

LEGAL NOTICE No.

THE ENVIRONMENTAL MANAGEMENT AND CO-ORDINATION ACT(NO. 8 of  
1999)

ENVIRONMENTAL MANAGEMENT AND CO-ORDINATION(WASTE  
MANAGEMENT) REGULATIONS, 2023

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**THE ENVIRONMENTAL MANAGEMENT AND CO-ORDINATION ACT(No.8 of 1999)**

IN EXERCISE of the powers conferred by sections 92 and 147 of the Environmental Management and Co-ordination Act, the Cabinet Secretary Ministry of Environment, Climate Change and Forestry in consultation with the relevant lead agencies makes the following regulations-

**THE ENVIRONMENTAL MANAGEMENT AND CO-ORDINATION (WASTE MANAGEMENT) REGULATIONS, 2023**

**PART I: PRELIMINARY PROVISIONS**

**1. Citation.**

These Regulations may be cited as the Environmental Management and Co-ordination(Waste Management) Regulations, 2023.

**2. Interpretation.** [Cap. 242, Cap. 346]

In these Regulations unless the context otherwise requires:

“Applicant” means any person who applies to the Authority for authorization to perform specific activities connected with waste management;

“Biodegradable substance” means a substance that can be degraded by microorganisms;

“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 Ninth Schedule to these Regulations;

“KNRA” means the Kenya Nuclear Regulatory Authority (KNRA) established under Section 5 of the Nuclear Regulatory Act No. 29 of 2019

“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;

“Domestic waste” means waste generated from residences;

“Environmentally sound management of waste” means taking all practical steps to ensure that waste is managed in a manner which protects human health and the environment against the adverse effects which may result from the waste;

“Incineration” means the controlled burning of solids, liquids, gaseous combustible waste to produce gases and residues containing little or no combustible materials;

“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;

“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;

“Recycling of waste” means the processing of waste material into a new product of similar chemical composition;

“Reprocessing” means the processing of waste into a new product of different chemical composition;

“Re-use” means waste repurposed with or without cleaning and/or repairing; “Segregation”

means any activity that separates waste materials for processing; “Sludge” means a non-flowing mixture of solids and liquids;

“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 and/or disposal.

“Toxic chemical” means any substance which on entry to or into an organism through ingestion, inhalation and dermal contact is injurious, causes physiological or biochemical disturbances or otherwise causes deterioration of the functions of the organism in any way;

“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;

“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 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.

### **3. Application.**

These Regulations shall apply to all categories of waste as is provided for herein

## **PART II – GENERAL PROVISIONS**

### **4. Responsibility of waste generator.**

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

(2) A waste generator shall collect, segregate and dispose such waste in the manner provided for under these Regulations.

### **5. Cleaner production methods.**

(1) A waste generator shall minimize the waste generated by adopting the following cleaner production methods:

(a) improvement of production process through –

(i) conserving raw materials and energy;

(ii) eliminating the use of toxic raw materials; and

(iii) reducing toxic emissions and wastes;

(b) 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

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

**6. Segregation of Waste by Generator.**

A waste generator shall segregate waste by separating hazardous waste from non-

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hazardous waste and shall dispose of such wastes in such facility as shall be provided by the relevant county government.

(1) A waste generator shall segregate non-hazardous waste into organic and non-organic fractions.

(2) The segregated waste shall be placed in properly labeled and colour coded receptacles, bins, containers and bags.

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

#### **7. Waste transportation licence.**

(1) No person shall transport any waste other than—

(a) in accordance with a valid licence to transport waste issued by the Authority; and

(b) to a waste storage, processing, treatment and disposal sites established in accordance with a licence issued by the Authority.

(2) No person shall be granted a license under the Act to transport waste unless such person operates a transportation vehicle approved by the Authority.

(3) Any vehicle used for transportation of waste or any other means of conveyance shall be labelled in such a manner as may be directed by the Authority.

(4) An application for a license to transport waste shall be submitted in Form I set out in the First Schedule to these Regulations and shall be accompanied by the prescribed fees set out in the Second Schedule.

(5) A license issued under the Act for the transportation of waste shall be in Form II set out in the First Schedule to these Regulations and shall be valid for one year from the date of issue.

#### **8. Responsibility of waste transporter.**

Any person granted a license to transport waste shall ensure that –

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

(2) The vehicles and equipment for the transportation of waste are in such a state that shall not cause scattering of, or flowing out of waste or emission of noxious smells from such waste;

(3) ; and

(4) He or his agent(s) possess at all times during transportation of the waste, a duly filled tracking document as set out in Form III in the First Schedule to these Regulations and shall produce the same such tracking document on demand to any law enforcement officer.

#### **9. Transportation of waste by licensed transporter.**

Any person licensed to transport waste shall collect waste and deliver such waste to the designated, storage, processing, treatment or disposal site or plant.

**10. Licence for waste storage, processing, treatment plant and disposal site**

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(1) Any person granted a license under the Act and any other licence that may be required by the relevant County government to operate a waste storage, processing, treatment and disposal site or plant, shall comply with all conditions imposed by the Authority to ensure that such waste disposal site or plant operates in an environmentally sound manner.

(2) An application for a license to operate a waste storage, processing, treatment or disposal site or plant shall be submitted in Form IV set out in the First Schedule to these Regulations and shall be accompanied by the prescribed fees set out in the Second Schedule.

(3) A license issued under the Act for the operation of a waste storage, processing, treatment or disposal site or plant shall be in Form V as set out in the First Schedule to these Regulations.

(4) A licence to operate a waste storage, processing, treatment or 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 deem necessary or impose for purposes of ensuring public health and sound environmental management.

(5) In issuing a waste storage, processing, treatment or disposal licence, the Authority shall clearly indicate the operation permitted and identified for the particular waste.

#### **11. operators of waste storage, processing, treatment or disposal sites.**

Any operator of a waste storage, processing, treatment or disposal site or plant shall apply the relevant provisions under the County Government Act, 2013 and Regulations to ensure that such waste does not present any imminent and substantial danger to the public health, the environment and natural resources.

#### **12. Requirement for Environmental Audit**

Every licensed owner or operator of a waste storage, processing, treatment or disposal site or plant shall carry out an annual environmental audit pursuant to the provisions of the Act.

#### **13. Industrial symbiosis**

In order to promote industrial symbiosis, non-hazardous waste destined for direct re-use as a raw material (without any form of processing) such as bagasse, sugar filter cake, molasses, demolition waste among others from a generator directly to the re-user shall be exempted from the provisions of a requirement for a licence to transport waste.

### **PART III – INDUSTRIAL WASTES**

#### **14. General obligation to mitigate pollution.**

(1) Every trade or industrial undertaking shall install at its premises anti-pollution equipment for the treatment of waste emanating from such trade or industrial undertaking.

(2) An Anti-pollution equipment installed pursuant to paragraph (1), shall be determined by the best practicable means, environmentally sound practice or other guidelines as the Authority may determine.

#### **15. Treatment of industrial waste.**

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

#### **PART IV: HAZARDOUS AND TOXIC WASTES**

##### **16. Hazardous Waste Specifications.**

For the purposes of this Part, hazardous waste means any waste specified in the Fourth Schedule or any waste having the characteristics specified in the Fifth Schedule.

##### **17. Requirement for EIA.**

- 1) No person shall engage in any activity likely to generate any hazardous waste without a valid Environmental Impact Assessment licence issued by Authority under the provisions of the Act.
- 2) Any person who shall engage in any activity to generate any hazardous waste without a valid Environmental Impact Assessment licence issued by the Authority under the provisions of the Act commits an offence.

##### **18. Handling, storing and transporting of hazardous waste.**

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

(2) The label 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 a skull and crossbones.
- (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.

### **19. Treatment of Hazardous Waste.**

(1) Every person who generates toxic or hazardous waste shall treat or cause to be treated such hazardous waste using where applicable the classes of incinerators prescribed in the Third 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 license or in accordance with guidelines issued by the Authority in consultation with the relevant lead agency.

