmium compounds;

(ii) Wastes in liquid form, which cannot meet waste water discharge standards to soil ir terms of cadmium and/or cadmium compound.

(d) Wastes to be exported for purposes other than those listed in the 8 above which cannot meet the following criteria:

(i) Wastes in solid form, which cannot meet standards to be determined by the relevant lead agency in terms of cadmium and/or cadmium compounds;

(ii) Wastes in liquid form, which cannot meet the effluent quality standards in terms of cadmium and/or cadmium compounds.

Y27 Wastes containing antimony and/or antimony compounds listed as follows:

(a) Wastes containing 0.1% or more by weight of any of the following antimony and/or antimony compounds:

Sodium antimonate, Lead antimonate, Antimony pentachloride, Antimonypentoxide, Antimonypentaflouride, Antimony trichloride, Antimony trioxide, Potassium hexahydroxoantimonate (V), Antimony trifluoride, Potassiumantimonyl tartrate, Antimony lactate, Sodiummetaantimonate.

(b) Wastes containing 1% or more by weight of antimony.

(c) Wastes containing antimony and/or antimony compounds other than those listed in (a) and (b) above.

Y28 Wastes containing tellurium and/or tellurium compounds listed as follows:

(a) Wastes containing 1% or more by weight of any of the following tellurium and/or tellurium compounds:

Tellurium, Diethyl tellurium, Dimethyl tellurium.

(b) Wastes containing tellurium and/or tellurium compounds other than those listed in the (a) above.

Y29 Wastes containing mercury and/or mercury compounds listed as follows:

(a) Wastes containing 0.1% or more by weight of any of the following mercury and/or mercury compounds:

Mercury, Mercury benzoate, Ethylmercury chloride, Mercurous chloride, Mercuric chloride, Mercury ammonium chloride, Methylmercuric chloride, Mercuric oxycyanide, Mercery oleate, Mercury gluconate, Mercury acetate, Mercury salicylate, Mercuric oxide, Mercury cyanide, Mercury potassium cyanide, Diethyl mercury, Dimethyl mercury, Mercury (1) bromide, Mercurous, Nitrate, Mercuric nitrate, Phenryl mercuric hydroxide, Mercuric thiocyanate, Mercuricarsenate, Mercury (II) iodide, Mercury potassium iodide, Mercury fulminate, Mercury suphide, Mercurous sulfate, Mercuric sulfate.

(b) Wastes containing 1% or more by weight of any of the following mercury and/or mercury compounds:

Mercury nucleate, Mercurous acetate, Phenylmercury acetate, Phenylmercuric nitrate, Thimerosal.

(c) Wastes containing mercury and/or mercury compounds other than those listed in (a) and (b) above.

(d) Wastes to be exported for the purpose of Dl to D4 or Rl0 of Annex IV of the Basel Convention, which cannot meet the following criteria:

(i) Wastes in solid form, which cannot meet the Ambient Soil Quality Standards determined by the relevant lead agency in terms of mercury and/or mercury compounds.

(ii) Wastes in liquid form, which cannot meet the waste water discharge standards to soil in terms of mercury and/or mercury compounds.

(e) Wastes to be exported for the purposes other than those listed in (d) above and which cannot meet the following criteria:

(i) Wastes in solid form, which cannot meet the standards determined by the relevant lead agency in terms of mercury and/or mercury compounds.

(ii) Wastes in liquid form, which cannot meet the effluent quality standards in terms of mercury and/or mercury compounds.

Y30 Wastes containing thallium and/or thallium compounds listed as follows

(a) Waste, containing 0.1% or more by weight of any of (lie following thallium arid/or thallium compounds:

Thallium chlorate, Thallium acetate, Thallic oxide, Thallium bromide, Thallous nitrate, Thallium iodide, Thallium sulfate.

(b) Wastes containing 1% or more by weight of thallium.

(c) Wastes containing thallium and/or thallium compounds other than those listed in (a) and (b) above.

Y3I Wastes containing lead and/or lead compounds listed as follows:

(a) Wastes containing 0.1% or more by weight of any of the following lead and/or lead compounds:

Lead, Lead azide, Lead arsenite, Lead monoxide, Lead chloride, Basic lead silicate, Lead perchlorate, Lead chromate, Lead silicate, lead acetate, Tribasic lead sulfate, lead cyanamide, tetraalkyllead, Lead cyanide, Lead tetroxide, lead nitrate, Lead hydroxide, lead styphnate, Lead stearate, Lead carbonate, Lead naphtenate, Calcium plumbate, dibasic lead sulfite, Dibasic lead phosphite, Lead srearate dibasic, basic lead phthalate Lead dioxide, Lead flouroborate solution, Lead phosphite dibasic, Lead arsenate, Lead flouride, Lead metaborate, Lead methanesuphonate, Lead iodide, Lead sulfate, Lead iodide, Lead sulfate, Lead chromate molybdate sulfate.

(b) Wastes containing lead and/or lead compounds other than those listed in (a) above.

(c) Wastes to be exported for the purpose of DI or D4 or RI0 in Annex IV of the Basel Convention, which cannot meet the following criteria:

(i) Wastes in solid form, which cannot meet the Ambient Soil Quality Standards determined by the relevant lead agency in terms of lead and/or lead compounds;

(ii) Wastes in liquid form, which cannot meet the waste water discharge standards to soil in terms of lead and/or lead compounds.

(d) Wastes to be exported or imported for purposes other than those listed in (c) above, which cannot meet the following criteria:

(i) Wastes in solid form, which cannot meet the standards determined by the relevant lead agency in terms of Lead and/or lead compounds.

(ii) Wastes in liquid form, which cannot meet the effluent quality standards in terms of Lead and or Lead compounds.

Y32 Wastes containing inorganic flourine compound excluding calcium flouride listed as follows:

(a) Wastes containing 0.1% or more by weight of any of the following inorganic flourine compounds:

Flourosilicic acid, Bromide pentaflouride, Bromide trifluoride, Bromide trifluoride dihydrate, Pottasium biflouride, Difluorphosphoric acid, Ammonium fluoride, Potassium fluoride (spray dide), Chromic fluoric, Hydrofluoride, Ammonium hydrogenfluoride, Hydrofluoric acid, Sodium fluoride, Fluorosulphonic acid, Fluorophosphoric acid Anhydrous, hexafluorophosphoric acid, Fluobolic acid.

(b) Wastes containing 1% or more by weight of any of the following inorganic fluorine compounds:

Ammonium fluoroborate, Ammonium fluorosilicate, Barium fluorids, Barium fluorosilicate, Iodine pentafluoride, Lithium borofluoride, magnesium borofluoride, Magnesium fluorosilicate, manganese fluorosilicate, Potassium fluoroborate, Potasium fluorosilicate, Potassium hydrogen fluoride, Sodium fluorosilicate, sodium hydrogen flouride, stannous fluoride, sodium fluoroborate, zinc fluorosilicate.

(c) Wastes containing inorganic flourine compounds other than those listed in (a) and (b) above.

Y33 Wastes containing inorganic cyanides listed as follows:

(a) Wastes containing 0.1% or more by weight of any of the following inorganic cyanides:

Cyanogen bromide, hydrogen cyanide, hydrocyanic acid aqueous, leadcyanide, mercurycyanide, mercuric potassium cyanide, nickel cyanide, Potassium cyanide, Silver cyanide, sodiumcuprocyanide, Sodiumcyanide, Zinc cyanide.

(b) Wastes containing 1% or more by weight of any of the following inorganic cyanides:

Barium cyanide, Barium platinum cyanide, Calcium cyanide, Copper cyanide, Potassium cobalt cyanide, Potassium cuprocyanide; Potassium gold cyanide, Potassium nickel cyanide.

(c) Wastes containing inorganic cyanide other than those listed in a) and b) above.

