

# **THE NATIONAL ENVIRONMENT ACT.**

Statutory Instrument 153—2.

## **The National Environment (Waste Management) Regulations.**

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# **THE NATIONAL ENVIRONMENT ACT.**

Statutory Instrument 153—2.

## **The National Environment (Waste Management) Regulations.**

*(Under sections 53(2) and 107 of the Act.)*

### **1. Citation.**

These Regulations may be cited as the National Environment (Waste Management) Regulations.

### **2. Application of Regulations.**

These Regulations apply—

- (a) to all categories of hazardous and nonhazardous waste;
- (b) to the storage and disposal of hazardous waste and its movement into and out of Uganda; and
- (c) to all waste disposal facilities, land fills, sanitary fills and incinerators.

### **3. Interpretation.**

In these Regulations, unless the context otherwise requires—

- (a) “Act” means the National Environment Act;
- (b) “authority” means the National Environment Management Authority established under section 4 of the Act;
- (c) “carrier” means a person who carries out the transportation of hazardous wastes and other wastes and includes his or her agents and assignees;
- (d) “competent local authority” means a local government established under the Local Governments Act;
- (e) “disposal site” includes the area of land on which waste disposal facilities are physically located and the final discharge point;
- (f) “disposer” means a person licensed to dispose of waste under these Regulations;
- (g) “domestic waste” means waste generated from residences;
- (h) “environmental inspector” means an inspector designated under section 79 of the Act;
- (i) “environmentally sound management of waste” means taking all

practical steps to ensure that waste is managed in a manner which will protect human health and the environment against the adverse effects which may result from the waste;

- (j) “executive director” means the executive director of the National Environment Management Authority appointed under section 11 of the Act and includes a person authorised by the executive director to act on his or her behalf, or a person to whom functions of the authority have been delegated under section 6(2) of the Act;
- (k) “exporter” means a person under the jurisdiction of the State of export who arranges for hazardous waste or other waste to be exported;
- (l) “generator of waste” means a person whose activities or activities under his or her direction produce hazardous waste or other waste or, if that person is not known, the person who is in possession or control of that waste;
- (m) “hazardous waste” means any waste specified in the Fifth Schedule to these Regulations or any waste having the characteristics defined in the Second Schedule to these Regulations and determined in accordance with the guidelines set out in the Third Schedule to these Regulations;
- (n) “importer” means a person under the jurisdiction of the State of import who arranges for hazardous waste or other waste to be imported;
- (o) “internal movement of waste” means the movement of waste from the jurisdiction of one district authority to another;
- (p) “lead agency” means any agency on whom the authority delegates its functions under section 6(2) of the Act;
- (q) “licensee” means a person issued with a licence under these Regulations;
- (r) “person” includes a company or association or body of persons corporate or unincorporate;
- (s) “prior informed consent procedure” means the international operation procedure for exchanging, receiving and handling notification information by the competent authority on hazardous waste;
- (t) “technical committee” means the technical committee on the licensing of pollution established under section 10 of the Act;
- (u) “transboundary movement” means any movement of waste into, from or through Uganda, from to or through any area under the jurisdiction of any other State;

- (v) “transit” means the movement of waste from one State to another State through the national territory of Uganda, and includes storage in transit bonds;
- (w) “Uganda Revenue Authority” means the Uganda Revenue Authority established under the Uganda Revenue Authority Act;
- (x) “waste” includes any matter prescribed to be waste, and any radioactive matter, whether liquid, solid, gaseous or radioactive which is discharged, emitted or deposited into the environment in such volume, composition or manner as to cause an alteration of the environment.

#### **4. Sorting and disposal of domestic waste.**

(1) The authority shall, from time to time, publish a list of wastes and by-products from domestic waste according to the categories specified in the Fifth Schedule to these Regulations or having the characteristics specified in the Second Schedule to these Regulations.

(2) A list published under subregulation (1) of this regulation shall identify each product or by-product by its trade name.

(3) The authority shall, in relation to the wastes and by-products published under subregulation (1) of this regulation, specify the quantity and method by which the waste and by-products shall be sorted and disposed of.

(4) A person who generates domestic waste shall sort the waste by separating hazardous waste from nonhazardous waste in accordance with the methods prescribed under subregulation (3) of these Regulations.

(5) A generator of domestic waste may, without a licence issued under these Regulations, dispose of nonhazardous waste in an environmentally sound manner in accordance with bylaws made by a competent local authority.

(6) Subregulation (5) of this regulation does not apply to the disposal of domestic waste exceeding the quantity specified in subregulation (3) of this regulation.

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

- (1) A person who owns or controls a facility or premises which

generate waste shall minimise the waste generated by adopting the following cleaner production methods—

- (a) improvement of production processes through—
  - (i) conserving raw materials and energy;
  - (ii) eliminating the use of toxic raw materials;
  - (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 reuse of the product where possible;
  - (iii) reclamation and recycling;
- (c) incorporating environmental concerns in the design and disposal of a product.

(2) The executive director may, from time to time, give directions in writing to any person or class of persons, requiring them to apply specifically stated methods of cleaner production to achieve the goals of cleaner production stated in the directive.

## **6. Application for licence for transportation or storage of waste.**

(1) A person intending to transport waste shall apply to the authority for a licence in Form I set out in the First Schedule to these Regulations.

(2) A person intending to store waste on his or her premises shall apply to the authority for a licence in Form III set out in the First Schedule to these Regulations.

(3) An application under this regulation shall be accompanied by the appropriate fee prescribed in the Sixth Schedule to these Regulations.

(4) A person intending to move waste from one district for disposal or storage in another district shall, before applying for a licence under this regulation, notify, in writing, the district environment officers of the district from which he or she intends to move the waste and the district to which he or she intends to move the waste.

(5) The district environment officer of the district in which the waste is intended to be disposed of or stored shall, if satisfied—

- (a) that the intended location of the waste and the proposed methods

of disposal or storage are in accordance with sound environmental criteria; and

- (b) that the requirements of the Act and these Regulations have been complied with,

recommend the applicant to the authority for consideration of the grant of a licence under these Regulations.

(6) A person who transports waste or stores waste on his or her premises without a licence issued under these Regulations commits an offence.

## **7. Licence for transportation or storage of waste.**

(1) The authority may issue a licence for transportation of waste or for storage of waste under this regulation where—

- (a) it is satisfied that the applicant has adequate and appropriate facilities and equipment to transport or store waste on his or her premises without causing significant damage to public health and the environment;
- (b) it is satisfied with the applicant's collection schedule of waste and, in the case of storage of waste, that the premises are adequate for storing the category of waste for which the licence is required; and
- (c) it has published its intention to issue the licence by notice in the Gazette, and in one or more local newspapers of daily circulation in Uganda thirty days before the issue of the licence.

(2) A person granted a licence to transport waste shall ensure that—

- (a) the collection and transportation of waste is conducted in a manner that will not cause scattering of the waste;
- (b) the vehicles, pipelines and equipment for the transportation of waste are in such a state as not to cause the scattering of, or the flowing out of the waste or the emitting of noxious smells from the waste;
- (c) the vehicles for transportation and other means of conveyance of waste follow the approved scheduled routes from the point of collection to the disposal site or plant;
- (d) the personnel involved in the collection, transportation or storage of waste are provided with—
  - (i) adequate protective and safety clothing;
  - (ii) adequate appropriate equipment or facilities for loading the

- waste;
- (iii) safe and secure sitting facilities in the vehicles used for transporting waste; and
  - (iv) proper training and information.

(3) A person licensed to transport or store waste shall ensure that all employees involved in the collection, transportation or storage of waste undergo such medical checkup as may be commensurate to the risks faced by the employees and, on completion of the checkup, the licensee shall submit a medical report of fitness in respect of each employee to the authority.

(4) An environmental inspector may, at any time, subject the persons involved in the collection, transportation or storage of waste to a medical checkup, and the costs of the examination shall be borne by the licensee.

(5) The vehicles used for transportation, or other means of conveyance, and the premises for storage of wastes shall be labelled in such a manner as may be directed by the authority.

(6) The authority may impose any conditions on a licence issued under this regulation which it may consider relevant to the transportation and storage of wastes.

## **8. Duration and form of licence.**

(1) Subject to these Regulations, a licence for the transportation or storage of waste is valid for one year and may be renewed by the authority on the application of the licensee.

(2) The authority may, where it deems it necessary, limit the validity of the licence to a specific number of transactions.

(3) A licence for the transportation of waste shall be in Form II set out in the First Schedule to these Regulations.

(4) A licence for the storage of waste shall be in Form IV set out in the First Schedule to these Regulations.

(5) A licence under this regulation shall be accompanied by the appropriate fee prescribed in the Sixth Schedule to these Regulations.

## **9. Powers of environmental inspector.**

An environmental inspector may, in addition to the powers contained in section 80 of the Act, at any reasonable time—

- (a) stop and inspect any vehicle used for the transportation of waste; and
- (b) enter upon any premises where waste is stored.

## **10. Packaging of waste.**

(1) Upon application for a licence for storage of waste under regulation 6 of these Regulations, the applicant shall provide a sample of the containers or packaging material in which the waste is to be stored.

(2) The container or packaging material referred to in subregulation (1) of this regulation shall be suitable for the storage of the waste for which the licence is required and shall—

- (a) not be reactive to the waste to be stored in it;
- (b) be free from the possibility of leakage; and
- (c) not cause harm to persons involved in handling the waste, the neighbouring community and the environment in general.

(3) Every container or package used in the storage of hazardous waste shall be labelled in accordance with regulation 11 of these Regulations and shall be disposed of in the manner prescribed by regulation 16 of these Regulations.

(4) A person who sells or offers for sale a container which has been used for the storage of hazardous waste to be used for a purpose other than the storage of waste commits an offence.

## **11. Labelling.**

(1) Each container or package of hazardous waste shall have attached to it a label, in easily legible characters, written in English and any other relevant local languages.