### **20. Export Permit.**

(1) No Person shall export hazardous wastes without a valid permit issued by the Authority and a valid Prior Informed Consent document issued by the designated national authority of the receiving country.

(2) Any person who shall export hazardous waste without a valid permit issued by the Authority and a valid Prior Informed Consent Document issued by the designated national authority of the receiving country commits an offence.

(3) An application for exportation of hazardous waste shall be submitted to the Authority in Form I set out in Sixth Schedule accompanied by the prescribed fee and a copy of the Prior Informed Consent document from the receiving country.

(4) Where the Authority is satisfied that all the requirements have been complied with, it shall issue an export permit as set out in Form III in the Sixth Schedule.

(5) 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.

### **21. Transit of Hazardous Waste.**

1) No person shall transit hazardous waste destined for another country through the territory of Kenya without a valid Prior Informed Consent as prescribed in Form I of the Sixth Schedule for such movement issued by the Authority including the prescribed document for trans boundary movement of waste set out in Form II of the Sixth Schedule.

2) Any person who shall transit hazardous waste destined for another country through the territory of Kenya without a valid Prior Informed Consent for such movement issued by the Authority commits an offence.

### **22. Insurance.**

(1) An application for an export permit issued under the Act and these Regulations shall satisfy the Authority that the hazardous waste exporter has subscribed to an insurance policy covering the risks likely to arise out of the activity for which the license is required.

(2) A generator of waste which has been characterised as hazardous waste shall submit to the Authority a Deposit Bond Assessment Report together with the Environmental Impact Assessment Report prior to the commencement of the operations to cover the risks likely to be caused by the waste.

**23. Register of permits.**

The Authority shall maintain a register of all permits issued under these Regulations.

**PART V: PESTICIDES AND TOXIC SUBSTANCES**

**24. Application of Cap.346.**

The regulations made under the Pests Control Products Act relating to the classification, registration, labeling, packaging, advertising, import, export, distribution, storage, transportation, handling and disposal of pesticides shall apply to this Part.

**25. Disposal of pesticides.**

No person shall dispose of any pesticide or toxic substance other than at a designated site or plant approved by the Authority.

**PART VI: BIOMEDICAL WASTES**

**26. Requirement for EIA from bio-medical waste generator.**

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.

**27. Approval of biomedical waste generating facility.**

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.

**28. Segregation of biomedical waste.**

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.

**29. Securing and packaging of bio-medical waste.**

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.

**30. Treatment of biomedical waste.**

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.

**31. Monitoring by lead agency.**

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

### **32. Storage of biomedical waste.**

No person shall store biomedical waste at a temperature above 0° 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 48 hours.

### **33. Transportation of biomedical waste.**

(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.

### **34. Transfer stations.**

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

### **35. Standards for biomedical waste disposal sites or plants.**

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.

### **36. Requirement for EIA for biomedical waste disposal site or plant and license to operate.**

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.

### **37. Requirement of Environmental Audits.**

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 VII: RADIOACTIVE SUBSTANCES**

### **38. Application of Cap.243.**

The Provisions of the regulations made under [the Nuclear Regulatory Act No. 29 of 2019](#) in relation to the classification, registrations, labelling, packaging, transportation, importation, exportations, waste disposal, health and safety requirements with regard to radioactive substances shall apply to this Part.

### **39. Disposal of Radioactive substance.**

No person shall dispose of any radioactive substance or waste other than at a designated site or plant approved by the Authority.

PART VIII - MISCELLANEOUS

**40. Transitional Provision for transporting waste.**

Any person, who before the commencement of these Regulations was carrying out the business of transporting waste, shall apply to the Authority for a licence for the transportation of waste in the prescribed Form I set out in the First Schedule within six months after the commencement of these Regulations.

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

Any person who before the commencement of these Regulations was carrying out the business of operating a waste storage, processing, treatment plant and disposal site shall apply to the Authority for a licence in the prescribed Form IV set out in the First Schedule within six months after the commencement of these Regulations.

**42. Offences and Penalties.**

Any person who violates the provisions of these Regulations commits an offence and is liable on conviction to imprisonment for such a term and such fine as provided for in the Act.

**43. Operation of Regulations.**

These Regulations shall operate in addition to any other regulations and standards made under any other law.

FIRST SCHEDULE

FORM I

FORM NEMA/WM/1

APPLICATION/RENEWAL FOR A LICENCE FOR TRANSPORTATION OF WASTE  
(Regulation 7)

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 & 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

FORM NEMA/WM/2

LICENCE TO TRANSPORT WASTE  
(Regulation 7)

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 licensed

.....

.....

...

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

FORM NEMA/WM/3

(To be completed in triplicate)TRACKING DOCUMENT  
 (Regulation 8)

A  Transporter	Serial No. Registered Name of Transporter..... Usual Municipality/Ward/Sub County/County of operation..... NEMA License number.....
<b>CONSIGNMENT NOTE FOR THE CARRIAGE AND DISPOSAL OF SOLID WASTE</b>	
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	I certify that I have received the waste as described in A and B above.

Disposer's Certificate

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: \_\_\_\_\_

On

FORM IV

FORM NEMA/WM/4

APPLICATION/RENEWAL FOR A LICENCE TO OWN/OPERATE A WASTE STORAGE,  
PROCESSING, TREATMENT PLANT OR DISPOSAL SITE

(Regulation 10)

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 and address of applicant.....  
.....  
.....

PIN Number .....  
Location (LR No./Ward/Sub county) and County of plant/site  
.....  
.....  
.....  
.....

Types of waste to be stored, processed, treated or disposed of at plant/site  
.....  
.....  
.....

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*

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LICENCE TO OWN/OPERATE A WASTE STORAGE, PROCESSING, TREATMENT PLANT OR DISPOSAL SITE

(Regulation 10)

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

SECOND SCHEDULE
(Regulations 7, 10, 20)FEES

Table with 2 columns: Description and Fees. Row 1: Application for license/Permit: Kshs. Row 2: a) For transportation of waste 3,000.00

.....	
b) To own/operate a waste storage, processing, treatment plant and disposal site	3,000.00
.....	
d) to export waste	3,000.00
.....	
2. License/Permit	
For a license/permit to:	
a) Transport waste.....	5,000.00
b) Own/operate a waste storage and processing plant/site...	40,000.00
c) Own/operate a waste treatment plant and disposal plant/site	75,000.00
d) to export waste per consignment	5,000.00
.....	

**THIRD SCHEDULE**  
(Regulations 19, 35)

**STANDARD FOR TREATMENT AND DISPOSAL OF WASTES**

**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 Kg/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 kg/ 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, GUIDELINES, CRITERIA, PROCEDURE FOR  
INSTALLING/OPERATING INCINERATORS**

No.	Parameter	Standards, Guideline, Criteria and Procedure
1	Basic Plant Design	<p>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:</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Overall plant layout.</li> <li><input type="checkbox"/> Feed chamber/ charging</li> <li><input type="checkbox"/> Primary Combustion Chamber.</li> <li><input type="checkbox"/> Secondary Combustion Chamber.</li> <li><input type="checkbox"/> Particle Scrubbers</li> <li><input type="checkbox"/> Acid Gas Scrubbers</li> <li><input type="checkbox"/> The stack/ chimney.</li> </ul>
2	Feeding And Charging	<p>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:</p> <ol style="list-style-type: none"> <li>1. Until the minimum temperatures have been reached.</li> <li>2. If the minimum combustion temperatures are not maintained.</li> <li>3. Whenever the previous charge has not been completely combusted in the case of batch feeding.</li> <li>4. Until such time as the addition of more waste will not cause the design parameters of the incinerator to be exceeded.</li> </ol>
3	Primary Combustion Chamber	<p>The primary combustion chamber must:</p> <ol style="list-style-type: none"> <li>1. Be accepted as the primary combustion zone.</li> <li>2. Be equipped with a burner/s burning gas/fuel or low sulphur liquid fuels. Other combustion methods will be judged on merits.</li> <li>3. Ensure primary air supply is controlled efficiently</li> <li>4. Ensure minimum exit temperature is not less than 850°C</li> </ol>
4	Secondary Combustion Chamber (Afterburner).	<p>The secondary combustion chamber must:</p> <ol style="list-style-type: none"> <li>1. Be accepted as secondary combustion zone.</li> <li>2. Be fitted with secondary burner/s burning gas or low sulphur liquid fuel or any suitable fuel.</li> <li>3. Ensure secondary air supply is controlled efficiently.</li> <li>4. Ensure flame contact with all gases is achieved.</li> <li>5. Ensure residence time is not less than two (2) seconds.</li> <li>6. Ensure the gas temperature as measured against the inside wall in the secondary chamber &amp; not in the flame zone, is not less than 1100°C.</li> <li>7. Ensure the oxygen content of the emitted gases is not less than 11%.</li> <li>8. Ensure both primary and the combustion temperatures are</li> </ol>