(d) Wastes to be exported or imported for the purpose of Dl to D4 or R10 of the Basel Convention which cannot meet the following criteria:

(i) Wastes in solid form, which cannot meet the Ambient Soil Quality Standards determined by the relevant lead agency in terms of inorganic cyanide.

(ii) Wastes in liquid form, which cannot meet the waste water discharge standards to soil in terms of inorganic cyanide.

(e) Wastes to be exported or imported for the purposes other than those listed in (d) above, which cannot meet the following criteria:

(i) Waste in solid form, which cannot meet the standards determined by the relevant lead agency for hazardous wastes in terms of inorganic cyanide;

(ii) Wastes in liquid form, which cannot meet the effluent quality standards in terms of inorganic cyanide.

Y34 Acidic solutions or acid in solid form with pH value of 2.0 or less, or basic solutions or bases in solid form with pH value of 11.5 or more by weight (in case of substances in solid form, pH value of the solution of water-substance has a ratio 1:3 in weight).

Y35 Basic solutions or bases in solid form.

Y36 Wastes containing asbestos in the form of dust or fibers.

Y37 Wastes containing organic phosphorus compounds listed is follows:

(a) Wastes containing 0.1% or more by weight of any of the following organic phosphorus compounds:

Azinphos-ethyl, Azinphos-methyl, Butyl phosphorotrithionate, Carbophenothion, Chlorfenvinphos (I SO), Chlormephos, S{ (6-Chloro-2-oxo-3-brenzosyazolyl) methyl} 0, 0-diethyl phosphorodithioate, ChIorthiophos, Camaphos, Cresyldiphenyl Phosphote, Crotoxyphos, Crufomate, Demephion, Demeton-O-methyl, Demeton-S-methyl, Dialifos, dichlofenthion, dichloromethylphosphine, Dicrotophos, 0, 0-Diethyl-S-2 (ethylthio) ethyl phosphorodithioate, diethyl = 4-nitobenzylaphosphonate, 0-0-Diethyl-0 (5-phenyl-3- isooxazolyl) phosphorothioate, 0, 0-Diethyl-0-3,5,6-trichloro-2-pyriylnphosphorothioate,
Dimefox, 0, 0-Dimethyl-S (1,2-etylthioethyl phosphodithioate, Dimethyl 2,2- dichlorovinylphospate, Dimethyl etylthicethyl dithiophosphate, Dimethylhydrogen phosphite, Dimethyl-methylcarbonylethylthioethyl thiophosphate, 0-0-Dimethyl N- methylcarbamoyl-methyl dithiophosphate, dimethyl-S-(N-methyl-N-formoylcarbamoylmethyl) dithiophosphate 0, 0-Dimethyl-0{3-methyl-4- (methylthio) phenyl} thiophosphate, 0-0-Dimethyl-0-(3-methyl-4-nitrophny) thiophosphate, 0-0-Dimethyls-S-(phenylaceticacidethylester) dithiophosphate, 0, 0-Dimethy phthaloimid methylthiophosphate, Diomethylthiophosphory chloride Dimethyl 2,2,2-richloro-1 hydroxyethyl phosphorate, Dioxathiory, Diphenyl-2, 4,6-trimethylbenzoylphosphine- oxide, Edifenphos, Endothior Ethion, Ethoatemethyl,Ethoprophos, 0-ethyl-0-p-nitrophenylthionobenzenephosphate, Fenamiphos,

Fensulfothion, Fonofos, Hexaethyl tetraphosphate, Hexamethylphosphoric triamide, heptenophos, Isodecyl diphenylphosphate 2-Isopropy 1-4 methylpryrimidyl 6-diethylthiophosphate, Isothioate, Mecarbam, Menazon, Mephosfolan Methamidophos, 2-Methos-4H-1,3,4-thiadiazolyl- (3)-methyl} dimethyl phospholothiolothionate, Methyl parathion, Methyltrithion, Mevinphos Naled, Omethoate, Oxydisulfoton, Oxydemetonmethyl, Paraoxon, Parathion, Pirimiphosethly, Phenkapton, Phorate, Phosfolan, Phosphamidon, Prothoate, Propaphos, Pyrazophos, Pyrazoxon, Quinalphos, Scharadan, Sulprofos, Tetraethyl dithiopyrophosphate, Thionazin, Temephos, Terbfos, Tris (1-aziridinly) phosphine oxide, Triamiphos, Triazophos, Trichloronate, Triethylphosphate Tris (1-aziridinly) phosphine sulphide, Tris (4-methoxy-3, 5 dimethylpehnyl) phosphine, Trixyly phosphate, Tributyl phosphates-S-3-(dimethoxyphosphinyloxy)-N-methylics-crotonamide, Di-(ethylhexyl) phospholic acid, di-(ethylhexyl) phosphoric acid, Triallyl phosphate, Tricresyl phosphate, Tris (isoropylphenyl) phosphate, Tri (2,3-dibromopropyl) phosphate

(b) Wastes containing 1% or more by weight of any of the following organic phosphorus compounds:

Amidothiaate, Bialaphos, 0-4-Bromo-2-chlorophenyl-0-ethyl-S-phopyl phosphorotioate Bromophosethyl, Butamifos, 0-Buthyl-S-benzyl-S-ethyl phosphorodithioate, 2-chloro-1-(2,4 dichlorophenyl) vinyldiethyl phosphate, DEF, Demeton, Demeton-0, Dialkyl phosphodithioate, 0-2, 4-Dichlorophenyl-0-ethyl-S- propylphosphorodithioate, Diethyl- S-benzyl thiophosphate, Diethyl-4-chlorophenylmercaptoethyldithiophosphate, Diethyl- (1,3 dithiocyclopentylidene) thiophosphoramide, Diethyl-4 methylsulfinylphenyl- thiophosphate, 0, 0-Diethyl-0- (3-oxo-2-phenyl-2H-pyridazin-6-yl) phosphorothionate Diethyl-paradimethylamino sulfonylphenylthio phosphate, Diethylthiophosphorylchrolide, 0, 0-Diisopropyl-S-benzylthiophosphate, Diisopropyl-S- (ehtylsulfinylmethyl)-dithiophosphate, Dimethyl-S-pchlorophenylthiophosphate, 0, 0- Dimethyl-0-4 cyanophenyl phosphorothioate, 2,3 (Dimethyldithiophosphro) paradioxan, 0, 0-0-dimethyl-S-2 (ethylsulfiny)- isopropyl-thiophosphate, Dimethyl-{2- (1-

methylbenzyloxycarbonyl)-1-methylethylen)-phosphate 0, 0-Dimethyl 0-0 (3,5,6- trichloro-2-pyridinyl) phosphorothioate, Ehtyl-2-dichlorophenylthionobenzene phosphorate, 0-6-Ethoxy-2- ethylpirimidinyl-0, 0-dimethyl-phosphorothioate, Fosthiazate, Leptopho Mesulfenfos, Meythylcyclohexyl-4-chlorophenylthiophosphate Octyldiphenyl Phosphate, Phenylphosphonic dichloride, Phenylphosphoro thiodichloride, Piperophos, Propetamphos, Pyraclofos, Sulfote Tetraethylpyrophosphate, Temivinphos,

Tributoxyethyl phosphate, Tributyl phosphine, S,S,S-Tributyl phosphorotrithioate, Trietyl phosphate Trimethys phosphate, Trimethyl phosphite, Trioctyl phosphate Tris (chloroethyl) phosphate, Tris (B-chlorophropyl) phosphate, Tris (dichloropropyl) phospate.

(c) Wastes containing organic phosphorus compounds other than those listed in (a) and (b) above.

(d) Wastes to be exported for the purpose of D1 and D4 or R10 of Annex IV of the Basel Convention, which cannot meet the following criteria:

(i) Wastes in solid form, which cannot meet the Ambient Soil Quality Standards determined by the relevant lead agency in terms of organic phosphorus compounds.