- (2) A label shall, at a minimum, contain the following information—
- (a) the identity of the hazardous waste;
  - (b) the name and address of the generator of the waste;
  - (c) the net contents;

- (d) the normal storage stability and methods for safe storage;
- (e) the name and percentage by weight of active ingredients and names and percentages by weight of other ingredients or the half-life of radioactive material;
- (f) warning or caution statements which may include all or some of the following as appropriate—
  - (i) the words “Warning” or “Caution”;
  - (ii) the words “Danger! Keep away from unauthorised persons”;
  - (iii) the word “Poison” (marked indelibly in red on a contrasting background); and
  - (iv) a pictogram of a skull and crossbones;
- (g) a statement of first-aid measures, including the antidote when inhaled or ingested, and a direction that a physician must be contacted immediately;
- (h) adequate directions, in an accompanying leaflet, for the handling of the waste, including safety precautions in transporting, storage and disposal of the waste and measures for cleaning any equipment used;
- (i) directions for the disposal of the container and the waste in accordance with the Act and these Regulations; and
- (j) any other information that the authority may deem necessary.

(3) A vehicle or other conveyance carrying hazardous wastes shall be labelled in accordance with subregulation (2)(f) of this regulation, and the label shall not contain any warranties, guarantees or liability exclusion clauses inconsistent with this Act or these Regulations.

## **12. Duty to treat waste from industries.**

(1) An industry shall not discharge or dispose of waste in any state into the environment, unless the waste has been treated in a treatment facility and in a manner approved by the lead agency in consultation with the authority.

(2) A person operating a factory who discharges or disposes of any waste, whether treated or not, into a disposal site or plant which is not approved or licensed in accordance with these Regulations commits an offence.

## **13. Application for licence to operate a waste treatment plant or waste**

**disposal site.**

(1) A person intending to operate a waste treatment plant or disposal site shall apply to the authority for a licence in Form V set out in the First Schedule to these Regulations and shall accompany the application with the appropriate fee prescribed in the Sixth Schedule to these Regulations.

(2) A person who operates a waste treatment or disposal site or plant without a licence issued under these Regulations commits an offence.

**14. Licence to own or operate a waste treatment plant or disposal site.**

(1) The technical committee shall issue to an applicant a licence to own or operate a waste treatment plant or waste disposal site if—

- (a) written approval has been obtained by the disposer from the local environment committee and district environment committee within whose jurisdiction the waste disposal site or plant is located;
- (b) the technical committee is satisfied that the applicant has the ability and the appropriate facilities to manage the site or plant without causing damage to public health and the environment, taking into account the findings of the environmental impact assessment submitted by the owner or operator; and
- (c) notice has been given by the applicant in the Gazette and in one or more local newspapers of daily circulation in Uganda as the authority shall deem fit, on the proposed waste treatment plant or waste disposal site, sixty days before the issue of the licence.

(2) A licence to own or operate a waste disposal site or plant shall be in Form VI set out in the First Schedule to these Regulations and shall be accompanied by the appropriate fee prescribed in the Sixth Schedule to these Regulations.

(3) A person licensed to own or operate a waste treatment plant or disposal site shall ensure that—

- (a) the waste treatment plant or disposal site is a radius of at least one thousand metres away from a residential or commercial area and from water sources;
- (b) the waste treatment plant or disposal site is enclosed and secure from scavengers;
- (c) the waste treatment or disposal site has hazard and safety signs

- displayed at appropriate places, indicating the treatment plant or disposal site and the nature of operations it carries out in accordance with the Fourth Schedule to these Regulations;
- (d) the waste treatment or disposal site is operated in a way which—
    - (i) avoids polluting surface and underground water;
    - (ii) avoids the emission of noxious smells from the plant or site to levels beyond a standard established under section 27 of the Act;
    - (iii) prevents the breeding of rats, mosquitoes or other vermin at the site or plant;
  - (e) any waste deemed not to be hazardous under these Regulations at the treatment plant or disposal site is compacted to a thickness of approximately three metres or less for each layer of waste and that each layer is covered with thirty centimetres of soil;
  - (f) hazardous waste is disposed of or treated in accordance with conditions laid down in the licence or in accordance with guidelines issued by the authority in consultation with the lead agency;
  - (g) means of ventilation are provided at the disposal site or plant to allow escape of bio-gas generated from the site or plant and that any noxious smell from the disposal site or plant is controlled;
  - (h) the personnel working at the waste treatment plant or disposal site are provided with—
    - (i) adequate protective and safety clothing;
    - (ii) adequate water and appropriate equipment or facilities for the operation of the treatment plant or disposal site;
    - (iii) first-aid facilities and training;
  - (i) the personnel working at the waste treatment plant or disposal site undergo an annual medical checkup;
  - (j) human waste or sewage is treated at a waste treatment plant or disposal site before disposal; and
  - (k) measures to control and prevent scattering of paper or other light waste materials are installed at the waste treatment plant or disposal site.

(4) The technical committee may impose conditions on a licence for the operation of a waste treatment or disposal site as it considers necessary.

(5) A licence to own or operate a waste treatment plant or disposal site is valid for one year and may be renewed; except that the technical committee may limit the duration of the licence for a period of less than one

year, but not less than six months.

(6) The authority may, where it deems it necessary, issue a licence to an applicant under regulation 7 of these Regulations for the temporary storage of any waste pending final disposal of the waste; and the temporary storage shall meet the standards required for the disposal of that category of waste as required by these Regulations.

(7) A person who—

(a) operates or owns a waste disposal site without a licence; or

(b) discharges waste onto a site or plant which is unlicensed, commits an offence.

### **15. Environmental impact assessment.**

(1) A waste treatment plant or disposal site shall not be licensed under these Regulations unless an environmental impact assessment has been carried out in accordance with sections 19, 20 and 21 of the Act.

(2) An operator of a waste treatment plant or disposal site shall carry out an annual audit of the environmental performance of the site or plant and shall submit a report to the authority.

### **16. Disposal of waste.**

(1) Where a disposer intends to dispose of or treat waste, the disposer shall, in addition to the matters required under regulations 13 and 14 of these Regulations, indicate in his or her application for a licence, the disposal operations he or she intends to carry out in accordance with the categories identified in the Fifth Schedule to these Regulations and shall enclose—

(a) a detailed description of the process he or she intends to employ and its possible effects;

(b) a detailed description of the soil structure and geology of the area;

(c) a plan for managing the leachate and other by-products from the waste;

(d) a detailed drawing indicating the structure, construction and surroundings of the waste treatment plant or disposal site;

(e) a plan of the surrounding areas, including water bodies and residences; and

(f) any other matter that may be required by the authority.

(2) In issuing a licence for the disposal of waste, the authority shall clearly indicate the disposal operation permitted and identified for the particular waste in accordance with the Fourth Schedule to these Regulations.

(3) A person who disposes of waste in contravention of this regulation commits an offence.

#### **17. Prevention of pollution from treatment plant and disposal site.**

(1) Every person who operates a waste treatment plant or disposal site shall take all necessary measures to prevent pollution from the site or plant, including the erection of necessary works and instituting of mitigation measures.

(2) In taking measures to prevent pollution under subregulation (1) of this regulation, the operations of a waste treatment plant or disposal site shall comply with any directions given by an environmental inspector under section 80 of the Act.

#### **18. Transboundary movement of waste.**

(1) A person intending to export waste from Uganda or to import waste into Uganda shall complete a movement document in Form VII set out in the First Schedule to these Regulations and shall submit a copy of the application to the Uganda Revenue Authority.

(2) The authority shall issue an export licence in Form VIII in the First Schedule to these Regulations after considering the movement document submitted under subregulation (1) of this regulation and taking into account the provisions of regulation 19 of these Regulations.

(3) The authority shall issue an import licence in Form IX set out in the First Schedule to these Regulations after the waste has been determined as nonhazardous waste under section 54 of the Act.

(4) The fees for a movement document, export and import licences referred to in subregulations (1), (2) and (3) of this regulation are those prescribed in the Sixth Schedule of these Regulations.

(5) Where a licence is issued under this regulation, a copy of the

licence shall be sent to the Uganda Revenue Authority for the necessary customs verification and control.

**19. Duties of authority in relation to transboundary movement of hazardous waste.**

(1) The authority is designated as the national authority for the operation of the prior informed consent procedure for the import, export, transit or other transboundary movement of hazardous waste.

(2) The authority shall closely liaise with the designated national authorities of other States under any international conventions or arrangements to which Uganda is a party and international organizations with competence in the field of the management of transboundary movements of hazardous wastes under any convention or arrangement to which Uganda is a party for the purpose of monitoring and controlling the movements of hazardous wastes in Ugandan territory.

(3) The authority shall disseminate information on waste management to the public.

**20. Notification procedures and prior informed consent.**

(1) The authority shall not issue a licence for export of waste unless—

- (a) the applicant has paid the appropriate fee prescribed in the Sixth Schedule to these Regulations;
- (b) the authority has notified the designated national authority of the State into which the waste is being imported, by sending a copy of the movement document in Form VII set out in the First Schedule to these Regulations and the notification document for transboundary movement of waste in Form X set out in the First Schedule and any comments of the authority made on the documents and the necessary consents received from those authorities; and
- (c) the authority has transmitted the documents referred to in paragraph (b) of this subregulation to the international body designated under any agreement or arrangement to which Uganda is a party or participant and has received written consent from that body.

(2) The authority shall not grant a licence to a person to import hazardous waste into Uganda unless—

- (a) the authority has received from the designated national authority of the State in which the waste is generated, a movement document conforming with Form VII set out in the First Schedule to these Regulations and a notification document conforming with Form X set out in the First Schedule;
- (b) the applicant has submitted a valid licence or letter of authority from the designated authority of the State where the waste is generated, permitting the export of the waste; and
- (c) the authority has received comments from the international body designated under any agreement or arrangement to which Uganda is a party or participant.

## **21. Ports of entry and routes.**

(1) A licence issued under these Regulations only entitles the licensee to transport waste through the customs points of entry designated in the Seventh Schedule to these Regulations.

(2) No hazardous waste shall be transported by water, except hazardous wastes generated from islands within the territorial jurisdiction of Uganda.

## **22. Insurance.**

(1) An applicant for a licence under regulations 6, 13 and 18 of these Regulations shall satisfy the authority that he or she has subscribed to an insurance policy covering the risks likely to arise out of the activity for which the licence is required.