		maintained until all waste has been completely combusted
5	Particulate Removers	<p>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:</p> <ol style="list-style-type: none"> <li>1. Cyclone separator</li> <li>2. Electrostatic precipitators</li> <li>3. Fabric filters</li> </ol>
6	Chimney / Stack	<ol style="list-style-type: none"> <li>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.</li> <li>2. If possible the chimney should be visible to the operator from the feeding area.</li> <li>3. The addition of dilution air after combustion in order to achieve the requirement of these guidelines is unacceptable.</li> <li>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.</li> <li>5. Point for the measurement of emissions shall be provided.</li> </ol>
7	Instrumentation	<ol style="list-style-type: none"> <li>1. Instrument for determining the inside wall temperature and not burner flame temperature must be provided for both primary and secondary chambers.</li> <li>2. An audible and visible alarm must be installed to warn the operator when the secondary temperature drops to below the required temperature.</li> <li>3. In addition to the above the following instruments may also be required. <ul style="list-style-type: none"> <li><input type="checkbox"/> Carbon monoxide and/or oxygen meter/recorder</li> <li><input type="checkbox"/> Smoke density meter/recorder</li> <li><input type="checkbox"/> Gas flow meter/recorder</li> <li><input type="checkbox"/> Solid particulate meter/recorder</li> </ul>           Any other instrument or measurement that may be considered necessary </li> </ol>
8	Location / Siting	<ol style="list-style-type: none"> <li>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,</li> <li>2. Must be housed in a suitably ventilated room.</li> </ol>
9	Emission Limits	<ol style="list-style-type: none"> <li>1. Combustion efficiency: <p>Combustion efficiency (CE) shall be at least 99.00% The Combustion efficiency is computed as follows;</p> <math display="block">C.E = \frac{\text{CO}_2}{\text{CO}_2 + \text{CO}} \times 100</math> </li> </ol>

% CO<sub>2</sub> + CO

2. The temperature of the primary chamber shall be 800 ± 50° C
3. The secondary chamber gas residence time shall be at least 1 (one) second at 1050 ± 50° 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 as	Cd	Mercury	Hg
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	SO <sub>2</sub>		

7. A 99.99% destruction and removal efficiency (DRE) for each principal organic hazardous constituent (POHC) in the waste feed where:

$$DRE = [(W_{in} - W_{out})/W_{in}] * 100$$

Where:  $W_{in}$  = mass feed rate of the POHC in the waste stream fed to incinerator, and

$W_{out}$  = 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/m<sup>3</sup> total dioxins and furans if measured for a period of 6 to 16 hours.

*Note:*

All pollutant concentrations must be expressed at 0° C and 1.013 x 10<sup>5</sup> N/m<sup>2</sup>, dry gas and 11% oxygen correction.

Oxygen correction is computed

		<p>as:</p> $E_s = \frac{21 - O_s}{21 - O_M} \times E_M$ <p>Where: <math>E_s</math> = Calculated emission concentration at the standard percentage oxygen concentration  <math>E_M</math> = Measured emission concentration  <math>O_s</math> = Standard oxygen concentration  <math>O_M</math> = measured oxygen concentration</p>
10	Operation	<ol style="list-style-type: none"> <li>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.</li> <li>2. A record must be kept of the quantity, type and origin of the waste to be incinerated.</li> <li>3. The incinerator must be preheated to working temperature before charging any waste.</li> <li>4. The incinerator must not be overcharged.</li> <li>5. The incinerator must be in good working order at all times and must not be used if any component fails. Any malfunctions should be recorded in a log book and reported to the relevant authority.</li> <li>6. The incinerator operator and all relevant staff must be trained to the satisfaction of the relevant control authority.</li> </ol>
11	Housekeeping	<p>The site where the incinerator is built must:</p> <ol style="list-style-type: none"> <li>1. Have running water.</li> <li>2. Have a solid floor.</li> <li>3. Have lighting if 24hrs operation</li> <li>4. Have fly ash containerization and storage before disposal.</li> </ol>
12	Health & Safety (Protective Gear)	<ol style="list-style-type: none"> <li>1. Staff handling waste must be well trained on safe handling of hazardous wastes.</li> <li>2. Staff must be provided with appropriate protective gear such as, gas mask, aprons, gumboots, helmets, gloves, goggles.</li> <li>3. Caution and Warning signs must be provided.</li> <li>4. Fire fighting equipment must be provided</li> <li>5. There should be no smoking or eating on the site.</li> </ol>

FOURTH SCHEDULE  
(Regulation 16)

WASTES CONSIDERED HAZARDOUS

The following wastes shall be considered hazardous wastes:

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 growthpromoting 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 Triphenyls (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 from 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:

Iron-pentacarbonyl, Nickel-tetracarbonyl, Methyl cyclopentadienyl manganese-tricarbonyl.

(b) 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 fluoride, Beryllium sulfate.

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

Y21 Wastes containing hexavalent chromium compounds listed as follows:

(a) Wastes containing 0.1% or more by weight of any of the following 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, anhydrous, 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 (sarcylideneamine), 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 thiocyanate, Copper pyrophosphate, 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 R10 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, Diethyl zinc, 2,5-Diethoxy 4-morpholinobenzenediazonium zinc chloride, Dimethyl zinc, 4-Dimethylamino-6-(2-dimethylaminoethoxy) toluene -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-{Benzyl 9methyl) amino}-3-ethoxybenzenediazonium 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:

Y24 Wastes containing 0.1% or more by weight of any of the following arsenic and/or arsenic compounds:

(a) Arsenic, Copper acetoarsenite, zinc arsenite, Calcium arsenite, Silver arsenite, Strontium arsenite, Ferric arsenite, Copper arsenite, Sodium arsenite, Lead arsenite, Alkylarsenic compounds, Ethyldichloroarsine, cacodylic acid, Sodium cacodylate, Diarsenic pentoxide, Arsenic pentafluoride, Arsenic trichloride, Arsenous trioxide, Arsenic tribromide, Arsenic manganese arsenate, Arsenic trifluoride, Diphenylamine chloroarsine, Diphenylchloroarsine, Tetraarsenic tetrasulfide, Vinylzene, Arsenic acid, Zinc arsenate, Ammonium arsenate, Potassium arsenate, Calcium arsenate, Sodium arsenate dibasic, Calcium arsenate, Ferrous arsenate, Mercuric Ferric arsenate, Copperarsenate, Sodium arsenate, Lead arsenate, magnesium arsenate, Calcium arsenate fluoride, benzenearsonic acid, Potassium Metaarsenite, Sodium metaarsenite, Calcium methanearsonate, Ferric methanearsonate, Arsenic disulfide, Arsenic trisulfide.

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

(c) 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 arsenic and/or arsenic compounds.

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

(d) Wastes to be exported for the purposes other than those listed in c) 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 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 in 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, Antimony pentoxide, Antimony pentafluoride, Antimony trichloride, Antimony trioxide, Potassium hexahydroxoantimonate (V), Antimony trifluoride, Potassium antimonyl tartrate, Antimony lactate, Sodium metaantimonate.