(ii) Wastes in liquid form, which cannot meet the waste water discharge standards to oil in terms of organic phosphorus compounds.

(e) Wastes to be exported for the purposes other than those listed in the (d) above, which cannot meet the following criteria:

(i) Wastes in solid form, which cannot meet the standards determined by the relevant lead agency in terms of organic phosphorous compounds.

(ii) Wastes in liquid form, which cannot meet the effluent quality standards in terms of organic phosphorus compounds.

Y38 Wastes containing organic cyanides listed as follows:

(a) Wastes containing 0.1% or more by weight of any of the following organic cyanides:

Acetone cyanhydrin, Acrylonitrile, Adiponitrile, 2-Amino-5 (2-chloro-4-nitrophenylazo) 4-methyl-3-thiophenecarbonitrile, 2,2 B Azobis-{2- (hydroxymethyl) proprienitrile} 2,2, B Azobis B (methylbutyronitrile), Benzonitrile, Bromobenzylcyanides, Bromoxynil, 3- Chloro-4-methylphenyl isocyanate, Cyanazine, a-Cyano-3-phenoxybenzyl-bis (trifluoromethyl) methyl 1-(3,4-isopropylidene) butene-1, 4-decarboxylate, Cyclohexyl isocyanate, 2,6-Dichlorobenzonitrile, dichlorophenylisocyanate, 3,3, B Dimethyl-4-4 B biphenylenediisocyanate, Diphenylmethane-4, 4-diisocyanate, Ethylene Cyanhydrin, Fenpropathrin, Ioxynyl, Isophor diisocyanate, lactonitrile, Melononitrile, Methacrylonitrile, met isocyanate Phenylacetonitrile, Phenyl isocyanate, 0- phthalodinitrile, Propionitrile, Trimethylhexamethylene diisacyanate, Tolylenediisocyanate.

(b) Waste containing 1% or more by weight of any of the following organic cyanides:

Acrylonitrile, 2,2 B Azobis isobutyronitrile, 2,2 B Azobis (2,4- dimethyl-4- methoxyvaleronitrile) 1,1,- B Azobis (2,4-(hexahydrobenzonitrile), Butyronitrile, N- cyanoethyl-monochloroacetoamide, Cyanofenphos (CYP), (RS)-a-cyanophenoxybenzyl, Cyhalothrin, Cyphenothrin, Cyfluthrin, 2, Dibromopropionitrile, 2- Dimethylaminoacetonitryl, Ethyl cyanoacetate, Ethyl isocyanate, Fluvalinate, Hexamethylene diisocyanate, Isobut isocyanate, Isobutyronitrile, Isocyanatobenzotrifluoride, Isoprop isocyanate, Methoxymethyl isocyanate, Methyl isothiocyanate, 3-(N-Nitrosomethylamino) propionitrile, N-Propyl isocyanate, Terephthalonitrile, Tralomethrin, 1,2,5-Trithiocycloheptadiene-3,4,6,7-Tatranitrile (TCH).

(c) Wastes containing organic cyanides other than those listed in (a) and (b) above.

Y39 Wastes containing phenol and/or phenol compounds:

(a) Wastes containing 0.1% or more by weight of any of the following phenol and/or phenol compounds:

2-Aminoanthraquinon, 7-Amoni-4-hydroxy-2 naphthalene sulfonic acid, p-t Butylphenol, Carbolic oil, Chlorophenol, Coal tar, Cresols, Cyclohexylaminophenol, dichiorophenols, 2,4-dichloro-3-methylphenol, 1,4-Dihydro-9, 10 dihydroxyanthracene, 2,4-Dinitro-6-secbuthylphenoldimethyl acrylate, 4,6 Dinitro-0-cresol, 2,4-Dinitrophenol, Dinoseb, Dinosebacetate, Dinoterb, Dinoterbacetate, Dodecylphenol, 0-Ethylphenol Heptyl-1{2,5 dimethyl-4 (2-methylphenylazo) phenylazo-2-naphthol, Hydroxybenzene, Isoamyl salicylate, Medinoterb, Methyl silicylate, Nitrocresols, Nitrophenols, Nonylphenol, Nonylphenol poly (4-12) ethoxylates, Pentachlorophenol, 4-phenoxyphenol, Picric acid, Sodium pentachlorophenate, Trichlorophenols, 2-(thiocyanatomethylthio) benzothiasol, Xylenols.

(b) Waste containing 1% or more by weight of any of the following phenol and/or phenol compounds:

2-Amino-4-chlorophenol, Aminophenols, Ammonium dinitro-0-cresolate Ammonium picrate, Chlorocresols, Diazodinitrophenol, 2,4-Dinitro-cyclohexylpenol, 2,4-Dinitro-6- (1-methylpropyl) phenol Dinitrophenolate, alkali metals, Dinitroresorcinol, Dyes, Hydroquinone, Hydroxysulfonic acid, N-Methylcarbamyl-2-chlorophenol (CPMC), 1 naphtho, Resorcinol, Sodium-2 4-Dichloro-6-nitrophenolate (DNCP) Sodiumdinitro-0- cresolate, 2,4,6-Trinitroresolcinol.

(c) Wastes containing phenol and/or phenol compounds other than those listed in (a) and (b) above.

Y40 Wastes containing ethers listed as follows:

(a) Wastes containing O.1% or more by weight of any of the following ethers:

o-Anisidine, 2-(2-aminoethoxy) ethanol, 2-Amino-dimethoxypirimidine, a-{1-[(Allyloxy) methyl] -2¬(nonylphenoxy) ethyl} -w-hydroxypoli (n=1-100) (oxyethylene), Allylglycidylether, Alkaryl polyether (C9-C20 Alcohol (C6-C17) sec-poly (3-12) thoxylates, alcohol (C12-C15) poly (1-11) ethoxylates, Alcohol (C13-C1 5) lyethoxylates, 1,2-Butylene oxide, Butyl glycidyl ether, Butyl hydroxy anisol, 2-t¬Butyl- 6-nitro-5-[p-(1,1,3,3-tetramethylbutyl) phenoxy] benzoxazole, Carbofran, 4-Chlorobenzyl-4¬ethoxyphenyl ether, p-(2-Chloroethyl) anisol, m-Chloromethylanisol, Coumafuryl, p-Cresidine, Endothal sodium, 2, 3-Epoxy-1-propanol, 2,3-Epoxypropyl-acetate, 2-(2,3-Epoxyproyl)-6¬methoxyphenyl-acetate, a-2, 3-Epoxypropoxyphenyl-w- hydtropoli(n=17) [2-(2,3-epoxypropoxy) benzylidene-2,3-epoxypropoxyphenylene], Ethyleneglycol isopropyl ether, Ethyleneglycol phenyl ether, Ethyleneglycol methylbutyl ether, Ethyleneglycol monoacrylate, Ethyleneglycol monobutyl ether, Ethyleneglycol monobutyl ether acetate, Ethyleneglycol monoethyl ether, Ethyleneglycol monoethyl ether acetate, Ethyleneglycol monomethyl ether, Ethyleneglycol monomethyl ether acetate, Ethyleneglycol mono-n-propyl ether, Ethyl 3-ethoxypropionate, Safrole, Propylene oxide, Di-(2¬chloro-iso-propyl) ether, B, B '-Dichloroethyl ether, 3,3' - Dichloro-4 4' -diaminodiphenyl ether, 1,3¬Dichloro-2-methoxy-5-nitrobenzene, Disodium=6-(4-amino-2,5-dimethoxyphenylazo)-3-[4-(4¬amino-sulfonatephenylazo)-2, 5-dimethoxyphenylazo]-4- hydroxy-2-naphthalenesulfonate, Diphenyl ether, Dipropyleneglycol monobutyl ether, Dipropyleneglycol monomethyl ether, Din-pentyl ether, Styreneoxide, Petroleum ether, Tetrahydrofuran, Dodecylphenoxybenzene disulphonate (solns.), Drazoxolan, Triethyleneglycol monoethyl ether, Triethyleneglycol monomethyl ether, 2, 4, 6¬Tris(chloromethyl)-1, 3, 5-trioxane, 3, 3, 3-Trifluoro-1, 2- epoxypropane, Tripropyleneglycol monomethyl ether, Trimethylolpropane polyethoxylate, 5-[N,N-Bis(2-acetoxyethyl)amino]-2-(2¬bromo-4,6-dinitorphenylazo)-4- methoxyacetanillide, 1,6-Bis(2,3-epoxypropoxy) naphthalene, 4,4' - Bis (,3-epoxypropoxy) biphenyl, 1,1-Bis[p-(2,3-epoxypropoxy) phenyl] ethane, 1,1-Bis[p-(3- chloro¬2-hydroxypropoxy) phenyl] ethane, Bis(chloromethyl) ether,4,6-Bis(difluoromethoxy)-2¬methylthiopyrimidine, Tributyltin oxide, Bisphenol A diglycidylether, Diglycidyl ether of Bisphenol F, Ethyl vinyl ether, Phenylglycidylether (RS)-1-(4- Phenoxyphenoxy)-2-propanol, Dihydro-2 (3H) -furanone, Butoxyl, Brucine, Furfural, Furfurylalcol, B-Propiolactone, 2,3-Epoxypropyl-propyonate,