(2) A generator of waste which has been characterised as hazardous under the Fifth Schedule to these Regulations shall, upon written instructions from the executive director, subscribe to an insurance policy to cover risks caused by that waste.

## **23. Reporting procedures.**

(1) A person licensed to carry out any activity under these Regulations shall submit biannual reports on the conduct of the licensed activity to the authority.

(2) Where special reporting procedures are made the condition of a licence granted under these Regulations, those procedures shall take precedence over the submission of biannual reports under subregulation (1) of this regulation.

**24. Duty to keep records.**

- (1) The holder of a licence under these Regulations shall—
  - (a) keep a record of the licensed activity and all transactions related to it; and
  - (b) submit the record referred to in paragraph (a) of this subregulation to the authority every six months from the commencement of the licensed activity.
- (2) The authority may order the licensee—
  - (a) to install metering devices at the expense of the licensee; and
  - (b) to take samples and analyse them as the authority may direct.

**25. Register of licences.**

The authority shall maintain a register of all licences issued under these Regulations.

**26. Improvement notice.**

(1) Where an environmental inspector has reasonable cause to believe that any person is violating these Regulations, he or she may issue against that person an improvement notice in accordance with section 80 of the Act or take any other measures provided for under section 80 of the Act.

(2) An improvement notice issued under subregulation (1) of this regulation shall not prejudice any other action which may be taken under the Act.

**27. Cancellation of licence.**

The authority may, on the advice of the technical committee, suspend or revoke a licence issued under these Regulations if it is satisfied that—

- (a) the conditions of the grant of the licence have not been complied with; or

- (b) the continued operation of the waste treatment plant or disposal site will be injurious to the health of the neighbouring community or to the environment in general.

**28. Offences and penalties.**

A person who commits an offence under these Regulations is liable on conviction to imprisonment for a term of not less than thirty-six months or to a fine of not less than 360,000 shillings and not more than 36,000,000 shillings or both.

**29. Fees.**

The fees prescribed in the Sixth Schedule to these Regulations shall be paid for the various applications and licences under these Regulations.

**30. Operation of Regulations.**

These Regulations shall, without prejudice, operate in addition to any other regulations or standards made under any other law.

## SCHEDULES

*First Schedule.*

regs. 6, 8, 13, 14, 18, 20.

### Forms.

reg. 6.

Form I.

Form NEMA/WM/I.

Application for a Licence for Transportation of Waste.

*The National Environment Act.*

*(To be completed in triplicate)*

I apply for a licence to transport waste, of which particulars are given below.

1. Name and address of applicant \_\_\_\_\_  
\_\_\_\_\_
2. Registration number and type of vehicles to transport waste \_\_\_\_\_  
\_\_\_\_\_
3. Quantity of waste per vehicle to be transported \_\_\_\_\_  
\_\_\_\_\_
4. Quantity of waste to be disposed of (tons/kg. per year) and source \_\_\_\_\_  
\_\_\_\_\_
5. Licensed sites/plant to which waste is to be transported \_\_\_\_\_  
\_\_\_\_\_
6. Collection schedule \_\_\_\_\_  
\_\_\_\_\_
7. Any other information \_\_\_\_\_  
\_\_\_\_\_

Date \_\_\_\_\_ Signature \_\_\_\_\_

Designation/Title \_\_\_\_\_  
\_\_\_\_\_

*For Official Use Only*

Application received by \_\_\_\_\_ on \_\_\_\_\_, 20 \_\_\_\_

Fee paid: shs \_\_\_\_\_ (*in words*) \_\_\_\_\_

\_\_\_\_\_  
Chairperson, Technical Committee on the  
Licensing of Pollution, National  
Environment Management Authority

reg. 8.

Form II.  
Form NEMA/WM III.  
Licence to Transport Waste.  
*The National Environment Act.*

Licence No. TR/HW \_\_\_\_\_

Name \_\_\_\_\_

Address \_\_\_\_\_

You are licensed to transport waste to \_\_\_\_\_ (*location/  
district*) from \_\_\_\_\_  
(*location/district*)

Type and registration number of vehicles licensed \_\_\_\_\_

This licence is valid from \_\_\_\_\_ 20 \_\_\_\_ to \_\_\_\_\_ 20 \_\_\_\_

This licence is granted subject to the following conditions \_\_\_\_\_

Date \_\_\_\_\_ Signature \_\_\_\_\_

\_\_\_\_\_  
Chairperson, Technical Committee on the  
Licensing of Pollution, National  
Environment Management Authority

Form III.  
Form NEMA/WM/V.  
Application for a Licence for Storage of Hazardous Waste.  
*The National Environment Act.*

I apply for a licence to store hazardous wastes, of which particulars are given below.

1. Name and address of applicant \_\_\_\_\_  
\_\_\_\_\_
2. Address of premises where waste will be stored \_\_\_\_\_  
\_\_\_\_\_  
*(Plot No., village, parish, subcounty, county, district)*
3. Type of waste to be stored *(indicate number in accordance with Second Schedule)* and describe whether liquid, solid or gaseous and their possible impacts \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
4. Quantity of waste to be stored in kg. or tons for solids; or in cm<sup>3</sup> if liquids or gases \_\_\_\_\_  
\_\_\_\_\_
5. Type of containers in which the waste is to be packaged \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
6. Type of labels on the container *(describe and attach sample)*  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
7. Are there any other materials stored in the premises? *(describe)*  
\_\_\_\_\_  
\_\_\_\_\_

8. Surroundings of the premises (*describe whether industrial, residential, commercial and whether it is near schools or recreational areas*)

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

9. Duration of storage applied for \_\_\_\_\_

10. Final destination of the waste \_\_\_\_\_

11. Specifications of the construction of the premises, including ventilation or other measures, and suitability for storage of the specified waste (*describe and attach building plans*) \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

12. Describe the safety measures at the premises \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

13. Measures for containment and treatment of leachate if applicable

\_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_\_  
Date

\_\_\_\_\_  
Signature of Applicant

\_\_\_\_\_  
*For Official Use Only*

Date received \_\_\_\_\_

Fee paid: shs. \_\_\_\_\_ (*in words*) \_\_\_\_\_

Comments of the lead agency \_\_\_\_\_

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Comments of the authority \_\_\_\_\_

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\_\_\_\_\_  
Date

\_\_\_\_\_  
Name and signature of Responsible Officer

Decision of the technical committee on the licensing of pollution and comments \_\_\_\_\_

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\_\_\_\_\_  
Date

\_\_\_\_\_  
Chairperson, Technical Committee on the Licensing of Pollution

Date when decision was communicated to applicant \_\_\_\_\_ (*attach communication to this form*)

\_\_\_\_\_  
Date

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Name of Responsible Officer

Form IV.  
Form NEMA/WM/VI.  
Licence for Storage of Hazardous/Nonhazardous Waste.  
*The National Environment Act.*

Licence No. ST/HW \_\_\_\_\_

Name and address \_\_\_\_\_  
\_\_\_\_\_  
*(Plot No.,  
village, parish, subcounty, county, district)*

You are licensed to operate a storage facility for the following waste  
*(indicated by number in Fifth Schedule to the National Environment (Waste  
Management) Regulations)*

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_
5. \_\_\_\_\_
6. \_\_\_\_\_
7. \_\_\_\_\_
8. \_\_\_\_\_

at the following address \_\_\_\_\_  
\_\_\_\_\_  
*(plot no.,  
village, parish, subcounty, county, district)*

This licence is valid from \_\_\_\_\_ 20\_\_\_\_, to \_\_\_\_\_ 20 \_\_\_\_

This licence is subject to the following conditions \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_\_  
Date

\_\_\_\_\_  
Chairperson, Technical Committee on the  
Licensing of Pollution

Form V.  
Form NEMA/WMII.  
Application for a Licence to Own/Operate  
a Waste Treatment Plant or Disposal Site.  
*The National Environment Act.*  
(To be completed in triplicate)

I apply for a licence to own/operate a waste treatment plant/disposal site, of which particulars are given below.

1. Name and address of applicant \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
2. Location and district of plant/site \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
3. Approval of town and country planning authority \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
4. Types of waste to be disposed of at plant/site \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
5. Quantity being disposed of per year: tonnes/kg. \_\_\_\_\_  
\_\_\_\_\_
6. Type of facilities/treatment to be carried on at plant/site—
  - (a) land fill \_\_\_\_\_
  - (b) compost \_\_\_\_\_
  - (c) incinerator \_\_\_\_\_
  - (d) other (*specify*) \_\_\_\_\_
7. Estimated life span of plant/site \_\_\_\_\_
8. Proposed hectarage/area of plant/site (*include plan or designs*) \_\_\_\_\_  
\_\_\_\_\_

9. Executive summary of environmental impact statement (*please attach*)

\_\_\_\_\_

10. Any other information \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Date \_\_\_\_\_

Signature \_\_\_\_\_

Designation/Title \_\_\_\_\_

\_\_\_\_\_

*For Official Use Only*

Application received by \_\_\_\_\_ on \_\_\_\_\_ 20 \_\_\_\_\_

Fee paid: shs. \_\_\_\_\_ (*in words*) \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_  
Chairperson, Technical Committee on the  
Licensing of Pollution, National  
Environment Management Authority

Form VI.  
Form NEMA/WM/IV.  
Licence to Own/Operate a Waste Treatment Plant/Disposal Site.  
*The National Environment Act.*

Licence No. WD/HW \_\_\_\_\_

Name \_\_\_\_\_

Address \_\_\_\_\_

You are licensed to own/operate a treatment plant/waste disposal site \_\_\_\_\_  
\_\_\_\_\_  
(Plot No.,  
*village, parish, subcounty, county, district*)

This licence is valid from \_\_\_\_\_ 20 \_\_\_\_, to \_\_\_\_\_ 20 \_\_\_\_

This licence is subject to the following conditions—

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_\_  
Date

\_\_\_\_\_  
Chairperson, Technical Committee on the  
Licensing of Pollution, National  
Environment Management Authority

regs. 18, 20.