(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, Mercury oleate, Mercury gluconate, Mercury acetate, Mercury salicylate, Mercuric oxide, Mercury cyanide, Mercury potassium cyanide, Diethyl mercury, Dimethyl mercury, Mercury (I) bromide, Mercurous, Nitrate, Mercuric nitrate, Phenyl mercuric hydroxide, Mercuric thiocyanate, Mercuric arsenate, Mercury (II) iodide, Mercury potassium iodide,

Mercury fulminate, Mercury sulphide, 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 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 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 the following thallium and/or thallium compounds:

Thallium chlorate, Thallium acetate, Thallous 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.

Y31 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 naphthenate, Calcium plumbate, dibasic lead sulfite, Dibasic lead phosphite, Lead srearate dibasic, basic lead phthalate Lead dioxide, Lead flouoroborate solution, Lead phosphite dibasic, Lead arsenate, Lead flouride, Lead metaborate, Lead methanesuphonate, Lead iodide, Lead sulfite, 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, Difluorosphoric acid, Ammonium flouride, Potassium flouride (spray dide), Chromic fluoric, Hydroflouride, Ammonium hydrogenflouride, Hydroflouric acid, Sodium flouride, Fluorosulphonic acid, Fluorosphoric acid Anhydrous, hexafluorosphoric acid, Fluobolic acid.

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

Ammonium fluoroborate, Ammonium fluorosilicate, Barium fluorids, Barium

fluorosilicate, Iodine pentafluoride, Lithium borofluoride, magnesium borofluoride, Magnesium fluorosilicate, manganese fluorosilicate, Potassium fluoroborate, Potassium fluorosilicate, Potassium hydrogen fluoride, Sodium fluorosilicate, sodium hydrogen fluoride, stannous fluoride, sodium fluoroborate, zinc fluorosilicate.

(c) Wastes containing inorganic fluorine 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, lead cyanide, mercuric cyanide, mercuric potassium cyanide, nickel cyanide, Potassium cyanide, Silver cyanide, sodium cuprocyanide, Sodium cyanide, 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 D1 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 (ISO), Chlormephos, S { (6-Chloro-2-oxo-3-brenzozazolyl) methyl} 0,0-diethyl phosphorodithioate, ChIorthiophos, Camaphos, Cresyldiphenyl Phosphate, Crotoxyphos, Crufomate, Demephion, Demeton-O-methyl, Demeton-S-methyl, Dialifos, dichlofenthion, dichloromethylphosphine, Dicrotophos, 0, 0-Diethyl-S-2 (ethylthio) ethyl phosphorodithioate, diethyl = 4-nitobenzylphosphonate, 0-0-Diethyl-0 (5-phenyl-3- isooxazolyl) phosphorothioate, 0, 0-Diethyl-0-3,5,6-trichloro-2-pyriylphosphorothioate, Dimefox, 0, 0-Dimethyl-S (1,2-ethylthioethyl phosphodithioate, Dimethyl 2,2- dichlorovinylphosphate, Dimethyl ethylthioethyl dithiophosphate, Dimethylhydrogen phosphite, Dimethyl-methylcarbonylthioethyl 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-nitrophenyl) thiophosphate, 0-0- Dimethyl-S-(phenylaceticacidethylester) dithiophosphate, 0, 0-Dimethyl phthalimid methylthiophosphate, Dimethylthiophosphoryl chloride Dimethyl 2,2,2-trichloro-1 hydroxyethyl phosphate, Dioxathion, Diphenyl-2, 4,6-trimethylbenzoylphosphine- oxide, Edifenphos, Endothion Ethion, Ethoatethyl, Ethoprophos, 0-ethyl-0-p- nitrophenylthionobenzenephosphate, Fenamiphos, Fensulfthion, Fonofos, Hexaethyl tetraphosphate, Hexamethylphosphoric triamide, heptenophos, Isodecyl diphenylphosphate 2-Isopropyl 1-4 methylpyrimidyl 6-diethylthiophosphate, Isothioate, Mecarbam, Menazon, Mephosfolan Methamidophos, 2-Methos-4H-1,3,4-thiadiazolyl- (3-methyl) dimethyl phosphorothiolothionate, Methyl parathion, Methyltrithion, Mevinphos Naled, Omethoate, Oxydisulfoton, Oxydemetonmethyl, Paraoxon, Parathion, Pirimiphosethyl, Phenkapton, Phorate, Phosfolan, Phosphamidon, Prothoate, Propaphos, Pyrazophos, Pyrazoxon, Quinalphos, Scharadan, Sulprofos, Tetraethyl dithiopyrophosphate, Thionazin, Temephos, Terbufos, Tris (1-aziridinyl) phosphine oxide, Triamiphos, Triazophos, Trichloronate, Triethylphosphate Tris (1-aziridinyl) phosphine

sulphide, Tris (4-methoxy-3, 5 dimethylphenyl) phosphine, Triethyl phosphate, Tributyl phosphates-S-3- (dimethoxyphosphinyloxy)-N-methylcrotonamide, Di-(ethylhexyl) phosphoric acid, di-(ethylhexyl) phosphoric acid, Triallyl phosphate, Tricresyl phosphate, Tris (isopropylphenyl) 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-propyl phosphorothioate Bromophosethyl, Butamifos, 0-Buthyl-S-benzyl-S-ethyl phosphorodithioate, 2-chloro-1- (2,4 dichlorophenyl) vinyl-diethyl 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) thiophosphoramidate, Diethyl-4 methylsulfinylphenyl- thiophosphate, 0, 0-Diethyl-0- (3-oxo-2-phenyl-2H-pyridazin-6-yl) phosphorothionate Diethyl-paradimethylamino sulfonylphenylthio phosphate, Diethylthiophosphorylchloride, 0, 0-Diisopropyl-S-benzylthiophosphate, Diisopropyl-S- (ethylsulfinylmethyl)-dithiophosphate, Dimethyl-S-pchlorophenylthiophosphate, 0, 0-Dimethyl-0-4 cyanophenyl phosphorothioate, 2,3 (Dimethyldithiophosphro) paradioxan, 0, 0-dimethyl-S-2 (ethylsulfinyl)- isopropyl-thiophosphate, Dimethyl- {2- (1-methylbenzyloxycarbonyl)-1-methylethylen)-phosphate 0, 0-Dimethyl 0-0 (3,5,6- trichloro-2-pyridinyl) phosphorothioate, Ethyl-2-dichlorophenylthionobenzene phosphate, 0-6-Ethoxy-2-ethylpyrimidinyl-0, 0-dimethyl-phosphorothioate, Fosthiazate, Leptophos Mesulfenfos, Methylcyclohexyl-4-chlorophenylthiophosphate Octyldiphenyl Phosphate, Phenylphosphonic dichloride, Phenylphosphoro thiodichloride, Piperophos, Propetamphos, Pyraclofos, Sulfote Tetraethylpyrophosphate, Temivinphos, Tributoxyethyl phosphate, Tributyl phosphine, S,S,S-Tributyl phosphorotrithioate, Triethyl phosphate Trimethyl phosphate, Trimethyl phosphite, Trioctyl phosphate Tris (chloroethyl) phosphate, Tris (B-chloropropyl) phosphate, Tris (dichloropropyl) phosphate.