Propyleneglycol monoalkyl. ether,Propyleneglycol monomethyl ether acetate,ropoxur, 1-Bromo-4-(2,2 dimethoxyethoxy)-2,3-dimethylbenzene, 1,1' - [Oxybis(methylene)bis(benzene)] Polyethyleneglicol monoalkyl ether, Methylhloromethyl ether, 2-Methoxy-2-methylpropane, 4-Methoxy-2,2', 4' - trimethyldiphenylamine, 1-(4-Methoxyphenoxy_-2- (2-methylphenoxy) ethane, Morpholine, Resorcinol diglycidyl ether, Rotenone

(b) Wastes containing 1% or more by weight of any of the following ethers:

Acetal, Anisol, N-Aminopropylmorpholine, Allilethylether, Ethylpropyl ether, Ethyleneglycol diethyl ether, Ethyleneglycol diglycidyl ether,Ethyleneglycol dimethyl ether, 3-Ethoxypropylamine, 1,2-Epoxy-3¬ethoxypropane, Glycidol, Chloroethyl vinyl ether, Chloromethyl ethyl ether, Diallil ether, Diethyleneglycol dimethyl ether, Diethyleneglyco 1 monobutyl ether, Di-2-ethoxyethyl peroxydicarbonate, 3, 3 Diethoxypropene, Diethoxymethane 2,5-Diethoxy-4-morpholino benzenediazonium zinc chloride, 1,3-Dioxane, Dioxolan, 2,3 -Dihydropylae, Diphenylsulphide, Dibutyl ether, Dipropyl ether, 4-Dimethylamino-6 (2-dimethyaminoethoxy) toluene-2-diazonium zinc chloride, Dimethyldiethoxysilane, Dimethyldioxane, Dimethoxyisopropylperoxydicarbonate, 1,1¬Dimethoxyethane, Di-methoxybutyl peroxydicarbonate, 2,2-Dimethoxypropane, Tetrahydrofurfurylamine, Triglycol dichloride, Trinitroanisole, Trinitrophenetole, Nitroanisol, Neopentylglycol diglycidyl ether, 3-(2-Hydroxyethoxy)-4-pyrrolidin-1-ylbenzenediazonium zinc chloride, Isobutyl vinylether, Phenetidines,Phenetole, Phenoxyethylacrylate, Ethylbutyl ether, n-Butyl methyl ether, Furan, Furfurylamine, Furfurylmercaptan, 2 Bromoethylethylether, 4- [Benzyl (ethyl) amino] -3-ethoxybenzenediazonium zinc chloride- [Benzyl(methyl) amino]-3¬ethoxybenzenediazonium zinc chloride, benfuracarb, Tetrahydrofurfuryl methacrylate, methylal,Methyltetrahydrofuran, 2-Methylfuran, Methylpropyl ether, Methyl-3-methoxybutanol, N¬Methylmorpholine, 4-Methoxy-4-methylpentane-2-one

(c) Wastes containing ethers other than those listed in a) and b) above Y41 Wastes containing halogenated organic solvents listed as follows:

(i) Wastes containing O.1% or more by weight of any of the following halogenated organic solvents:

Chloropropanes, Chloropropenes, Chlorobenzene, Chloroform, Carbontetrachloride, Dichloroethanes, Dichloroethylenes, Dichloropropanes Dichloropropenes, Dichlorobenzene, Methylenehloride, Dibromoethanes, Tetrachloroethane, Tetrachloroethylene, Tetrabromoethane, Tetrabromomethane, Trichloroethanes,

Trichloroethylene, Trichloro-trifluoroethane, 1,2,3Trichloropropane, 1,2,4Trichlorobenzene, Pentachloroethane

(ii) Wastes containing 1% or more by weight of any of the following halogenated organic solvents: 1,1-Dichloro-1-nitroethane, 1,4-Dichlorobutane, Dichloropentanes, Bromoform

(iii) Wastes containing halogenated organic solvents other than those listed in (i) and (ii) above;

(iv) Wastes in liquid form to be exported for the purpose of D1 to D4 or R10 of Annex VI of the Basel Convention, which cannot meet the waste water discharge standards to soil in terms of tetra-chloro¬ethylene and/or tri-chloro-ethylene

(v) Wastes to be exported for the purposes other than those listed in the above (iv), which cannot meet the following criteria;

(aa) Wastes in solid form, which cannot meet the standards determined by the relevant lead agency for hazardous wastes in terms of tetra-chloro-ethylene and/or tri-chloro-ethylene;

(bb) Wastes in liquid form, which cannot meet the standards of the effluent quality standards in terms of tetra-chloro-ethylene and/or tri-chloro-ethylene.

Y42. Wastes containing organic solvents excluding halogenated solvents

(a) Wastes containing 0.1% or more by weight of any of the following organic solvents:

Acrolein, Diisononyly adipate, Acetaldehyde, Ethyl acetoacetate, Methyl acetoacetate, Acetophenone, Acetone, Aniline Allylalcohol,Alkylbenzenes,benzylbenzoate, Methyl benzoate, Isoamyl alcohol,Isooctanol, Isooctane,isononyl alcohol, Isobutanol, Iso Butylamine, 4-Methyl-2-pentanone, Isopropylamine, Isopropyl alcohol, Isopropyl cyclohexane, isopropyl toluene, 3-Methyl-2-butanone, Isopentane, Isopentene, Isobutyric acid, Ethanolamine, Ethylanilines, Ethylamine, Ethylcyclohexane, N¬Ethyl cyclohexylamine, 2-Ethylbutanol, N Ethylbutylamine, Ethyl-butylketone, 2-Ethyl-3- propyl acrolein, Ethyln-propyl ketone, 2-Ethylhexanol, 2-Ethylhexylamine, Ethyl n- penthyl ketone, 2-Butanone, Ethyleneglycol diacetate, Ethylene glycol, Ethylenediamine, Octanol, Octane, Octanes, Formic acid, Isobutyl formate, n-Butyl formate, Methyl formate, Quinoline, Dimethyl succianate, Acetic acid, Isobutyl acetate, isopropyl acetate, isopentyl acetate, Ethyl acetate, Ethylbutyl acetate, n-Octyl acetate, Cychlohexyl acetate, n-Decyl acetate, n-Nonyl acetate, Vinyl acetate, 2-Phenyl ethyl acetate, Butyl acetate, sec-Butyl acetate, n-Propyl acetate, n-Hexyl acetate, sec-Hexy acetate, Heptyl acetate, Benzyl