Form VII.  
Form NEMA/WM/VII.  
Movement Document for Transboundary Movement of Waste.<sup>1</sup>  
*The National Environment Act.*

*(To be completed in triplicate)*

Notification for waste shipment was issued at \_\_\_\_\_

Date of issuance \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_

' Notification for a single shipment

' Notification for multiple shipments for the period \_\_\_\_\_

This shipment is number \_\_\_\_\_ of total shipments included in the  
general notification number \_\_\_\_\_.

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<sup>1</sup>To be issued in triplicate, one copy to Uganda Revenue Authority.

1. Exporter (Notifier) (Note 1)

Name	
Address	
Telephone	
Telefax	
E-mail	
Contact person ( <i>name, address, telefax</i> )	

2. Generator(s) of waste

Name	
Address	
Telephone	
Telefax	
E-mail	
Contact person ( <i>name, address, telephone, telefax, e-mail</i> )	
Process by which the waste was generated	
Site of generation	

3. Disposer of the waste

Name: Address: Telephone:      Telefax: Email:	TO BE COMPLETED BY THE DISPOSER
Contact person in case of emergency (name, address, telephone, telefax, e-mail)	Certification of receipt of waste at designated disposal facility
Approximate date of disposal:	Method of disposal (3) D code _____ R code _____

Actual site of disposal	Date _____ / _____ / _____
	Signature _____
	Actual date of disposal _____ / _____ / _____
	Signature of disposer _____

#### 4. Waste

Description of the waste				
Y number	H number	UN class	UN number	
UN shipping name		IWIC code		
Physical state at 20EC: 9 powder 9 solid 9 paste/viscous 9 sludge 9 liquid 9 gaseous 9 other				
Estimated quantity ( <i>kg. or l.</i> ) per shipment:				
9 1st	9 2nd	9 3rd	9 4th	9 5th
Type of packaging _____				
Number of packages _____				
State the special handling requirements, including emergency provisions in case of accidents.				

#### 5. Itinerary

Country of export:
Point of exit (when designated):
Transit countries—
(1) Point of entry (when designated): Point of exit (when designated):
(2) Point of entry (when designated): Point of exit (when designated):
(3) Point of entry (when designated): Point of exit (when designated):
(4) Point of entry (when designated): Point of exit (when designated):
Country of import:
Point of entry (when designated):

6. Carrier of waste or agent of carrier

(1) Name	
Address	
Telephone	
Telefax	
E-mail	
Contact person ( <i>name, address, telephone</i> )	
Means of transportation	9 sea      9 air      9 road      9 rail
Date of transboundary movement	Started: _____ / _____ / _____
Signature of the carrier(s) or agent	
Licence (when applicable)	

(2) Name	
Address	
Telephone	
Telefax	
E-mail	
Contact person ( <i>name, address, telephone, telefax, e-mail</i> )	
Means of transportation	9 sea      9 air      9 road      9 rail
Date of transboundary movement	Started: _____ / _____ / _____
Signature of the carrier(s) or agent	
Licence (when applicable)	

(3) Name	
Address	
Telephone	
Telefax	
E-mail	
Contact person ( <i>name, address, telephone, telefax, e-mail</i> )	
Means of transportation	9 sea      9 air      9 road      9 rail
Date of transboundary movement	Started: _____ / _____ / _____
Signature of the carrier(s) or agent	
Licence (when applicable)	

7. Consent of competent local authority  
*(To be completed by the generator/exporter/importer)*

<p>I/We _____ being the generator/exporter/importer declare/guarantee that the information contained in this document is correct and true.</p> <p>Signed _____ (<i>Generator/Importer/Exporter</i>)  Date _____</p>	
<p>I/We _____ being the generator/exporter/importer declare/guarantee that there are no objections from all the contracting parties to the Basel Convention and local authorities through which the waste will be transported.</p> <p>Signed _____ (<i>Generator/Importer/Exporter</i>)  Date _____</p>	
<p><i>(Attach copies of no objections/consent)</i></p> <p>Date of consent of exporting      State:    /    /</p> <p>Date of consent of transit      State:    /    /</p> <p>Date of consent of transit      State:    /    /</p> <p>Date of consent of transit      State:    /    /</p>	

**Annex to the notification and movement document.**

1. The notifier is the person who wants to transit hazardous waste through Uganda.
2. “Designation of the waste” means a designation of the nature and the concentration of the most hazardous components, in term of toxicity and other dangers presented by the waste both in handling and in relation to the proposed disposal method.
3. As per Annex IV of the Basel Convention: D or R code.
4. This must include the point of entry and the point of exit of the waste, inside or outside the country.
5. In the case of a general notification covering several shipments, the expected dates of each shipment have to be specified. If this is not known, the expected frequency of the shipments.

Form VIII.  
Form NEMA/WM/VIII.  
Licence to Export Waste.  
*The National Environment Act.*

Licence No. \_\_\_\_\_

Name and address of exporter \_\_\_\_\_  
\_\_\_\_\_  
*(plot no., village, parish, subcounty, county, district)*

You are licensed to export the following waste (indicated by number in Second Schedule)

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

To *(name and address)* \_\_\_\_\_  
\_\_\_\_\_

This export shall be made through \_\_\_\_\_ border/custom control post.  
This licence is valid from \_\_\_\_\_ 20 \_\_\_\_ to \_\_\_\_\_ 20 \_\_\_\_

This licence is subject to the following conditions:

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_
5. \_\_\_\_\_
6. \_\_\_\_\_

*(Attach a copy of authorisation by the state to which the export is to be made.)*

\_\_\_\_\_  
Date

\_\_\_\_\_  
Chairperson, Technical Committee on the  
Licensing of Pollution

Form IX.  
Form WM/NEMA/IX.  
Licence to Import Waste.  
*The National Environment Act.*

Licence No. IM/HW \_\_\_\_\_

Name and address of importer \_\_\_\_\_  
\_\_\_\_\_ (*Plot No., village, parish, subcounty, county, district*)

Purpose for which the import of waste is licensed \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

You are licensed to import the following waste \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

From (*name and address*) \_\_\_\_\_  
\_\_\_\_\_

To (*name and address*) \_\_\_\_\_  
\_\_\_\_\_

This import shall be made through \_\_\_\_\_ border/customs control post.

This licence is valid from \_\_\_\_\_ 20 \_\_\_\_\_, to \_\_\_\_\_ 20 \_\_\_\_\_

This licence is subject to the following conditions:

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_
5. \_\_\_\_\_
6. \_\_\_\_\_

*(Attach a copy of authorisation by the State from which the importation is to be made.)*

\_\_\_\_\_  
Date

\_\_\_\_\_  
Chairperson, Technical Committee on the  
Licensing of Pollution

Form X.  
Form NEMA/WM/X.  
Notification Document for Transboundary  
Movement of Waste.  
*The National Environment Act.*  
*(For transit purposes only)*  
*(To be filled in triplicate)*

1. Notifier<sup>1</sup>

Name	
Address	
Telephone	
Telefax	
E-mail	
Contact person ( <i>name, address, telefax, e-mail</i> )	

## 2. Generator(s) of waste

Name	
Address	
Telephone	
Telefax	
E-mail	
Contact person ( <i>name, address, telephone, telefax, e-mail</i> )	
Process by which waste was generated	
Site of generation	

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<sup>1</sup> The notifier is the exporter or importer of wastes.

3. Reason for waste export/import

Why the waste cannot be disposed of in the country of origin	
Why the waste has to be exported/imported through Uganda	

4. Waste

Description of the waste			
Y number	H number	UN class	UN number
Shipping name		IWIC code	
Physical state at 20EC: <input type="checkbox"/> powder <input type="checkbox"/> solid <input type="checkbox"/> paste/viscous <input type="checkbox"/> sludge <input type="checkbox"/> liquid <input type="checkbox"/> gaseous <input type="checkbox"/> other ( <i>specify</i> )			
Estimated quantity (kg. or l.) per shipment:			
Type of packaging _____			
Number of packages _____			
Special handling requirements, including emergency provisions in case of accidents			
Method of disposal			

5. Exporter/importer of the waste

Competent authority and details of approval	
Exporter/Importer of the waste in the country of origin/destination	
Name	
Telephone	
Telefax	
E-mail	

6. Disposer of waste

Contact person in case of emergency	
Name	
Telephone	
Telefax	
E-mail	
Approximate date of disposal	
Actual site of disposal	
Signature and official stamp of disposer	

7. Transit

Projected length of time the waste shipment shall be in transit in Uganda	
Expected date of entry	
Expected date of exit	
Means of transport envisaged	
Information relating to insurance: <i>(Guarantee that the person responsible shall fully compensate any damage caused to human health, property or the environment by the waste in question during transit)</i>	

8. Declaration

I/We \_\_\_\_\_ being the exporter/importer declare that on \_\_\_\_\_ I/we entered into a contract with the disposer and that I/we shall be bound by the terms of that contract.<sup>2</sup> (*attach a copy of contract*)

Signed \_\_\_\_\_ (*Exporter/Importer<sup>2</sup>*)

I/We \_\_\_\_\_ being the exporter/importer guarantee/declare that the above information is correct and true.<sup>2</sup>

Signed \_\_\_\_\_ (*Exporter/Importer<sup>2</sup>*)

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<sup>2</sup>Delete whichever is inapplicable.

*Second Schedule.*

regs. 3, 4.

**List of hazardous characteristics.**

UN Code	Characteristics	Class <sup>1</sup>
1	H1.	Explosive. An explosive substance or waste is a solid or liquid substance or waste (or mixture of substances or wastes) which is in itself capable by chemical reaction of producing gas at such a temperature and pressure and at such a speed as to cause damage to the surroundings.
3	H3.	Flammable liquids. The word “flammable” has the same meaning as “inflammable”. Flammable liquids are liquids, or mixtures of liquids, or liquids containing solids in solution or suspension (for example paints, varnishes, lacquers, etc. 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 60.5EC, closed-cup test, or not more than 65.6EC, open-cup test. (Since the results of open-cup tests and of closed-cup tests are not strictly comparable and even individual results by the same test are often variable, regulations varying from the above figures to make allowance for such difference would be within the spirit of this definition).
4.1	H4.1	Flammable solids. Solids, or waste solids, other than those classed as explosives, which under conditions encountered in transport are readily combustible, or may cause or contribute to fire through friction.