(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 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 phosphorus 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) propionitrile} 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, Ioxynil, Isophor diisocyanate, lactonitrile, Melonitrile, Methacrylonitrile, met isocyanate Phenylacetoneitrile, Phenyl isocyanate, 0-phthalodinitrile, Propionitrile, Trimethylhexamethylene diisocyanate, 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- Dimethylaminoacetonyl, 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/orphenol compounds:

2-Aminoanthraquinon, 7-Amoni-4-hydroxy-2 naphthalene sulfonic acid, p-t Butylphenol,Carbolic oil, Chlorophenol, Coal tar, Cresols, Cyclohexylaminophenol, dichlorophenols, 2,4-dichloro-3-methylphenol, 1,4-Dihydro-9, 10 dihydroxyanthracene, 2,4-Dinitro-6- secbutylphenoldimethyl 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-cyclohexylphenol, 2,4-Dinitro-6-(1-methylpropyl) phenol Dinitrophenolate, alkali metals, Dinitroresorcinol, Dyes, Hydroquinone, Hydroxysulfonic acid, N-Methylcarbamy-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 0.1% 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-C15) 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-Epoxypropyl)-6-methoxyphenyl-acetate, a-2, 3-Epoxypropoxyphenyl-w- hydrtropoli(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-dinitrophenylazo)-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 diglycidyl

ether, 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-propionate, 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, Methylchloromethyl 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, Diallyl ether, Diethyleneglycol dimethyl ether, Diethyleneglycol 1 monobutyl ether, Di-2-ethoxyethyl peroxydicarbonate, 3, 3 Diethoxypropene, Diethoxymethane 2,5-Diethoxy-4-morpholino benzenediazonium zincchloride, 1,3-Dioxane, Dioxolan, 2,3 - Dihydropylae, Diphenylsulphide, Dibutyl ether, Dipropyl ether, 4-Dimethylamino-6 (2-dimethylaminoethoxy) toluene-2-diazonium zinc chloride, Dimethyldiethoxysilane, Dimethyldioxane, Dimethoxyisopropylperoxydicarbonate, 1,1-Dimethoxyethane, Dimethoxybutyl peroxydicarbonate, 2,2-Dimethoxypropane, Tetrahydrofurfurylamine, Triglycol dichloride, Trinitroanisole, Trinitrophenetole, Nitroanisole, Neopentylglycol diglycidyl ether, 3-(2-Hydroxyethoxy)-4-pyrrolidin-1-ylbenzenediazonium zinc chloride, Isobutyl vinyl ether, 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:

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

Chloropropanes, Chloropropenes, Chlorobenzene, Chloroform, Carbontetrachloride, Dichloroethanes, Dichloroethylenes, Dichloropropanes, Dichloropropenes, Dichlorobenzene, Methylenechloride, Dibromoethanes, Tetrachloroethane, Tetrachloroethylene, Tetrabromoethane, Tetrabromomethane, Trichloroethanes, Trichloroethylene, Trichloro-trifluoroethane, 1,2,3Trichloropropane, 1,2,4Trichlorobenzene, Pentachloroethane

(b) 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

(c) Wastes containing halogenated organic solvents other than those listed in a) and b) above

(d) 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

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

(i) 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;

(ii) 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, Diisononyl adipate, Acetaldehyde, Ethyl acetoacetate, Methyl acetoacetate, Acetophenone, Acetone, Aniline Allyl alcohol, 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, Ethyl n-propyl ketone, 2-Ethylhexanol, 2-Ethylhexylamine, Ethyl n-pentyl ketone, 2-Butanone, Ethyleneglycol diacetate, Ethylene glycol, Ethylenediamine, Octanol, Octane, Octanes, Formic acid, Isobutyl formate, n-Butyl formate, Methyl formate, Quinoline, Dimethyl succinate, Acetic acid, Isobutyl acetate, isopropyl acetate, isopentyl acetate, Ethyl acetate, Ethylbutyl acetate, n-Octyl acetate, Cyclohexyl 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-Hexyl acetate, Heptyl acetate, Benzyl acetate, pentyl acetate, sec-Pentyl acetate, methyl acetate, Methylpentyl acetate, Mesityl oxide, Diisobutylamine, Diisobutyl ketone, Diisopropanolamine, Diisopropylamine, N, N, N, Diethylaminoethanol, Diethylamine, Diethylenetriamine, Cyclohexanol, Cyclohexanone, Cyclohexane, Cyclohexylamine, Cycloheptane, 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 benzene, 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, Nitroxyls, O-Nitrotruenes, Nitropropanes, 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-xylene, n-Butanol, 2-Butanol, Dialkyl phthalates, 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, Methyl alcohol, Methylamine, Methyl iso-amylketone, 7-Methyl-1, 6-octadiene, 2- Methylcyclohexanol, Methylcyclohexanone, Methycyclohexane, Methylcyclopentane, I- Methyl naphthalene, Methyl n-pentyl ketone, Methyl butanol, Methyl n-pentyl ketone, 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, Diethylamine, Diisopropyl ketone, Diethyl ketone, Diethyleneglycol, Cyclohexene, Cycloheptene, Cyclopentanol, Cyclopentanone, Dipropylketone, Dimethylcyclohexane, Dimethyl sulfoxide, 2,3-Dimethylbutane, 1,3-Dimethylbutylamine, Dioctyl sebacate, Dibutyl sebacate, Thiophene, n-Decane, Tetrahydrothiophene, Terpinolene, Triethylamine, Trimethylene glycol, Methyl lactate, Dimethyl disulphide, Acetyl methyl carbinol, Vinyltoluene, Piperidine, 3-Butanol, Butylmercaptan, 1,4-Butylenediol, 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 dibenzo-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-azabicyclo(4,2,0)-octa-2-ene-2-carboxylic acid-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 chlorohydrin, Epichlorohydrin, Acetyl chloride, Anisoil chloride, Allyl chloride, Choline chloride, Chlorinated paraffins (C10-13), Pyrosulphuryl chloride, Benzylidene chloride, Benzyl chloride, Benzoyl chloride, Endrin, Captafol, Canpachlor, 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-phenetyl aniline, Chloronitrobenzenes, Chloropicrin, Chlorohydrins, Chlorophacinone, 4-Chloro- o-phenylenediamine, 3-Chloro-2-fluoronitrobenzene 3-Chloro-4-fluoronitrobenzene, Chloroprene, 2-Chloropropionic acid, 3-Chloropropionic acid, 1-chlorohexane, 1-chloroheptane, p-Chlorobenzylchloride, p-Chlorobenzotrichloride, Chloromethyl-p- tolyl=ketone, 2-(4-Chloromethyl-4-hydroxy-2-thiazoline-2-yl guanidine=chloride, Methyl 2-[(chloromethyl) phenyl] propionate, (2S)-3-Chloro-2-methylpropionic acid, (Z)-4-Chloro-2-(methoxycarbonylmethoxymimono)-3-oxobutyric acid, 2-Chlorobutyric acid, kepone, Kelevan, 1-Chloroformyl-1-methylethyl acetate, 1-Bromoformyl-1-methylethyl acetate, Benzotrichloride, 3,5-Diaminochlorobenzene, Diallylate, Silicon tetrachloride, Diglycol chlorohydrin, Cyclohexenyltrichlorosilane, 3,4-Dichloroaniline 4, 5-Dichloro- p-n-octylisothiazole-3-one, Dichloroacetic acid, Methyl dichloroacetate, 3, 3'-Dichloro-4,4'-diaminodiophenylmethane, 3,5-Dichloro-4-(1,1,2,2-tetrafluoroethoxy) aniline, 1,4-Dichloro-2-trichlorosilyl-2-butene, 2,4-Dichloro-5-trifluoromethylnitrobenzene, 1,4-Dichloro-2-nitrobenzene, 2,2-Dichloro-5-nitrobenzophenone, 2,4-Dichlorophenoxyacetic acid diethanolamine, 2,4-Dichlorophenoxyacetic acid diethylamine, 2,4-Dichlorophenoxyacetic acid triisopropanolamine, 2,4-Dichloro-3-fluorene tobenzene, 1,3-Dichloro-4-fluorobenzene, 2,3-Dichloro-1-propanol, 2,2-Dichloropropionic acid, Methyl 2,3-dichloropropionate, Dichlorobromomethane, 1,6-Dichlorohexane, 2,6-Dichloro-3-perchloromethyltoluene, 4,5-Dichloro-2-perchloromethyltoluene, Dichlorobenzidine, 2,2-Dichloro-3-pentanone, 2,4-Dichloro-3-pentanone, 2,6-Difluoroaniline, 3,4-Difluoronitrobenzene, 2-Dibromoethylene 2'-(2,6-Dibromo-4-nitrophenylazo)-5'-diethylaminoacetanilide, 2,3-Dibromopropionate, Dibromomethane, Simazine, Acetyl bromide, Allyl bromide, Sulfallate, Cyclohexyl-1-iodoethylcarbonate, DDT (chlorophenothane), 2,4-DB((2,4-dichlorophenoxy) butyric acid), Dieldrin, 2,2,6,6-Tetrachlorocyclohexanone 2,2', 4,4'-Tetrachlorobenzophenone, Tetrahydro-5, 5-dimethyl-2(1H)-pyrimidinone [p-trifluoromethyl]-a-[p-(trifluoromethyl)styryl]Cynamiliden] hydrazone, 2,2,3,3-Tetrafluoroxetane, Diuron, Telodrin, Toxaphene, 1-(4-Chlorophenoxy)-3,3-dimethyl-1-(1H)-1, 2,4-triazol-1-yl)-2-butanone