acetate, pentyl acetate, sec-Pentyl acetate, methyl acetate, Methylpentyl acetate, Mesityl oxide, Diisobutylamine, Diisobutyl ketone, Diisopropanolamine, Diisopropylamine, N, N e,Diethylaminoethanol, Diethylamine, Diethylenetriamine, Cyclohexanol, Cyclohexanone,Cyclohexane, Cyclohexylamine, Cycroheptane,Cyclopentane, Cyclopentene, Dicyclohexylamine, Di-n—butylamine, Dipropylamine, Dipentene, N, N-Dimethylacetamide, N, N-Dimethylaniline, Dimethylamino azobenzene, 2-dimethylaminoethanol, 2,6-Dimethyl-4-heptanol, N, N- Dimethyl formamide, Diethyl oxalate, Camphor oil, Styrene, Butyl stearate, Tetrahydrothiophene-1, I-dioxide, Petroleum naphtha,Petroleum benzine, Dimethyl sebacate, Solvent naphtha, Diethyl carbonate, Dimethyl carbonate,Decanol, Decene, Tetraethylenepentamine, Tetrahydronaphthalene, Turpentine oil, Dodecanol, 1- Dodecylamine, Triethanolamine, Triethylamine,Trietylenetetramine, Tributylamine, Tripropylamine, Toluidine, Naphthalene, Nitroethane, Nitroxylenes,O-Nitrotruene, Nitoropropanes, Nitrobenzene, Nitromethane, Ethyl lactate, Butyl lactate, Carbon disulfide, Nonanol, Nonane, Nonene, Paraldehyde, Methyl palmitate, Picolines, 4- Hydroxy-4-methyl-2-pentanone, Pinenes, Pyridine, Phenyl ethyl alkyl, 1-Phenyl-1¬xylylethane, n-Butanol, 2-Butanol, Dialkyl phtalates, Bis (diethyleneglycol) phthalate, Butyl benzylphthalate, Butanediols, n-Butylamine, sec-Butylamine, tert-Butylamine, 1,3- Propane sultone, Propionic acid, n-Amyl propionate, Ethyl propionate, n-Butyl propionate, Methylpropionate, Propylamine, Hexanol, Hexane, Hexenes, Heptanols, Heptane, n—Heptene, Benzyl alcohol, Benzene, 1,3-Pentadiene, Pentanols, n-Pentane, Pentenes, Formamide, White spirit, Di-n-butyl maleate, Methyl myristate, Methanol, Methallyl alcohol, Methylamine, Methyl iso-amylketone, 7-Methyl-1, 6-octadiene, 2-Methylcyclohexanol, Methylcyclohexanone, Methycyclohexane, Methylcyclopentane, I- Methyl naphthalene, Methyl n-pentyl ketone, Methyl butanol Metju; nitu; letame, Methyl butanol, 2-Methyl hexane, Methyl n-hexylketone, Methyl heptyl ketone, Methylpentanol, 2-Methyl pentane, 2-Methyl-1¬pentane, 4-Methyl-1-pentane, Ethyleneglycol monoacetate, Methyl laurate, Butyric acid, Ethyl butyrate, Vinyl butyrate, n-Butyl butyrate, Methyl butyrate, Ligroin, Dimethylsulfide, Dimethylsulfate

(b) Wastes containing 1% or more by weight of any of the following organic solvents:

Allylamine, Methyl valerate, Methyl isopropenyl ketone, Isobutyl isobutyrate, Isopropyl isobutyrate, Ethyl isobutyrate, N-Undecane, Ethyl alcohol, N-ethyltoluidine, Allyl formate, Ethyl formate, Propyl formate, Pentyl formate, Allyl acetate, Isopropenyl acetate, tert-Butyl acetate, Diallilamine,

Diisopropyl ketone, Diethyl ketone, Diethylenglycol, Cyclohexene, Cycroheptene, Cycropentanol, Cycropentanone, Dipropyl ketone, Dimethylcyclohexane, Dimethyl sulfoxide, 2,3-Dimethylbutane, 1,3¬Dimethylbutylamine, Dioctyl sebacate, Dibutyl sebacate, Thiophene, n-Decane, Tetrahydrothiophene, Terpinolene, Triallilamine, Trimethylene glycol, Methyl lactate, Dimethyl disulphide, Acetyl methyl carbinol, Vinyltoluene, Piperidine, 3-Butanol, Butylmercaptan, 1,4-Butynediol, n-Propanol, Isopropyl propionate, Isobutyl propionate, 4-Methyl-1,3 -dioxacyclopentan-2-one, 1,2-Propylenediamine, 2¬Methyl-2,4-pentanedil, Pentamethylheptane, Pentane-2,4-dione, Triisopropyl borate, Ethyl borate, Trimethyl borate, Butyric anhydride, N-methylaniline, Methyl vinyl ketone, N-Methylpiperidine, Methyl propyl ketone, 5-Methylhexan-2-one, Isopropyl butyrate, Isopentyl butyrate, Pentyl butyrate

(c) Wastes containing organic solvents other than those listed in a) and b) above Y43 Any congener of Polychlorinated debenzo-foran.

Y44 Any congener of Polychlorinated dibenza-p-dioxin.

Y45 Wastes containing organohalogen compounds other than substances referred to in this Schedule, listed as follows:

(a) Wastes containing 0.1% or more by weight of any of the following organohalogen compounds:

1-(Acetylamino)-4-bromoanthraquinone, Atrazine, 2-Amino-2-chloro-5- nitrobenzophenone, (6R,7R)¬7-Amino-3-chloromethyl-8-oxo-5-thia-1-azabic ycro(4,2,O)-octa-2-ene-2-carbonicacid=4¬methoxybenzyl, Methyl aminodithio-2-chloropropionate hydrochloride, 2-Amino-3,5¬dibromothiobenzamide, 2-Chloro-2', 6'- diethyl-N-(methoxymethyl) acetanilide, Alidochlor, Aldrin, Isodrin, Imazalil, Ethyl-3, 5- dichloro-4-hydroxybenzoate, Ethyl-3, 5-dichloro-4¬hexadecyloxycarbonyloxybenzoate Ethylene chlorohydrine, Epichlorohydrin, Acetyl chloride, Anisoil chloride, Allyl chloride, Choline chloride, Chlorinated paraffins (C10-13), Pyrosulphuryl chloride, Benzylidene chloride, Benzyl chloride, Benzoyl chloride, Endrin, Captafol, Canphechlor, Coumachlor, Crimidine, Chloral, Chlordimeform, Chlordane, Chlorendic acid, Chloroacetaldehyde, Chloroacetone, Chloroanilines, 4-Chloro-2-aminotoluene hydrochloride, 1-Chlorooctane, 1¬Chloroethylchloroformate, 1-Chloro-3-(4-Chlorophenyl)hydrazone-z-propanol Monochloroacetic acid, Chlorodinitrobenzene, 3- Chloro-1, 2-dibromopropane, 1-Chloro-3, 3-dimethyl-2-butanol, Ethylchlorothioformate, 2-Chloro-5-trifluoromethylnitrobenzene, Chlorotoluidines, Chlorotoluenes, 2¬Chloronicotinic acid, Chloronitroanilines, 4-Chloro-2-nitrotoluene, N-(2-Chloro-3- nitro-6-pyridyl) acetamide, 4-(2-Chloro-4-nitrophenylazo)-N-(2-cyanoethyl)-