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<sup>1</sup> 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).

- 4.2 H4.2 Substances or wastes liable to spontaneous combustion. Substances or wastes which are liable to spontaneous heating under normal conditions encountered in transport, or to heating upon contact with air, and being then liable to catch fire.
- 4.3 H4.3 Substances or wastes which, in contact with water emit flammable gases. Substances or waste which, by interaction with water, are liable to become spontaneously flammable or to give off flammable gases in dangerous quantities.
- 5.1 H5.1 Oxidizing. Substances or wastes which, while in themselves not necessarily combustible, may, generally by yielding oxygen, cause or contribute to the combustion of other materials.
- 5.2 H5.2 Organic peroxides. Organic substances or wastes which contain the bivalent-O-O-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 or to harm 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 microorganisms 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 or the means of transport; they may also cause other hazards.

- 9 H10 Liberation of toxic gases in contact with air or water. Substances or wastes which, by interaction with air or water, are liable to give off toxic gases in dangerous quantities.
- H11 Toxic (delayed or chronic). Substances or wastes which, by intersection with air or water, are liable to give off toxic gases in dangerous quantities. Substances or wastes which, if they are inhaled or ingested or if they penetrate the skin, may involve delayed or chronic effects, including carcinogenicity.
- 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.
- H13 Capable, by any 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; wastes 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.
-

*Third Schedule.*

reg. 3.

**Guidelines for determination of some hazardous characteristics.**

	Testing methods	Judging criteria
1.	Thermal analysis test using 2,4-dinitrotoluene and dibenzoyl peroxides as standard substances, as specified in Annex 1	The results of thermal analysis of test substance are placed on the rectangular coordinates, where the common logarithm of corrected initiation temperature (real-measured initiation temperature -25EC) is on X axis (horizontal) and the common logarithm of calorific value is on Y axis (vertical). Then, a plot of the common logarithm of corrected initiation temperature and adjusted calorific value (real-measured calorific value multiplied by 0.7) of 2,4-dinitrotoluene and a plot of the common logarithms of corrected initiation temperature and adjusted calorific value (real-measured calorific value multiplied by 0.8) of dibenzoyl peroxide are placed in the same coordinate. The criterion is whether the plot of test substance in question is placed on or above the line to link the plots of 2,4-dinitrotoluene and dibenzoyl peroxides.
2.	Flash point test by Tag closed cup apparatus, as specified in Annex 2.A. (Flash point test by Seta closed cup apparatus as specified in Annex 2.B. should be utilised instead, in case that, flash point measured by Tag closed cup apparatus be between 0EC and 80EC and also kinetic viscosity of test substance in question at that flash point is of 10 cent-stokes or more.)	Flash point of 60.5EC or less

	Testing methods	Judging criteria
3.	Small gas flash ignition test, as specified in Annex 3.A. and flash point test by Seta closed cup apparatus, as specified in Annex 3.B.	The criteria are: (a) whether test substance ignites within 10 seconds and burning continues by small gas flash ignition test; or (b) whether flash point is less than 40EC by Seta closed cup flash point test.
4.	Spontaneous combustion test as specified in Annex 4	The criteria are: (a) whether gas substance combusts; or (b) whether the filter paper becomes scorched.
5.	Reaction-to-water test, as specified in Annex 5	The criteria are: (a) whether gas generated by the reaction of test substance to water autoignites or catches fire; or (b) whether gas generated per one kilogram of test substance is one litre or more and also has flammable component.
6.	Burning test using ammonium persulfate as standard substance, as specified in Annex 6.A. <i>(applicable only for test substance in solid form)</i>	The criterion is whether the burning time of test substance is equal to or shorter than that of standard substance.
7.	Burning test using 90% nitric acid solution as standard substance, as specified in Annex 6.B. <i>(applicable only for test substance in liquid form)</i>	The criterion is whether the burning time of test substance is equal to or shorter than that of standard substance.
8.	Oral toxicity test, as specified in Annex 7.A.	(a) LD <sub>50</sub> of 200 mg./kg. or less <i>(applicable for test substance in solid form)</i> (b) LD <sub>50</sub> of 500 mg./kg. or less <i>(applicable for test substance in liquid form)</i>
9.	Dermal toxicity test as specified in Annex 7.B.	LD <sub>50</sub> of 1,000 mg./kg. or less
10.	Inhalation toxicity test, as specified in Annex 7.C. <i>(applicable only for test substance in form of dust or mist)</i>	LD <sub>50</sub> of 10 mg./kg. or less
11.	Corrosion test for metals, as specified in Annex 8	Corrosion rate of metal chip of 6.25 mm/year

Remarks:

1. Test substances which are determined not to fall into the groups of class 1 (explosives) and class 5.2 (organic peroxides) based on the rules of the United Nations Recommendations on the Transport of Dangerous Goods (ST/SG/AC.10/1/Rev. 7) adopted in New York by the United Nations in 1990 (hereafter referred to as “United Nations Recommendations”) shall be recognised as not possessing the properties given in the lower row of item 1 for the corresponding test given in the relevant middle row of that item.
2. Test substances which are determined not to fall into the group of class 3 (flammable liquids) based on the rules of the United Nations Recommendations shall be recognised as not possessing the properties given in the lower row of item 2 for the corresponding test given in the relevant middle row of the same item.
3. Test substances which are determined not to fall into the group of class 4 (flammable solids) based on the rules of the United Nations Recommendations shall be recognised as not possessing the properties given in the lower row of item 3 for the corresponding test given in the relevant middle row of the same item.
4. Test substances which are determined not to fall into the group of class 5.1 (oxidizing substances) based on the rules of the United Nations Recommendations shall be recognised as not possessing the properties given in the lower row of item 4 for the corresponding test given in the relevant middle row of the same item.
5. Test substances for which no deaths of laboratory animals are observed as a result of the fixed dose toxicity test specified in Annex 7.D., shall be recognised as not possessing the properties given in the lower rows of item 7 for the corresponding tests given in the relevant middle rows of the same item.
7. Test substances which are determined not to fall into the group of class 8 (corrosive substances) based on the rules of the United Nations Recommendations shall be recognised as not possessing the properties given in the lower row of item 8 for the corresponding test given in the relevant middle row of the same item.

The thermal analysis test with 2,4-dinitrotoluene and dibenzoyl peroxides as standard substances uses the apparatus specified in item 1 to measure the starting heating temperature and the heating value of the waste in question and the standard substances when heated according to the testing methods specified in item 2.

1. Apparatus.

The apparatus shall be a differential scanning calorimetry (DSC) or a differential thermal analysis (DTA) apparatus using aluminium oxide (%) as standard substance.

2. Testing methods.

(1) Testing methods for 2,4-dinitrotoluene.

(a) Encapsulate 1 mg. of 2,4-dinitrotoluene and 1 mg. of the standard substance in a pressure-proof stainless steel cell with a burst pressure of 50 kfg./cm.<sup>2</sup> or more, and load it on the apparatus. Then, heat it so that the temperature of the 2,4-dinitrotoluene and the standard substance rises at a rate of 10EC in 60 seconds.

(b) Determine the initiation temperature of heat generation and calorific value from the chart obtained.

(2) Test procedure for dibenzoyl peroxide.

Carry out the procedure from (1)(a) to (b), using 2 mg. each of dibenzoyl peroxide and the standard substance.

(3) Testing methods for test substance.

Carry out the procedure from (1)(a) to (b), using 2 mg. each of the test substance and the standard substance.

Annex 2.

A. Flash point test by Tag closed cup apparatus.

The flash point test by Tag closed cup apparatus uses the apparatus specified in item 1. The flash point of the waste in question is measured in the laboratory specified in item 2 according to the testing methods specified in item 3.

1. Apparatus.

The apparatus shall be a Tag closed cup apparatus.

2. Laboratory.

The laboratory shall be in a place under atmospheric pressure in almost

windless conditions.

3. Testing methods.

- (1) Put 50 cm.<sup>3</sup> of a test substance in a test cup and then put the lid in place.
- (2) Produce a test flame and adjust its size to a diameter of 4 mm.
- (3) Adjust the heating condition of the bath so that the temperature of the test substance will rise by 1EC per 60 seconds. When the temperature of the test substance reaches a value of 5EC below the expected flash point (the temperature at which the test substance flash is to be confirmed, the same applying hereafter), open the shutter to make the test flame apply to the vapour space of the test cup for about one second and return it to the original position. In this case, do not rapidly adjust the test flame up and down.
- (4) Where the test substance does not flash in (3), open the shutter every time the temperature of the test substance rises by 0.5EC, make the test flame apply to the vapour space of the cup for one second, and return it to the original position. Repeat this operation until the flash is observed.
- (5) Where the test substance flashes at a temperature lower than 60EC in (4) and, in addition, the difference between that temperature and the expected flash point does not exceed 2EC, the temperature at which the test substance flashes shall be deemed the flash point of the test substance.
- (6) When the test substance flashes in (3) or when there is a difference between the temperature at which the test substance flashes in (4) and the expected flash point exceeds 2EC, repeat the procedures from (1) to (4).
- (7) Where the temperature at which the test substance flashes in (4) or (6) is not less than 60EC, carry out the following procedure.
- (8) Carry out the procedure described in (1) and (2).
- (9) Adjust the heating condition of the bath so that the temperature

of the test substance rises by 3EC within 60 seconds. When the temperature of the test substance reaches a value 5EC below the expected flash point, open the shutter to make the test flame apply to the vapour space of the cup for about one second and then return it to the original position. In this case, do not rapidly adjust the test flame up and down.

- (10) Where the test substance does not flash in (9), open the shutter every time the temperature of the test substance rises 1EC to make the test flame apply to the vapour space of the cup, and then return it to the original position. Repeat this operation until the test substance catches fire.
- (11) Where the difference between the temperature at which the test substance flashes in (10) and the expected flash point does not exceed 2EC, the temperature at which the test substance flashes shall be deemed the flash point of that test substance.
- (12) When the test substance flashes in (9) and/or when there is a difference between the temperature at which the test substance flashes in (10) and the expected flash point exceeds 2EC, repeat the procedure from (8) to (10).