Trichloroacetylchloride, 2,2,6-Trichloro-6-(1-chloroisobutyl) cyclohexanon, 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, Perchloromethylmercaptan, 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, Perfluoroproxy-1,1,2-trifluoroethylene, I-Benzyl-2- (chloromethyl) imidazole=chloride, Hexachloro-hexahedra-methano-dioxathiepine oxide, N-[B-(benzol) furan-2-yl] acryloyl-N'-trichloroacetohydrazid, Pentachloronaphthalene, Pentafluoriodoethane, 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-methylphenoxoy) acetic acid, Isobutyryl chloride, Butyryl chloride, Propionyl chloride, Pentyl chloride N'-(2-Methyl-4- chlorophenyl)-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, Chloroacetonitril, 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, Dichlorobenzylacid 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 horma 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-Butyl bromide, 2-Bromobutane, Benzyl bromide, Thioclormethyl, 1,1,2,2-Tetrachloronitroethane, Methyl trichloroacetate, 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-trichloroethylidene)] 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, BenzoatePentyltrichlorosilane, 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

Residues arising from the incineration of household wastes

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

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

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 exclusively<sup>11</sup> consisting of one non – halogenated polymer, including but not limited to the following polymers:

Polyethylene (PE)

Polypropylene (PP)

Acrylonitrile butadiene styrene (ABS)

Polyethylene terephthalate (PET)

Polycarbonates (PC)

Polyethers

FIFTH SCHEDULE  
 (Regulation 16)  
 LIST OF HAZARDOUS CHARACTERISTICS UN CODE  
 CHARACTERISTICS CLASS

UN CLASS	CODE	CHARACTERISTICS
1	HI	<p>Explosive</p> <p>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.</p>
3	H3	<p>Flammable Liquids</p> <p>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 60.5°C, closed-cup test, or not more than 65.6°C 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).</p>
4.1	H4.1	<p>Flammable Solids</p> <p>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.</p>
4.2	H4.2	<p>Substances or wastes liable to spontaneous combustion</p> <p>Substance or wastes which are liable to spontaneous heating under normal conditions encountered in transport or to heating up on contact with air, and being then liable to catch fire.</p>
4.3	H4.3	<p>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.</p>
5.1	H5.1	<p>Oxidizing</p> <p>Substances or wastes which, while in themselves not necessarily combustible, may generally, by yielding oxygen, cause or contribute to the combustion of other materials.</p>

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.

Corresponds to the hazardous classification system included in the United Nations Recommendations on the Transport of Dangerous Goods (ST/SG/AC.10/1/Rev.5, United Nations New York, 1988

SIXTH SCHEDULE

FORM NEMA/WM/I

FORM I

Notification document for transboundary movements/shipments of waste

<b>1. Exporter - notifier</b> Registration No: Name: Address:  Contact person: Tel: Fax: E-mail:	<b>3. Notification No:</b> <b>Notification concerning</b> A.(i) Individual shipment: <input type="checkbox"/> (ii) Multiple shipments: <input type="checkbox"/> B.(i) Disposal (1): <input type="checkbox"/> (ii) Recovery : <input type="checkbox"/> C. Pre-consented recovery facility (2;3) Yes <input type="checkbox"/> No <input type="checkbox"/>	
<b>2. Importer - consignee</b> Registration No: Name: Address:  Contact person: Tel: Fax: E-mail:	<b>4. Total intended number of shipments:</b> <b>5. Total intended quantity (4):</b> Tonnes (Mg): m <sup>3</sup> :	
<b>8. Intended carrier(s)</b> Registration No: Name(7): Address:  Contact person: Tel: Fax: E-mail: Means of transport (5):	<b>6. Intended period of time for shipment(s) (4):</b> First departure: Last departure: <b>7. Packaging type(s) (5):</b> <b>Special handling requirements (6):</b> Yes: <input type="checkbox"/> No: <input type="checkbox"/>	
<b>9. Waste generator(s) - producer(s) (1;7;8)</b> Registration No: Name: Address:  Contact person: Tel: Fax: E-mail: Site and process of generation (6)	<b>11. Disposal / recovery operation(s) (2)</b> D-code / R-code (5): Technology employed (6):  Reason for export (1;6):	
<b>10. Disposal facility (2):</b> <input type="checkbox"/> <b>or recovery facility (2):</b> <input type="checkbox"/> Registration No: Name: Address:  Contact person: Tel: Fax: E-mail: Actual site of disposal/recovery:	<b>12. Designation and composition of the waste (6):</b>   <b>13. Physical characteristics (5):</b>  <b>14. Waste identification (fill in relevant codes)</b> (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: (v) National code in country of import: (vi) Other (specify): (vii) Y-code: (viii) H-code (5): (ix) UN class (5): (x) UN Number: (xi) UN Shipping name: (xii) Customs code(s) (HS):	
<b>15. (a) Countries/States concerned, (b) Code no. of competent authorities where applicable, (c) Specific points of exit or entry (border crossing or port)</b>		
State of export - dispatch	State(s) of transit (entry and exit)	State of import - destination
(a)		
(b)		
(c)		
<b>16. Customs offices of entry and/or exit and/or export (European Community):</b> Entry: Exit: Export:		
<b>17. Exporter's - notifier's / generator's - producer's (1) declaration:</b> 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:		<b>18. Number of annexes attached</b>
<b>FOR USE BY COMPETENT AUTHORITIES</b>		
<b>19. Acknowledgement from the relevant competent authority of countries of import - destination / transit (1) / export - dispatch (9):</b> Country: Notification received on:	<b>20. Written consent (1;8) to the movement provided by the competent authority of (country):</b> Consent given on: Consent valid from: until:	

Acknowledgement sent on:  
Name of competent authority:  
Stamp and/or signature:

Specific conditions: No:  If Yes, see block 21 (6):   
Name of competent authority:  
Stamp and/or signature:

LEADER

**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 facility(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

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## List of abbreviations and codes used in the notification document

### DISPOSAL OPERATIONS (block 11)

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 (block 11)

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)

1. Drum
2. Wooden barrel
3. Jerrican
4. Box
5. Bag
6. Composite packaging
7. Pressure receptacle
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)

### H-CODE AND UN CLASS (block 14)

UN Class	H-code	Characteristics
1	H1	Explosive
3	H3	Flammable liquids
4.1	H4.1	Flammable solids
4.2	H4.2	Substances or wastes liable to spontaneous combustion
4.3	H4.3	Substances or wastes which, in contact with water, emit flammable gases
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.