N-phenety aniline, Chloronitrobenzenes, Chloropicrin, Chlorohydrins, Chlorophacinone, 4-Chloro- o-phenylenediamine, 3-Chloro-2¬fluoronitrobenzene 3-Chrolo-4-fluoronitrobenzene, Chloroprene, 2-Chloropropionic acid, 3¬Chloropropyonic acid, 1-chlorohexane, 1- chloroheptane, p-Chlorobenzylchloride, p¬Chlorobenzotrichloride, Chloromethyl=p- tolyl=ketone, 2-(4-Chloromethyl-4-hydroxy-2-thiazoline-2yl guanidine=chloride, Methyl 2-[(chloromethyl) phenyl] propionate, (2S)-3-Chloro-2-methylpropyonic acid, (Z)-4- Chloro-2-(methoxycarbonylmethpoxyimiono)-3-oxob utyric acid, 2-Chlorobutyric acid, kepone, Kelevan, 1-Chroloformyl-1-methylethyl acetate, 1-Bromoformyl-1-methylethyl acetate, Benzotrichloride, 3,5-Diaminochlorobenzene, Diallate, Silicon tetrachloride, Diglycol chlorohydrin, Cycrohaexenyltrichlorosilane, 3,4-Dichloroaniline 4, 5-Dichloro- p-n-octylisothiazole-3-one, Dichloroacetic acid, Methyldichloroacetate, 3, 3'-Dichloro- 4,4' -diaminodiophenylmethane, 3,5¬Dichloro-4-(1,1,2,2-tetrafluoroethoxy) aniline, 1,4- Dichloro-2-trichlorosiryl-2-butee, 2,4-Dichloro-5¬trifluoromethylnitrobenzene, 1,4-Dichloro-2-nitrobenzene, 2,2-Dichloro-5-nitrobenzophenon, 2,4¬Dichlorophenoxyacetic acid diethanolamine, 2,4-Dichlorophenoxyacetic acid diethylamine, 2,4¬Dichlorophenoxyacetic acid triisopropanolamine, 2,4-Dichloro-3-fluorene trobenzene, 1,3-Dichloro¬4-fluorobenzene, 2,3-Dichloro-1-propanol, 2,2-Dichloropropioniccid, Methyl 2,3-dichloropropionate, Dichlorobromomethane, 1,6- Dichlorohexane, 2,6-Dichloro-3-perchloromethyltoluene, 4,5-Dichloro¬2-perchloromethyltoluene, Dichrolobenzidine, 2,2-Dichloro-3-pentanon, 2,4-Dichloro-3- pentanon, 2,6-Difluoroaniline, 3,4-Difluoronitrobenzene, 2-Dibromoethylene 2'-(2,6-Dibromo-4¬nitrophenylazo)-5'-diethylaminoace toaniride, 2,3-Dibromopropionate,, Dibromomethane, Simazine, Acetyl bromide, Allyl bromide, Sulfallate, Cyclohexyl-1-iodoethyl=carbonate, DDT (chlorophenothane), 2,4-DB((2,4-dichlorophenoxy) butyric acid), Dieldrin, 2,26,6¬Tetrachlorocycrohexanon 2,2', 4,4'-Tetrachlorobenzophenon, Tetrahedra-5, 5-dimethyl-2(1H)¬pyrimidinone [p-trifluorome thyl)-a-[p-(trifluoromethyl) styryl]Cynamiliden] hydrazone, 2,2,3,3¬Tetrafluoroxetane, Diuron, Telodrin, Toxaphene, 1-(4-Chlorophenonxy)-3,3-dimethyl-1-(lH-l, 2,4¬triazol-1-y1)-2-butanone Trichloroacetylchloride, 2,2,6-Trichloro-6-(1-chloroisobutyl) cycrohexanon, Trichloroacetic acid, 2,4,6-Trichloro-1,3,5-triazine, 2,2,3 -Trichloro-3-phenyl-1, 1-propanediol, 2,4,5¬Trichlorophenoxyacetic acid, Trichlorobutene, Perchloromethylmercapan, 2-Trichloromethyl-5-(4¬hydroxystyryl)-1,3,4-oxadiazole, Sodium trifluoroacetate, 2,3,4-Trifluoronitrobenzene, Nitrobenzotrifluoride, Trimethylacetylchloride,

Trimethylchlorosilane, Sodium=4-(2,4-dichloro-m¬toluol)-1,3- dimethylpyrazole-5-oleate, Nitrofen, Paraquat, 5'-tBis(2-acetoxyethyl) amino]-2'- (2¬chloro-4-nitrophenylazo) acetanilide 4- (p-Bis(2-chloroethyl) aminophenyl) butyric acid, odomethylpivalate 2-t-Butyl-5-chloro-6-nitro-benzooxazole, O-3-t-Butylphenyl - chlorothioformate, 2-Chloro-1-propanol, 4-Bromo-3-oxobutyroanilide, 1-Bromo-2- chloroethane, Ethyl bromoacetate, 3¬Bromopropionic acid, Ethyl 3-bromopropionate, (E)-3-[p-(Bromomethyl) phenyl) acrylic acid, Ethyl (E)-3-[p-(bromomethyl) phenyl] acrylate, 3-Bromo-2-methylpropionic acid 4-Bromo-2¬methoxyimino-3- oxobutyryl=chloride, Hexachlorocyclohexane, hexachloro-1, 3-butadiene, Hexachlorobenzene, Heptachlor, Perfluoroprpoxy-1,1,2-trifluoroethylene, I-Benzyl-2- (chloromethyl) imidazole=chloride, Hexachloro-hexahedra-methano-dioxathiepine oxide, N-[B-(benzol) furan-2-yl) acrylol-N'-trichloroacetohydrazid, Pentachloronaphthalene, Pentafluoroiodoethane, Mirex, 2-Methyl-4¬chlorophenoxy-acetic acid, Methyltrichlorosilane, 2-Methyl-3-trifluoromethylaniline, Methylphenyldichlorosilane, Methrachlor, 2-Mercaptobenzothiazol, Monofluoroacetic amide, Acetyl iodide, Allyl iodide, Methyl iodide, 3-Iodopropionic acid

(b) Wastes containing 1% or more by weight of any of the following organohalogen compounds:

Isopropyl-N-(3-chlorophenyl) carbamate (IPC), Imidacloprid, Echlomezole, Ethychlozate, Epibromohydrin, (4-Chloro-2-methylphenxoy) acetic acid, Isobutyryl chloride, Butyryl chloride, Propionyl chloride, Pentyl chloride N'-(2-Methyl-4- chlorophenyl)-N,N-dimethylformamizine chloride, Oxadiazon, 2-Chloro-4, 5- dimethylphenyl-N-methylcarbamate, Chlorphenamidinel-[3, 5-Dichloro-4¬(3-chloro-5- trifluoromethyl-2-pyridylox y) phenyl]-3-(2, 6-difluorobenzoyl) urea, Chlormequat, Chloroacetonitryl, Chloro acetophenone, Chloroanisidine, Allyl chloroformate, Isobutyl chloroformate, Isopropyl chloroformate, Ethyl chloroformate, 2-Ethylhexyl chloroformate, 2-Ethoxyethyl chloroformate, Chloromethyl chloroformate, Cyclobutyl chloroformate, Phenyl chloroformate, n-Butyl chloroformate, sec-Butyl chloroformate, t- Butylcyclohexyl chloroformate, 2-Butoxyethyl chloroformate, n-Propyl chloroformate, Benzyl chloroformate, Methyl chloroformate, Isopropyl chloroacetate, Ethyl chloroacetate, Sodium chloroacetate, Vinyl chloroacetate, Methyl monochloroacetate, 1- Chloro-1,2-dibromoethane, 2-Chloropridine, Chlorobutanes, 3-Chloro-1¬propanol, Glycerol a-monochlorohydrin, Isopropyl 2-chloropropionate, Ethyl 2-chloropropionate, Methyl 2-chloropropionate, I-Chloro-3-bromopropane, Dichlorobenzylicacid ethyl ester, p - Chlorobenzoyl chloride, Chlorobenzotrifluorides, 1,1-Bis(p-chlorophenyl)-2,2,2 -