B. Flash point test by Seta closed cup apparatus.

The flash point test by Seta closed cup apparatus shall measure the flash point of the waste in question by using the apparatus specified in item 1 at the laboratory specified in item 2 and according to the testing methods specified in item 3.

1. Apparatus.  
The apparatus shall be a Seta flash closed cup apparatus.
2. Laboratory.  
The laboratory shall be in a place under atmospheric pressure in almost windless conditions.
3. Testing methods.
  - (1) Heat or cool a sample cup to the expected flash point, keep the sample cup at that temperature, pour 2 cm<sup>3</sup> of the test substance (when the expected flash point is lower than the room temperature of the laboratory, the sample shall be cooled down to the expected flash point) in the cup, and then immediately

place the lid and close the shutter.

- (2) Retain the temperature of the sample cup at the expected flash point for one minute.
- (3) Produce a test flame and adjust it to a diameter of 4 mm.
- (4) After one minute, open the shutter to make the test flame apply to the sample cup for about 2.5 seconds, and then return it to the original position. In this case, do not rapidly adjust the test flame up and down.
- (5) Where the sample flashes in (4), lower the expected flash point stepwise and perform the procedures from (1) to (4) until it does not flash anymore. Where the sample does not flash in (4), raise the expected flash point stepwise and perform the procedures from (1) to (4) until it flashes.

### Annex 3.

#### A. Small gas flash ignition test.

The small gas flame ignition test measures the duration of time from when the waste in question makes contact with the flame to when a flame is ignited and observes whether burning continues or not. This test is conducted at the laboratory specified in item 1 and according to the testing methods specified in item 2.

##### 1. Laboratory.

The laboratory shall be in a place under atmospheric pressure at a temperature of 20EC and a humidity of 50% in almost windless conditions.

##### 2. Testing methods.

- (1) Put 3 cm<sup>3</sup> of the test substance (conditioned for 24 hours or more at a temperature of 20EC in a desiccator containing silica gel for drying) on an impervious low-heat conducting base plate with a thickness of 10 mm. or more. In this case, a powdery or granular substance shall be put on the impervious low-heat conducting base plate in a hemispherical shape.
- (2) Keep a flame of liquefied petroleum gas (a diffusion flame from

an ignition device with a rod-like nozzle, and the flame length adjusted to 70 mm. with the nozzle of the ignition device held upward) in touch with the test specimen for 10 seconds. (The contact area of the flame and test substance shall be 2 cm<sup>2</sup> and the angle of contact shall be approximately 30 degrees).

- (3) Measure the time after the flame makes contact with the test substance until it is ignited. Determine whether burning (including burning with no flame) continues. A test substance shall be judged to have undergone continuous burning in the case where it burns out completely during its contact with the flame, where it burns out completely within 10 seconds after the flame is detached, or where it continues to burn for 10 seconds or more after the flame is detached.

B. Flash point test by Seta closed cup apparatus.

The flashpoint test point test by Seta closed cup apparatus measures the flash point of the waste in question using the apparatus specified in item 1 at the laboratory specified in item 2 and according to the testing methods specified in item 3.

1. Apparatus.

The apparatus shall be a Seta flash closed cup apparatus.

2. Laboratory.

The laboratory shall be in a place under atmospheric pressure in almost windless conditions.

3. Testing methods.

- (1) Heat or cool a sample cup to the expected flash point, and while keeping the sample cup at that temperature, put 2 g. of the test substance in the cup (where the expected flash point is lower than the room temperature in the laboratory, the sample shall be cooled down to the expected flash point), and immediately place the lid and close the shutter.
- (2) Retain the temperature of the sample cup at the expected flash point for five minutes.
- (3) Produce a test flame and adjust its diameter to 4 mm.
- (4) After five minutes, open the shutter to make the test flame apply

to the vapour space of the sample cup for about 2.5 seconds and then return it to the original position. In this case, do not rapidly adjust the test flame up and down.

- (5) Where the sample flashes in (4), lower the expected flash point stepwise and perform the procedures from (1) to (4) until it does not flash anymore. Where the sample does not flash in (4), raise the expected flash point stepwise and perform the procedures from (1) to (4) until it flashes.

#### Annex 4.

The spontaneous combustion test is conducted at the laboratory specified in item 1 and according to the testing methods specified in item 2. This test examines whether or not the waste in question combusts and whether or not the filter paper becomes scorched when exposed to air.

1. Laboratory.

The laboratory shall be in a place under atmospheric pressure at a temperature of 20EC and a humidity of 50% in almost windless conditions.

2. Testing methods.

- (1) Testing methods for solid substance.

- (a) Drop 2 cm.<sup>3</sup> of the test substance onto an impervious low-heat conducting base plate (with a heat transfer coefficient 86 cal/(m.hr.C) or less) from a height of 1 m. and determine whether spontaneous combustion occurs during the fall or within 5 minutes after falling. In this case, when the test substance does not pass through a 0.3 mm. sieve, the test substance should be pulverised to pass through the same sieve.

- (b) Where spontaneous combustion does not occur, repeat the same procedure six times, and determine whether spontaneous combustion occurs once or more.

- (2) Testing methods for liquid substance.

- (a) Fill a porcelain cup with a diameter of approximately 70 mm. with diatomaceous earth or silica gel to a height of 5 mm.

- (b) Drop the entire 5 cm.<sup>3</sup> of the test substance onto the porcelain cup from a height of 20 mm. for 30 seconds at a constant speed using

a syringe, and determine whether spontaneous combustion may occur within 5 minutes from first drop.

- (c) Where spontaneous combustion does not occur in (b), repeat this operation six times using new samples of the wastes in question. If spontaneous combustion does not occur for any of the six trials, conduct the test shown in (d).
- (d) Drop the entire 0.5 cm.<sup>3</sup> of the test substance onto filter paper (conditioned for 24 hours or more at a temperature of 20EC in a desiccator containing silica gel for drying) with a diameter of 90 mm. placed on a porcelain with a diameter of approximately 70 mm. from a height of 20 mm. for 30 seconds at a constant speed using a syringe. Determine whether spontaneous combustion or scorching of the filter paper occurs within 5 minutes.

#### Annex 5.

The reaction to water test is conducted at the laboratory specified in item 1 and according to the testing methods specified in item 2. This test examines whether or not the gas generated by the reaction of the waste in question to demineralised water combusts or whether or not the generated gas ignites when in proximity to flames; measures the amount of gas generated when the waste in question is added to demineralised water; and analyses the composition of the generated gas.

1. Laboratory.

The laboratory shall be in a place under atmospheric pressure at a temperature of 20EC and a humidity of 50% in almost windless conditions.

2. Testing methods.

- (1) Pour 20EC demineralised water into a beaker or an evaporating dish and put a 2 mm. diameter of test substance (5 millimetres for liquid substance) into the water, and then determine whether any gas is generated and whether the generated gas is autoignited. Where the generated gas is autoignited, the following procedures do not need to be implemented.
- (2) Make the test substance into a pile 20 mm. high and 30 mm. in diameter with a hollow in the top. Drop a few drops of 20EC

demineralised water in the hollow and determine whether any gas is generated and whether the generated gas is autoignited. Where the generated gas is autoignited, the following procedures do not need to be implemented.

- (3) Put a filter paper supporting stand at the bottom of a beaker with a capacity of 500 cm.<sup>3</sup>, pour 20EC of demineralised water up to the top face of that stand, and put a piece of filter paper with a diameter of 70 mm. on it. After adjusting the water volume so that the filter paper floats on the water surface, put 50 mm.<sup>3</sup> of the test substance at the centre of the filter paper, and determine whether the generated gas is autoignited. Where spontaneous combustion of the generated gas occurs, the following procedures need not be implemented.
- (4) Where the generated gas is not autoignited in (3), apply a flame to the gas and determine whether the gas catches fire.
- (5) Where the generated gas is not autoignited or generation of gas is not recognised in test (3) or where the generated gas does not catch fire in test (4), put 2 g. of the test substance in a round-bottomed flask with a capacity of 100 cm.<sup>3</sup>, immerse it in a basin with a temperature kept at 40EC and promptly pour in 50 cm.<sup>3</sup> of demineralised water of 40EC. Shaking the contents of the flask with an agitating ball of 12 mm. in diameter and a stirrer agitator, measure the volume of generated gases for one hour.
- (6) The maximum value of the generated gas measurement made every hour (converted into the generation volume per kilogram of test substance) shall be deemed the generated gas volume for one operation.
- (7) Use a detecting tube, gas chromatography, etc., to determine whether the generated gas contains a flammable component.

## Annex 6.

### A. Burning test using ammonium persulfate as the standard substance.

In a burning test using ammonium persulfate as the standard substance, the burning time shall be measured for a mixture of a standard substance as specified in item 1, and wood powder as specified in item 2, and a mixture of a test substance and wood powder as specified in item 2, burned in a laboratory as specified in item 3, according to the test procedure for confirmation test specified in item 4.

#### 1. Standard substance.

The particle size of standard substance shall be such that it can pass through a 300 m. (approximately 50 mesh) sieve but cannot pass through a 150 Fm. (approximately 100 mesh) sieve.

#### 2. Wood powder.

(1) The wood powder shall be prepared from sapwood of Japanese cedar.

(2) The particle size of wood powder shall be such that it can pass through a 500 Fm. (approximately 30 mesh) sieve but cannot pass through a 250 Fm. (approximately 60 mesh) sieve.

#### 3. Laboratory.

The laboratory shall be in a room under atmospheric pressure at a temperature of 20EC and a humidity of 50% in almost windless conditions.

#### 4. Testing methods.

(1) Testing methods for standard substance.

(a) Make a uniform mix of the standard substance (conditioned for 24 hours or more at a temperature of 20EC in a desiccator containing silica gel for drying) and the wood powder (dried for 4 hours at a temperature of 105EC, and then conditioned for 24 hours or more at a temperature of 20EC in a desiccator containing silica gel for drying, the same applying to paragraphs (2)(a), B.1.(1)(a) and B.1(2)(a) to provide a 30 g. mixture with a weight ratio of 1:1.