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FORM II

MOVEMENT DOCUMENT FOR TRANSBOUNDARY MOVEMENTS/SHIPMENTS OF WASTE

<b>1. Corresponding to notification No:</b>		<b>2. Serial/total number of shipments:</b> /	
<b>3. Exporter - notifier</b> Registration No: Name: Address: Contact person: Tel: Fax: E-mail:		<b>4. Importer - consignee</b> Registration No: Name: Address: Contact person: Tel: E-mail: Fax:	
<b>5. Actual quantity:</b> Tonnes (Mg): m3:		<b>6. Actual date of shipment:</b>	
<b>7. Packaging Type(s) (1):</b> Number of packages: <b>Special handling requirements: (2)</b> Yes: <input type="checkbox"/> No: <input type="checkbox"/>			
<b>8.(a) 1st Carrier (3):</b> Registration No: Name: Address: Tel: Fax: E-mail:	<b>8.(b) 2nd Carrier:</b> Registration No: Name: Address: Tel: Fax: E-mail:	<b>8.(c) Last Carrier:</b> Registration No: Name: Address: Tel: Fax: E-mail:	
----- <b>To be completed by carrier's representative</b> -----		More than 3 carriers (2) <input type="checkbox"/>	
<b>Means of transport (1):</b> Date of transfer: Signature:	<b>Means of transport (1):</b> Date of transfer: Signature:	<b>Means of transport (1):</b> Date of transfer: Signature:	
<b>9. Waste generator(s) - producer(s) (4;5;6):</b> Registration No: Name: Address: Contact person: Tel: Fax: E-mail: Site of generation (2):		<b>12. Designation and composition of the waste (2):</b>	
<b>10. Disposal facility</b> <input type="checkbox"/> <b>or recovery facility</b> <input type="checkbox"/> Registration No: Name: Address: Contact person: Tel: Fax: E-mail: Actual site of disposal/recovery (2)		<b>13. Physical characteristics (1):</b>	
<b>11. Disposal/recovery operation(s)</b> D-code / R-code (1):		<b>14. Waste identification (fill in relevant codes)</b> (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: (v) National code in country of import: (vi) Other (specify): (vii) Y-code: (viii) H-code (1): (ix) UN class (1): (x) UN Number: (xi) UN Shipping name: (xii) Customs code(s) (HS):	



FORM III

FORM NEMA/WM/III

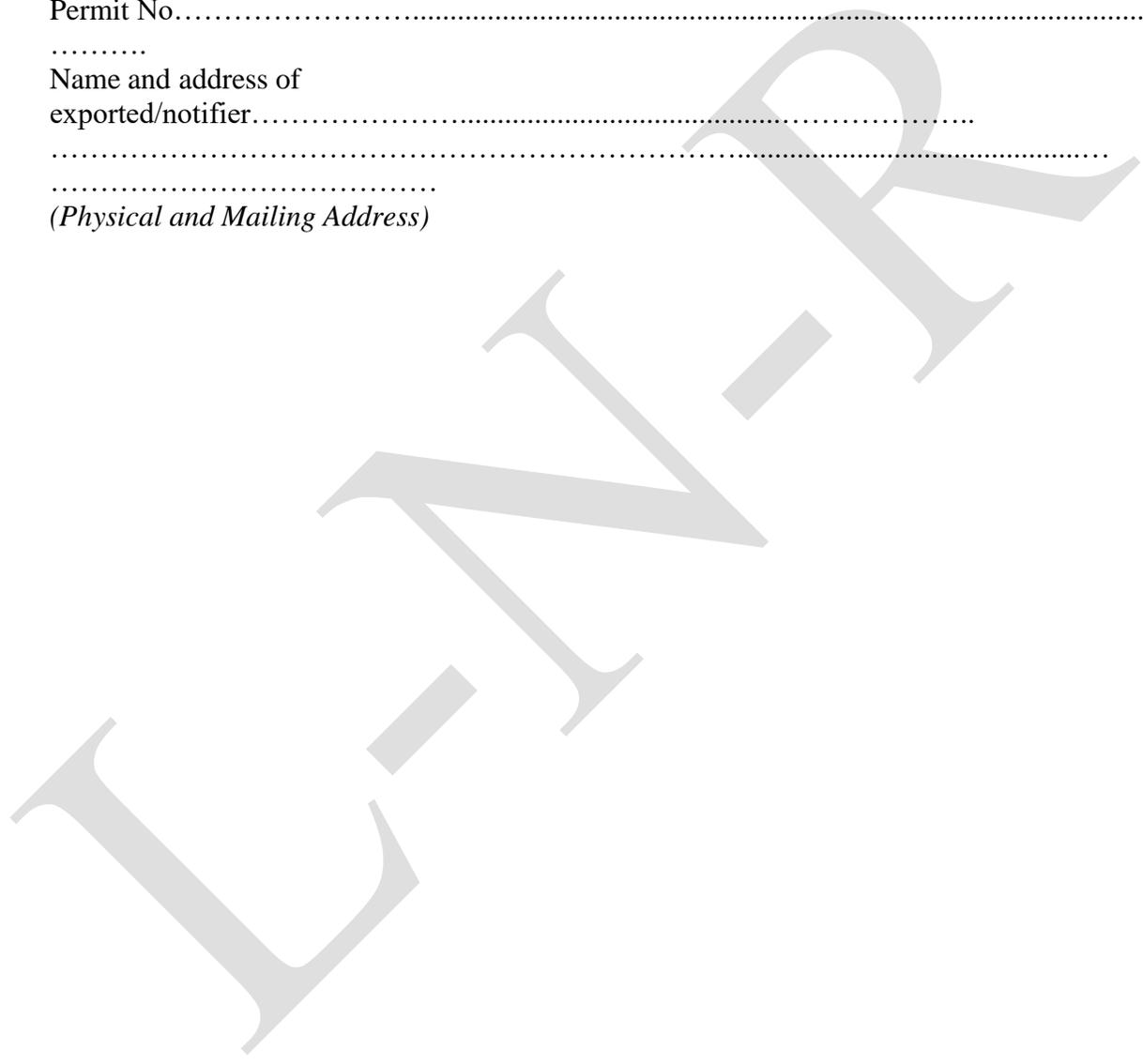
SIXTH SCHEDULE  
*(To be filled in triplicate)*  
PERMIT TO EXPORT WASTE  
(Regulations 20, 21)

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*

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

(11) Attach details if necessary

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

SEVENTH SCHEDULE  
(Regulation 28)  
CATEGORIES OF BIOMEDICAL WASTE

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 casts and other materials contaminated with blood infected patients, excreta.
2.	Pathological waste	Human and animal tissues or fluids. e.g body parts blood and other body fluids, fetuses, animal carcasses.
3.	Sharps	Sharp waste. e.g needles, infusion sets, scalpels, knives, blades, broken glass that may cause puncture and cuts. This includes both used and unused sharps.
4.	Pharmaceutical waste	Waste containing pharmaceutical e.g pharmaceuticals

		that are expired or no longer needed; items contaminated by or containing pharmaceuticals(bottles, boxes).
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.

#### EIGHTH SCHEDULEPART I

(Regulation 29)

Colour code for Biomedical adopted from the WHO colour code

	Type of Waste	Colour of Container and Markings	Type of Container
1.	Infectious	Yellow	Strong leak proof-plastic bag with biohazard symbol
2	Pathological	Yellow	Strong leak proof-plastic bag with biohazard symbol
3	Sharps	Yellow – (marked sharps)	Puncture proof
4	Chemical and Pharmaceutical	Brown	Plastic bag or container
5	Non-infectious/non hazardous (Non-clinical)	Black	Plastic bag or container
6	Radioactive waste		Lead box, labeled with radioactive symbol
7	Non-infectious/non hazardous (Non-	Black	Plastic bag or container

- |  |           |  |  |
|--|-----------|--|--|
|  | clinical) |  |  |
|--|-----------|--|--|
- Infectious, Pathological and Sharp waste should also be marked with the international biohazard symbol.
  - Chemicals should also be marked with the appropriate international chemical hazard symbol
  - Radioactive must be labeled with the appropriate warning symbol as in Schedule Eight Part II.

*Note:*

1. Colour coding of waste categories with multiple treatment options as defined in Schedule Nine, shall be selected depending on treatment option chosen, which shall be as specified in Schedule Nine.
2. Waste collection bags for waste types needing incineration shall not be made of chlorinated plastics.