trichloroethanol, 2,4,6-Trichlorophenyl-4'-nitrophenyl ether, 1,4,5,6,7,7- Hexachlorobicyclo(2,2,1) hept-5-ene-2,3-d carboxylic acid di-2-propenylester, Dicloro dinitromethane, Dichlorobutyne, 1,3-Dichloroacetone, 2,5-Dichloroaniline, 3,5- Dichloroaniline, B, B'-Dichloroethyl hormal 1,1'-Ethylene-2, 2'¬dipyridiliumdibromide, Dibromochloropropane 3,5-Dibromo-4-hydroxy-4'-nitroazobenzene (BAB), 1,2-Dibromobutan-3-one, m-Dibromobenzen, Bromoacetone, Isopropyl bromide, Ethyl bromide, Xylol bromide, Diphenylmethyl bromide, Phenacyl bromide, n-Buthyl bromide, 2-Bromobutane, Benzyl bromide, Thiochlormethyl, 1,1,2,2-Tetrachloronitoroethane, Methyl tricloroacetate, Trichloronitroethylene, 2,4,5-Trichlorophenoxyacetic acid butoxyethylester, 2,4,5¬Trichlorophenoxyacetic acid methoxyethylester, 2,4,6-Trinitrochlorobenzene, Trinitrofluorenone, Trifluoroacetate acid, Trifluoromethanesulfonic acid 2-Trifluoromethylaniline, 3¬Trifluoromethylaniline, N,N'-[1,4-Priperazinediylbis(2,2,2,-trichloroethylide ne)] bisformamide, Nitrobromobenzene, n-Valerylchloride, Halofuginone, Isopropyl p,p'-dibromobenzilate, Fluoroaniline, Fluoroacetic acid, Fluorotoluene, Fluorobenzene, Fulsulfamide, Methyl bromoacetate, 3¬Bromopropyne, Bromobenzene, 2-Bromopentane, I-Bromo-3- methylbutane, Bromomethylpropane, Hexachloroacetone, Hexachloro-1,3- cyclopentadiene, Hexachlorophene, Hexythiazox, Permethrin, Benzotrifluoride, Benzoate Pentyltrichlorosilane, Methylallyl chloride, Methyl bromoacetone, Sodium fluoroacetate, Monofluoroacet-p-bromoanilide, N-(p-Bromobenzyl) monofluoroacetamide, n-Butyl iodide, Benzyl iodide, 2-Iodobutane, Iodopropanes, Iodomethylpropane, Hexafluoroacetone

(c) Waste containing or contaminated with polychlorinated biphenyls (PCBs) and/or polychlorinated triphenyls (PCTs) and/or polybrominated biphenyls (PBBs) of 50 ppm or more by weight.

(d) Wastes other than the organic halogen compounds given in a), b), and c) (excluding wastes listed in other items)

(e) Wastes to be exported for the purpose of D1 to D4 or R10 of Annex IV of the Basel Convention, which cannot meet the following criteria:

(i) Wastes in solid form, which cannot meet the Ambient Soil Quality Standards in terms of PCB determined by the relevant lead agency.

(ii) Wastes in liquid form, which cannot meet the waste water discharge standards to soil in terms of PCB.

(f) Wastes to be exported or imported for purposes other than those in e) above, which cannot meet the following criteria:

(i) Wastes in solid form, which cannot meet the standards in for hazardous wastes in terms of PCB

(ii) Wastes in liquid form, which cannot meet the standards for effluent quality standards in terms of PCB.

Y46 Wastes collected from households

Y47 (a) Residues arising from the incineration of household wastes

(b) Plastic waste, including mixtures of such waste, with the exception of the following:

(i) Plastic waste that is hazardous waste pursuant to paragraph 1 (a) of Article 1;

(ii) Plastic waste listed below, provided it is destined for recycling in an environmentally sound manner and almost free from contamination and other types of wastes.

Y48 Plastic waste almost exclusively11 consisting of one non-halogenated polymer, including but not limited to the following polymers:

Polythylene (PE), Polypropylne (PP), Acrylonitrile butadiene styrene (ABS), Polyethlene terephthalate (PET), Polycarbonates (PC), Polyethers

PART II — LIST HAZARDOUS CHARACTERISTICS OF WASTES
UN CODE CHARACTERISTICS CLASS

Un Class	*Code*	*Characteristics*
1	HI	*Explosive* An explosive substance or waste is a solid or liquid substance or waste (or mixture of substances or wastes) which is in itself capable by chemical reaction or producing gas at such a temperature and pressure and at such a speed as to cause damage to the surroundings.
3	H3	*Flammable Liquids* The word "flammable" has the same meaning as "inflammable". Flammable liquids are liquids, or mixtures of liquids, or liquids containing solids in solution or suspension (for example paints, varnishes, lacquers and others but not including substances or wastes otherwise classified on account of their dangerous characteristics) which give off a flammable vapour at temperatures of not more than 60.5ºC, closed-cup test, or not more than 65.6ºC open-cup test (since the results of open-cup tests and closed-up tests are not strictly comparable and even individual results by the same tests are often variable, regulations varying from the above figures to make allowance for such difference would be within the spirit of this definition).
4.1	H4.1	*Flammable Solids* Solids or waste solids, other than those classed as explosives, which under conditions encountered in transport are readily combustible, or may cause or contribute to fire through friction.
4.2	H4.2	Substances or wastes liable to spontaneous combustion Substance or wastes which are liable to spontaneous heating under normal conditions encountered in transport or to heating up on tract with air, and being then liable to catch fire.
4.3	H4.3	Substances or wastes which, in contact with water emit flammable gases; substances or wastes which, by interaction with water, are liable to become spontaneously flammable or give off flammable gases in dangerous quantities.
5.1	H5.1	*Oxiding* Substances or wastes which, while in themselves not necessary combustible, may generally, by yielding oxygen, cause or contribute to the combustion of other materials.
5.2	H5.2	Organic Peroxides Organic substances or wastes which contain the bivalent 0-0-structure are thermally unstable

		substances which may undergo exothermic self accelerating decomposition.
6.1	H6.1	*Toxic or Poisonous (Acute)* Substances or wastes liable either to cause death or serious injury to the human health if swallowed or inhaled or by skin contact.
6.2	H6.2	Infectious substances extremely hazardous to health Substances or wastes containing viable micro-organisms or their toxins which are known or suspected to cause disease in animals or humans.
8	H8	*Corrosives* Substances or wastes which, by chemical action, will cause severe damage when in contact with living tissue, or in the case of leakage will materially damage, or even destroy, other goods in the means of transport; they may also cause other hazards.
9	9.H10	Liberation of toxic gases in contact with air or water Substances or wastes which by interaction with air or water, are liable to give out toxic gases in dangerous quantities.
9	H11	*Toxic (delayed or chronic)* Substances or wastes which, by interaction with air or water, are liable to give out toxic gases in dangerous quantities. Substances or wastes which, if they are inhaled or ingested or if they penetrate through the skin may involve delayed or chronic effects, including carcinogenicity.
9	H12	*Ecotoxic* Substances or wastes which, if released present or may present immediate or delayed adverse impacts to the environment by means of bio-accumulation and/or toxic effects upon biotic systems.
9	H13	Capable, by means, after disposal, of yielding another material e.g. leachate which possesses any of the characteristics listed above.
10	H14	Radioactive waste
11	H15	Persistent waste; waste which contaminate the environment for long periods of time.
12	H16	Carcinogenic wastes which may lead to development of cancer in human beings or animals.