- (b) Put the mixture of (a) in a conical cup with a height to bottom diameter ratio of 1:1.75, then put it upside down on an impervious low-heat conducting base plate with a thickness of 10 mm. or more (the heat transfer coefficient at a temperature of 0EC shall be 86 cal/(m.hr.C) or less, the same applying hereafter) to provide a conical pile, followed by shaping and conditioning for one hour.
- (c) Gently press an ignition source (nichrome wire in the form of a circular loop with a diameter of 2 mm. heated to a temperature of approximately 1,000EC by applying electricity) around the base part of the conical pile prepared in (b) above until the entire circumference of the base part is ignited. In this case, the duration for which the ignition source is kept in contact with the base part shall be up to 10 seconds.
- (d) Measure the time required for burning (from the time when the entire circumference of the base part of the pile described in (b) is ignited to the time when no flame is observed or, where flaming occurs intermittently, to the time when the final flame is extinguished).

(2) Testing methods for test substance.

- (a) Uniformly mix up the test substance (which can pass through a 1.18 mm. sieve and has been conditioned for 24 hours or more at a temperature of 20EC in a desiccator containing silica gel for drying) and the wood powder to provide 30 g. mixtures with a weight ratio of 1:1 and 4:1. In this case, if the test substance does not contain components that can pass through a 1.18 mm. sieve, the test substance shall be pulverised to become able to pass through the sieve for the purpose of this test.
- (b) Carry out the same procedure as described in (1)(b) and (c) (d) for each of the mixtures with a weight ratio of 1:1 and 4:1.
- (c) The shorter one of the burning time measures in (b) shall be taken as the burning time of the mixture of the test substance and wood powder.

B. Burning test using 90% nitric acid solution as the standard substance.

In a burning test using nitric acid solution as the standard substance, the burning time shall be measured for a mixture of 90% nitric acid solution and wood powder and a mixture of a test substance and wood powder, which are burned in a laboratory as specified in item 1.3 according to the testing methods specified in item 1.

1. Testing methods.

- (1) Testing methods for 90% aqueous solution of nitric acid.
  - (a) Put 15 g. of the wood powder in a conical cup with a height to bottom diameter ratio of 1:1.75, and then put it upside down on a flat-bottom evapourating dish with a diameter of 120 mm. to provide a conical pile, followed by shaping and conditioning for one hour.
  - (b) Pour 15 g. of the 90% aqueous solution of nitric acid uniformly over the conical pile prepared in (1)(a) using a syringe to ensure its mixing with the wood powder.
  - (c) Keep an ignition source (nichrome wire in the form of a circular loop with a diameter of 2 mm. heated to a temperature of approximately 1,000EC by applying electricity) in contact with the base part of the conical pile prepared in (b) above until the entire circumference of the base part is ignited. In this case, the duration for which the ignition source is kept in contact with the base part shall be up to 10 seconds.
  - (d) Measure the time required for burning.
- (2) Test procedure for test substance.
  - (a) Put 15 g. and 6 g. of the wood powder in a conical cup with a height to bottom diameter ratio of 1:1.75, then put them upside down on flat-bottomed evapourating dishes with an outer diameter of 20 mm. and 80 mm. respectively to form a conical pile, followed by shaping and conditioning for one hour.
  - (b) Pour 15 g. and 24 g. of the test substance uniformly over the 15 g. and 6 g. conical piles prepared in (a) using a syringe to ensure their mixing with the wood powder.
  - (c) Carry out the procedure described in (1)(c) to (d) for each of the

mixtures prepared in (b).

- (d) The shorter one of the burning times measured in (c) shall be taken as the burning time of the mixture of the test substance and wood.

## Annex 7.

### A. Oral toxicity test.

The oral toxicity test measures the amount of substance orally administered to induce mortality in half of the laboratory animals. This test is conducted according to the testing methods specified in item 2 using the animal species specified in item 1.

#### 1. Selection of animal species employed.

The animal employed for testing is a rat of commonly used laboratory strains with an age of approximately 6 weeks.

Ten rats (5 male and 5 female) should be used for each dose group. Healthy rats should be selected and acclimatized to the laboratory conditions in the testing cage for at least 5 days. The weight variation in rats used in testing should not exceed +20% of the mean weight.

#### 2. Test methods.

- (1) The test substance should be conditioned for the use in testing. Where the test substance is in solid form, the test substance should be dissolved in water or suspended in a suitable vehicle. When some agent for suspending the test substance is utilised, there should be a reference dose group which is dosed only with such an agent. The same procedure should be applied for test substances in liquid form with high kinematic viscosity.
- (2) The test substance is administered in a single dose to the rats by gavage using a stomach tube. Dose levels should have three levels or more and be selected so that it would produce evident toxicity and mortality.
- (3) Rats should be observed for 14 days after dosing and the mortality of rats should be observed.
- (4) By using statistical methods on the basis of the number of dead rats within 14 days after dosing, LD<sub>50</sub> should be calculated.

### B. Dermal toxicity test.

The dermal toxicity test measures the amount of substance administered to induce mortality in half of the laboratory animals. This test is conducted according to the testing methods specified in item 2 using the animal species specified in item 1.

1. Selection of animal species employed.  
The animal employed for testing is a rat of commonly used laboratory strains with an age of approximately 6 weeks.

Ten rats (5 male and 5 female) should be used for each dose group. Healthy rats should be selected and acclimatized to the laboratory conditions in the testing cage for at least 5 days. The weight variation in rats used in testing should not exceed +20% of the mean weight.

2. Test procedures.
  - (1) The test substance should be conditioned for use in testing. Where the test substance is in solid form, the test substance should be pulverised and moistened with water or other appropriate solvent etc. in order to ensure good contact with the skin. When some solvent is utilised, there should be a reference dose group which is dosed only with such a solvent.
  - (2) Approximately 24 hours before the test, fur should be removed by close-clipping from the dorsal area of the trunk of rats. Care should be taken to avoid abrading the skin. Area for removal should be more than 10% of total area of the surface of the body.
  - (3) The test substance should be uniformly applied to the area, where fur has been removed, and should be kept in contact for 24 hours. Dose levels should have three levels or more and should be selected so that it produces evident toxicity and mortality. In this case, the part applied should be covered by a gauze patch which is to be held in place with nonirritating tape, or by other appropriate methods, in order to prevent the rats from coming in contact with it.
  - (4) Rats should be observed for 14 days after dosing and the mortality of rats should be observed.
  - (5) LD<sub>50</sub> should be calculated by using statistical methods on the basis of the number of dead rats within 14 days after dosing.

C. Inhalation toxicity test.

The inhalation toxicity test measures the amount of substance administered to induce mortality in half of the laboratory animals. This test is conducted according to testing methods specified in item 3 using the animal species specified in item 1 and the apparatus specified in item 2.

1. Selection of animal species employed.

The animal employed for testing is a rat of commonly used laboratory strains with an age of approximately 6 weeks.

Ten rats (5 male and 5 female) should be used for each dose group. Healthy rats should be selected and acclimatized to the laboratory conditions in the testing cage for at least 5 days. The weight variation in rats used in testing should not exceed +20% of the mean weight.

2. Apparatus.

The apparatus should be the inhalation toxicity testing apparatus which is composed of (1) a device for conditioning the test substance in specific concentration and for supplying the conditioned test substance, (2) an inhalation room where the rats are kept, (3) a device which can measure continuously the concentration of the test substance, and other devices.

3. Testing methods.

(1) Rats should be kept in the inhalation room for one hour, where the concentration of the test substance is conditioned and kept at specified concentration. Dose levels should have three levels or more and should be selected so that it produces evident toxicity and mortality.

(2) Rats should be moved to the feeding cage and observed for 14 days after dosing and the mortality of rats should be observed.

(3) LD<sub>50</sub> should be calculated by using statistical methods on the basis of the number of dead rats within 14 days after dosing.

D. Fixed dose toxicity test.

The fixed dose toxicity test is conducted according to the testing methods specified in item 2 using the animal species specified in item 1 and examines the presence of mortality among the species tested.

1. Selection of animal species employed.

The animals employed for testing include 3 males and 3 females each of rats and mice of commonly used laboratory strains with an age of approximately 6 weeks.

2. Testing methods.

- (1) The test substance is administered in a single dose to the rats by gavage using a stomach tube. When the test substance is in a solid form, the test substance should be dissolved in water or suspended in a suitable vehicle.

When some agent for suspending the test substance is utilised, there should be a reference dose group which is dosed only with such an agent. The same procedures should be applied for a test substance in liquid form with high kinematic viscosity. The dose level of the test substance administered should be 2,000 mg./1 kilogram body weight.

In case that the test substance is in the form of dust or mists, the animal employed should be kept for one hour in the inhalation room where the concentration should be conditioned and kept at 10 mg./litre.

- (2) Rats should be observed for 14 days after dosing and the mortality of rats should be observed.

Remarks.

Half-death weight refers to the value in milligrams for one kilogram by weight of test species when the mortality of half of the species number has been confirmed.

The corrosion test for metals uses the apparatuses specified in item 1 and, according to the testing methods specified in item 2, soaks the test metal chip into the test substance and measures the decrease in mass after soaking.

1. Apparatuses.

(1) Soaking devices.

A flat-bottom glass triangular flask with a capacity of 1,000cm.<sup>3</sup> which is attached with a glass vertical reverse condenser with enough capacity for cooling.

(2) Heating device.

A pyrostat and other necessary devices which can keep the test substance at 55EC (hereafter referred to as heating devices).

(3) Chemical balance.

A chemical balance which can measure at the level of 1 milligram.

(4) Polishing paper.

Polishing paper No. 600 specified by the JISR 6252 “Polishing Paper” (1976).

2. Testing methods.

(1) Polish a test metal chip of 10 cm. long, 1 cm. wide and 1 cm. thick, which is specified in JISG 3101 (1987) with the polishing paper. After washing the polished chip by water, remove the oil component with an appropriate solvent such as ethanol.

(2) Measure the weight of the test chip by using a chemical balance.