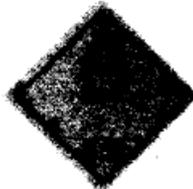
EIGHTH SCHEDULE PART II  
Symbols (Regulation 39)

**Class 5**

(No 5.1)  
Division 5.1  
Oxidizing substances  
Symbol (flame over circle) : black ;  
Background : yellow ;  
Figure '5.1' in bottom corner



(No. 5.2)  
Division 5.2  
Organic peroxides  
Symbol (flame over circle) : black ;  
Background : yellow ;  
Figure '5.2' in bottom corner



**Class 6**

(No. 6.1)  
Division 6.1  
Toxic substances  
Symbol (skull and crossbones) : black;  
Background : white ;  
Figure '6' in bottom corner



(No.6.2)  
Division 6.2  
Infectious substances  
The lower half of the label may bear the  
Inscriptions: 'INFECTIOUS SUBSTANCE'  
and 'in the case of damage or leakage immediately  
notify Public Health Authority';  
Symbol (three crescents superimposed on a circle)  
and inscriptions : black ; Background : white ;  
Figure '6' in bottom corner



**Class 7 Radioactive material**

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



(No. 7B)

Category II - Yellow

Symbol (trefoil) : black ;

Background : upper half yellow  
with white border, lower half white

Text (mandatory) : black in lower half of label:

'RADIOACTIVE'

'Contents.....'

'Activity.....'

In a black outlined box - 'Transport Index'

Two red bars should follow the word 'Radioactive'

Figure '7' in bottom corner



(No. 7C)

Category II - Yellow

Symbol (trefoil) : black ;

Background : upper half yellow  
with white border, lower half white

Text (mandatory) : black in lower half of label:

'RADIOACTIVE'

'Contents.....'

'Activity.....'

In a black outlined box - 'Transport Index'

Three red bars should follow the word 'Radioactive'

Figure '7' in bottom corner



**Class 8** Corrosive substances



(No. 8)

Category I - White

Symbol (liquids, spilling from two glass  
vessels and attacking a hand and a metal) : black

Background : upper half white,  
lower half black with white border ;

Figure '8' in white in bottom corner

**Class 9** Miscellaneous dangerous  
substances and articles



(No. 9)

Category I - White

Symbol (seven vertical stripes in upper half) : black ;

Background : white,

lower half black with white border ;

Figure '9' underlined in bottom corner

NINTH SCHEDULE  
(Regulations 30)  
TREATMENT METHODS OF BIOMEDICAL WASTES

<i>Waste category</i>	<i>Treatment method</i>
Contaminated animal carcasses	Incineration
Cultures and stock	Steam sterilization
Contaminated bedding/patient care waste	Steam sterilization or Incineration
Contaminated small equipment	Steam sterilization or incineration
Contaminated large equipment	Formaldehyde decontamination
Waste biological	Steam sterilization or incineration
Surgery waste	Steam sterilization or incineration
Human blood	Steam sterilization or incineration
Autopsy waste	Incineration
Human blood products	Steam sterilization or Incineration
Contaminated laboratory waste	Steam sterilization
Pathological waste	Steam sterilization or Incineration/Grinding
Dialysis unit waste	Steam sterilization
Contaminated and unused sharps	Steam sterilization and Incineration/grinding
Pharmaceutical waste	See separate Pharmaceutical waste guidelines
Anti-neoplastic drug waste	Incineration
Low level radioactive waste	Consult Kenya Nuclear regulatory Authority

*Note:*

- Chemical treatment using at least 1% hypochlorite solution or any other equivalent chemical reagent. It must be ensured that the chemical treatment.
- Mutilation/shredding must be such so as to prevent unauthorized reuse.
- There will be no chemical pretreatment before incineration.
- Chlorinated plastics shall not be incinerated.
- Deep burial shall be an option available only in towns with population less than five hundred thousand and in rural areas.

TENTH SCHEDULE  
(Regulation 35)  
STANDARDS FOR WASTE AUTOCLAVING

The autoclave should be indicated for the purposes of disinfecting and treating bio-medical waste,

I. When operating a gravity flow autoclave, medical shall be subjected to:

(i) a temperature of not less than 121°C and pressure of 15 pounds per square inch (psi) for an autoclave residence time of not less than 60 minutes; or

(ii) a temperature of not less than 135°C and a pressure of 31 psi for an autoclave residence time of not less than 45 minutes; or

(iii) a temperature of not less than 149°C and a pressure of 52 psi for an autoclave residence time of not less than 30 minutes

II. When operating a vacuum autoclave, medical waste shall be subjected to a minimum of one pre-vacuum pulse to purge the autoclave of all air. The waste shall be subjected to the following:

(i) a temperature of not less than 121°C and a pressure of 15 psi per autoclave residence time of not less than 45 minutes; or

(ii) a temperature of not less than 135°C and a pressure of 31 psi for an autoclave residence time of not less than 30 minutes;

III. Medical waste shall not be considered properly treated unless the time temperature and pressure indicators indicate that the required time, temperature and pressure were reached during the autoclave process. If for any reasons, time temperature, pressure or residence time was not reached, the entire load of medical waste must be autoclaved again until proper temperature, pressure and residence time were achieved.

IV. Recording of operational parameters

Each autoclave shall have graphic or computer recording devices, which will automatically and continuously monitor and record dates, time of the day, load identification number and operating parameters throughout the entire length of the autoclave cycle.

V. Validation test Spore testing:

The autoclave should completely and consistently kill biological indicator at the maximum design capacity of each autoclave unit. Biological indicator for autoclave shall be *Bacillus stearothermophilus* spore using vials or spore strips, with at least  $1 \times 10^4$  spores per milliliter.

Under no circumstances will an autoclave have minimum operating parameters less than a residence time 30 minutes, regardless of temperature and pressure, a temperature less than 121°C or pressure less than 15 psi.

VI Routine Test

A chemical indicator strip/tape that changes colour when a certain temperature is reached can be used to verify that a specific temperature has been achieved. It may be necessary to use more than one strip over the waste package at different location to ensure that the inner content of the package has been adequately autoclaved.

#### STANDARDS FOR LIQUID WASTE

The effluent generated from the hospital should conform to the following limits:

PARAMETERS	PERMISSIBLE LIMITS
pH	6.5-9.8.5
Suspended solids	100 mg/l
Oil and grease	Nil
BOD	30 mg/l
COD	50 mg/l
Bio-assay test	90% survival of fish after 96 hours in 100% effluent

These limits are applicable to those hospitals, which are either connected with sewers without terminal sewage treatment plant or not connected to sewage. For discharge into public sewers with terminal facilities, the general standards as notified under the Environmental Management Coordination (Water Quality) Regulations 2005 shall be applicable.

#### STANDARDS FOR MICROWAVING

1. Microwave treatment shall not be used for cytotoxic, hazardous or radioactive wastes, contaminated animal carcasses, body parts and large metal items.
2. The microwave system shall comply with the efficacy test/routine tests and a performance guarantee may be provided by the supplier before operation of the unit.
3. The microwave should completely and consistently kill the bacteria and other pathogenic organisms that is ensured by approved biological indicator at the maximum design capacity of each microwave unit. Biological indicators for microwave shall be *Bacillus subtilis* spores using vials strips with at least  $1 \times 10^4$  spores per milliliter.

#### STANDARDS FOR DEEP BURIAL

1. A pit trench should be dug about 2 metres deep. It should be filled with waste, and then covered with lime within 50 cm of the surface, before filling the rest of the pit with soil.
2. It must be ensured that animals do not have any access to burial sites. Covers of galvanized iron/wire meshes may be used.
3. On each occasion, when wastes are added to the pit, a layer of 10 cm of soil shall be added to cover the wastes.
4. Burial must be performed under close and dedicated supervision.

5. The deep burial site should be relatively impermeable, and no shallow well should be close to the site.
6. The pits should be distant from habitation, and sited so as to ensure that no contamination occurs of any surface water or groundwater. The area should not be prone to flooding or erosion.
7. The Authority will authorize the location of the deep burial site.
8. The institution shall maintain a record of all pits for deep burial.

Made on the 4th September, 2006

SOIPAN TUYA  
*Minister for Environment and Natural Resources*