SIXTH SCHEDULE

(r. 17(1))

STANDARD FOR TREATMENT AND DISPOSAL OF WASTE

A. Classification of Incinerators

Class 1: Industrial Plants Burning Waste as an Additional/Alternative Fuel

Incinerators in which the waste serves as the fuel or supplementary fuel in an industrial process (e.g. the use of cement kilns or any other industrial boilers or furnaces for the disposal of noxious or hazardous materials).

Class 2 Industrial Incinerators

Class 2A: Commercial

Incinerators for the disposal of waste that contains hazardous, potential hazardous and bio-medical waste where the operator exceeds 100 kilograms per day.

Class 2B: Small Scale Incinerators for Private Use

Incinerators for the disposal of hazardous, potential hazardous and bio-medical waste where the operator does not exceed 100 kilograms per day.

Class 3: General waste Incinerators

Incinerators for general waste that is non-toxic, non-hazardous, non-medical or does not contain organic halogens, i.e., selected customs, police, contraband goods, offices waste, commercial waste and industrial wastes) where the operator does not exceed 1 ton/ day.

STANDARDS, PROCEDURE FOR INSTALLING/OPERATING INCINERATORS

No.	*Parameter*	*Standards, Guideline, Criteria and Procedure*
1	Basic Plant Design	An approved plant must have four distinct sections that demonstrate three principles of Turbulence, Residence Time and Temperature are inbuilt in the plant design. The regulated sections may include but not limited to: (i) Overall plant layout. (i) Feed chamber/ charging (ii) Primary Combustion Chamber. (iii) Secondary Combustion Chamber. (iv) Particulate Scrubbers (v) Acid Gas Scrubbers (vi) The stack/ chimney

2	Feeding and Charging	Controlled hygienic, mechanical or automatic feeding methods have to be used which will not influence the air temperature in the primary and secondary chambers of the incinerator negatively. No waste is to be fed into the incinerator: 1. Until the minimum temperatures have been reached. 2. If the minimum combustion temperatures are not maintained. 3. Whenever the previous charge has not been completely combusted in the case of batch feeding. 4. Until such time as the addition of more waste will not cause the design parameters of the incinerator to be exceeded.
3	Primary Combustion Chamber	The primary combustion chamber must: 1. Be accepted as the primary combustion zone. 2. Be equipped with a burner/s burning gas/fuel or low sulphur liquid fuels. Other combustion methods will be judged on merits. 3. Ensure primary air supply is controlled efficiently 4. Ensure minimum exit temperature is not less than 850ºC
4	Secondary Combustion Chamber (Afterburner).	The secondary combustion chamber must: 1. Be accepted as secondary combustion zone. 2. Be fitted with secondary burner/s burning gas or low sulphur liquid fuel or any suitable fuel. 3. Ensure secondary air supply is controlled efficiently. 4. Ensure flame contact with all gases is achieved. 5. Ensure residence time is not less than two (2) seconds. 6. Ensure the gas temperature as measured against the inside wall in the secondary chamber & not in the flame zone, is not less than 1100ºC. 7. Ensure the oxygen content of the emitted gases is not less than 11%. 8. Ensure both primary and the combustion temperatures are maintained until all waste has been completely combusted

5	Particulate Removers	A mechanical particulate collector must be incorporated after secondary combustion chamber for removal of particulate pollutants entrained in the flue gas stream. The particulate collectors may include any of the following or a combination thereof: 1. Cyclone separator 2. Electrostatic precipitators 3. Fabric filters
6	Chimney / Stack	1. The chimney should have a minimum height of 10 meters above ground level and clear the highest point of the building by not less than 3 meters for all roofs. The topography and height of adjacent buildings within 50 meters radius should be taken into account. 2. If possible the chimney should be visible to the operator from the feeding area. 3. The addition of dilution air after combustion in order to achieve the requirement of these guidelines is unacceptable. 4. The minimum exit velocity should be 10 m/s and at least twice the surrounding wind speed (Efflux velocity = wind speed x 2) whichever is higher to ensure no down washing of exiting gases. 5. Point for the measurement of emissions shall be provided.
7	Instrumentation	1. Instrument for determining the inside wall temperature and not burner flame temperature must be provided for both primary and secondary chambers. 2. An audible and visible alarm must be installed to warn the operator when the secondary temperature drops to below the required temperature. 3. In addition to the above the following instruments may also be required: (a) A carbon monoxide and/or oxygen meter/recorder (b) A smoke density meter/recorder (c) A gas flow meter/recorder (d) A solid particulate meter/recorder Any other instrument or measurement that may be considered necessary
8	Location / Siting	1. Must be sited in accordance with the relevant local municipal authority planning scheme, the topography of the area and be compatible with premises in the neighborhood. 2. Must be housed in a suitably ventilated room.

9	Emission Limits	1. Combustion efficiency: Combustion efficiency (CE) shall be at least 99.00% The Combustion efficiency is computed as follows; C.E =% CO2 x 100 % CO2 + CO 2. The temperature of the primary chamber shall be 800 ± 50o C 3. The secondary chamber gas residence time shall be at least 1 (one) second at 1050 ± 50o C, with 3% oxygen in the stack gas. 4. Opacity of the smoke must not exceed 20% Viewed from 50 meters with naked eyes. 5. All the emission to the air other than steam or water vapour must be odourless and free from mist, fume and droplets. 6. The Authority may require that the certificate holder have tests carried out by an accredited institution to determine stack and/or ground level concentrations of the following substances. Cadmium and compounds Hg as Cd Mercury Thallium Tl Chromium Cr Beryllium Be Arsenic As Antimony Sb Barium Ba Lead Pb Silver Ag Cobalt Co Copper Cu Manganese Mn Tin Sn Vanadium V Nickel Ni Hydrochloric HCL Hydrofluoric acid HF Sulphur dioxide S02

		7. A 99.99% destruction and removal efficiency (DRE) for each principal organic hazardous constituent (POHC) in the waste feed where: DRE = [(Win - Wout)/Win]*100 Whn ere: Win = mass feed rate of the POHC in the waste stream fed to incinerator, and Wout = mass emission rate of POHC in the stack prior to the release to the atmosphere. 8. The average dioxin and furan concentration in the emissions should not exceed 80ng/m3 total dioxins and furans if measured for a period of 6 to 16 hours. *Note*: *All pollutant concentrations must be expressed at O^o C and 1.013 x 10^5 N/m^2, dry gas and 11% oxygen correction*. Oxygen correction is computed as: $E_s = \frac{21 - O_s}{21 - OM} \times EM$ Where: Es = Calculated emission concentration at the standard percentage oxygen concentration EM = Measured emission concentration Os = Standard oxygen concentration OM = measured oxygen concentration
10	Operation	1. Materials destined for incineration should be of known origin and composition and must be only incinerated in a furnace that is registered for the particular type of waste. 2. A record must be kept of the quantity, type and origin of the waste to be incinerated. 3. The incinerator must be preheated to working temperature before charging any waste. 4. The incinerator must not be overcharged. 5. The incinerator must be in good working order at all times and must not be used if any component fails. Any malfunction should be recorded in a log book and reported to the relevant authority. 6. The incinerator operator and all relevant staff must be trained to the satisfaction of the relevant control authority.

11	Housekeeping	The site where the incinerator is built must: 1. Have running water. 2. Have a solid floor. 3. Have lighting if 24hrs operation 4. Have fly ash containerization and storage before disposal.
12	Health & Safety (Protective Gear)	1. Staff handling waste must be well trained on safe handling of hazardous wastes. 2. Staff must be provided with appropriate protective gear such as, gas mask, aprons, gumboots, helmets, gloves, goggles. 3. Caution and Warning signs must be provided. 4. Firefighting equipment must be provided 5. There should be no smoking or eating on the site.

Made on the 14th October, 2024.

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