(3) Pour the test substance in liquid form into the soaking device and keep the test metal chip with an appropriate holder so that one half of the test metal chip in the distance of length will be in the test substance.

(4) Use the heating device to heat the test substance and the test metal chip up to 55EC and keep the temperature for 120 hours.

(5) After 120 hours soaking, take out the test metal chip and wash it by water. Then remove the oil component as described in (1).

Measure the weight by using a chemical balance.

(6) Calculate the corrosion rate by using the following formula—

$$X = W \times 10 \times 365 / d \times S \times T$$

X = corrosion rate (unit: mm./year)

W = weight reduction after soaking (unit: grams)

d = density of the test metal chip (unit: g./cm.<sup>3</sup>)

S = surface area of the test metal chip soaked into the test substance (unit: cm.<sup>2</sup>)

T = time length for soaking (unit: days)

Remark.

The conditions of the soaked portion and unsoaked portion (part in contact with the steam) of the test chip should be observed and recorded in as much detail as possible.

*Fourth Schedule.*

regs. 14,16.

**Disposal operations.**

- D1 Deposit into or onto land, (e.g., landfill, etc).
- D2 Land treatment, (e.g., biodegradation of liquid or sludgy discards in soils, etc).
- D3 Deep injection, (e.g., injection of pumpable discards into wells, salt domes or naturally occurring repositories, etc).
- D4 Surface impoundment, (e.g., placement of liquid or sludge).
- D5 Discards into, (pits, ponds, or lagoons, etc.).
- D6 Biological treatment not specified elsewhere in this Annex which results in final compounds or mixtures which are discarded by means of any of the operations in Annex 3.
- D7 Physics-chemical treatment not specified elsewhere in this Annex which results in final compounds or mixtures which are discarded by means of any of the operations in Annex 3, (e.g., evaporation, drying, calcination, neutralization, precipitation, etc.).
- D8 Incineration on land.
- D9 Incineration at sea.
- D10 Permanent storage, (e.g., emplacement of containers in a mine, etc.).
- D11 Blending or mixing prior to submission to any of the operations in Annex 3.
- D12 Repackaging prior to submission to any of the operations in Annex 3.
- D13 Storage pending any of the operations in Annex 3.
- D14 Use as a fuel (other than in direct incineration) or other means to generate energy.

- D15 Solvent reclamation/regeneration of organic substances which are not used as solvents.
- D16 Reclamation/recycling of organic substances which are not used as solvents.
- D17 Reclamation/recycling of metals and metal compounds.
- D18 Reclamation/recycling of other inorganic materials.
- D19 Regeneration of acids and bases.
- D20 Recovery of components used for pollution abatement.
- D21 Recovery of components from catalysts.
- D22 Used oil re-resulting in benefit to agriculture or ecological improvement.
- D23 Land treatment resulting in benefit to agriculture or ecological improvement.
- D24 Uses of residual materials obtained from any of the operations numbered D1-D25.
- D25 Exchange of wastes for submission to any of the operations numbered D1-D26.
- D26 Accumulation of material intended for any operation in Annex 3.

*Fifth Schedule.*

regs. 3, 4, 16, 22.

**Waste considered hazardous.**

The following waste shall be considered hazardous waste—

- Y0. All wastes containing or contaminated by radionuclides the concentration or properties of which result from human activity.
- Y1. Wastes generated from medical care or medical examination in hospitals, clinics, elderly medical care centres and maternity wards and in medical care centres and wastes from medical examination in medical examination laboratories.
- Y2. (a) Wastes generated from production and import of pharmaceutical products.  
(b) Wastes generated from preparation of pharmaceutical products for sale and grant.
- Y3. Waste pharmaceuticals, drugs and medicines.
- Y4. (a) Wastes generated from the production and import of the chemicals including germicides, fungicides, bactericides, insecticides, ratcides, herbicides and other chemical for prevention of the breeding and extermination of animals, plants and viruses; and growth promoting chemicals, germination control and other chemicals for the promotion and suppression of physiological activities of plants (hereafter referred to as “biocides etc.”).  
(b) Wastes generated from formulation of biocides etc. for sales and grant.  
(c) Wastes generated from sales and use of biocides etc.
- Y5. (a) Wastes generated from the production and import of decay-preventing agents, insect control agents and other chemicals for wood preservation (hereafter referred to as “wood preserving chemicals”).  
(b) Wastes generated from formulation of wood preserving chemicals for sale 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 grant.  
(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. (a) Waste tarry residues arising from refining, distillation and any paralytic 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, pigments, paints, lacquers and varnishes (hereafter referred to as “inks, etc.”).  
(b) Wastes generated from formulation on inks, etc. for sales and grant.
- Y13. (a) Wastes generated from production and import of resins, latex, plasticisers, glues/adhesives (hereafter referred to as “resins, etc.”).  
(b) Wastes 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 humans and/or the environment are not known—  
(a) research and examination institutes owned by central and local governments;  
(b) universities, colleges, junior colleges, professional schools and

- their subsidiary research and study institutes; and
- (c) institutes for research and development of products and technologies.

Y15. Wastes of an explosive nature not subject to the Explosives Act.

- Y16. (a) Wastes generated from the production and import of sensitive emulsion, developing solution, fixing solution, washing solution and other 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 of 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, calcium chromate, silver chromate, strontium chromate, sodium chromate, lead chromate, barium chromate, bismuth chromate, chromosulphuric acid, chromium trioxide, anhydrous, ammonium dichromate,

potassium dichromate, sodium dichromate and lead chromate molybdate sulfate;

- (b) wastes containing other hexavalent chromium compounds;
- (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: wastes in solid form, which cannot meet the ambient soil quality standards established under the National Environment Act.

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 (saricylideneaminato), cuprous chloride, cupric chloride, copper cyanide, sodium cuprocyanide, cupriethylenediamine solution, copper arsenate and copper sulfate;
- (b) wastes containing 1% or more by weight of any of the following copper 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-dimethoxy-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

(methyl 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.

Y24. Wastes containing arsenic and/or arsenic compounds listed as follows—

- (a) wastes containing 0.1% or more by weight of any of the following arsenic and/or arsenic compounds—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, acid 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, copper arsenate, 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 the above (a);
- (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 to solid 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 in the verification standards for hazardous wastes in terms of arsenic and/or arsenic compounds;
  - (ii) wastes in liquid form, which cannot meet the standards set

in the effluent quality standards regulations 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 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 above (a);
- (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 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 compounds;
- (d) wastes to be exported for purposes other than those listed in the above (c), which cannot meet the following criteria—
  - (i) wastes in solid form, which cannot meet the standards in Attached Table 1 of the verification standards for hazardous wastes in terms of cadmium and/or cadmium compounds;

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

Y27. Wastes containing antimony and/or antimony compounds listed as follows—

- (a) wastes containing 0.1% or more by weight of any of the following antimony and/or antimony compounds—sodium antimonate, lead antimonate, antimony pentachloride, antimonypentoxide, antimonypentafluoride, antimony trichloride, antimony trioxide, potassium hexahydroxoantimonate (V), antimony trifluoride, potassiumantimonyl 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 the above (a) and (b).

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 above (a).

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, mercuric potassium cyanide, diethyl mercury, dimethyl mercury, mercury (II) bromide, mercurous nitrate, mercuric nitrate, phenyl mercuric hydroxide, mercuric thiocyanate, mercuricarsenate, 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 4 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 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 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 in the verification standards for hazardous wastes in terms of mercury and/or mercury compounds;
    - (ii) wastes in liquid form, which cannot meet the standards in Attached Table 1 of the effluent quality standards in terms of mercury and/or mercury compounds.

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

- (a) wastes containing 0.1% or more by weight of any of the following thallium and/or thallium compounds—thallium chlorate, thallium acetate, thallic oxide, thallium bromide, thallic 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 stearate dibasic, basic lead phthalate, lead dioxide, lead fluoroborate solution, lead phosphite dibasic, lead arsenate, lead fluoride, lead metaborate,

- lead methanesulphonate, 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 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 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 in Attached Table 1 of the verification standards for hazardous wastes in terms of lead and/or lead compounds;
    - (ii) wastes in liquid form, which cannot meet the standards in Attached Table 2 of the effluent quality standards in terms of lead and/or lead compounds.

Y32. Wastes containing inorganic fluorine compounds excluding calcium fluoride listed as follows—

- (a) wastes containing 0.1% or more by weight of any of the following inorganic fluorine compounds—fluorosilicic acid, bromine pentafluoride, bromine trifluoride, boron trifluoride dihydrate, potassium bifluoride, difluorophosphoric acid, ammonium fluoride, potassium fluoride (spray dide), chromic fluoride, hydrofluoride, ammonium hydrogenfluoride, hydrofluoric acid, sodium fluoride, fluorosulphonic acid, fluorophosphoric acid anhydrous, hexafluorophosphoric acid, fluobolic acid;
- (b) wastes containing 1% or more by weight of any of the following inorganic fluorine compounds—ammonium fluoroborate, ammonium fluorosilicate, barium fluoride, 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, mercury 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 which cannot meet the following criteria—
  - (i) wastes in solid form, which cannot meet the ambient soil quality standards 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) wastes in solid form, which cannot meet the standards in attached table I of the verification standards for hazardous wastes in terms of inorganic cyanide;
  - (ii) wastes in liquid form, which cannot meet the standards in 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 as follows—

- (a) wastes containing 0.1% or more by weight of any of the

following organic phosphorus compounds—azinphos-ethyl, azinphos-methyl, butyl phosphorotrithionate, carbophenothion, chlorfenvinphos (I SO), chlormephos, S-[(6-chloro-2-oxo-3-brenzoxyazoly) methyl] O, O-diethyl phospholodithioate, chlorthiophos, camaphos, cresyldiphenyl phosphote, crotoxyphos, crufomate, demephion, demeton-O-methyl, demeton-S-methyl, dialifos, dichlofenthion, dichloromethylphosphine, dicrotophos, O,O-diethyl-s-2-(ethylthio) ethyl phosphorodithioate, diethyl=4-nitrobenzylaphosphonate, O,O-diethyl-O- (5-phenyl-3-isoxazolyl) phosphorothioate, O,O -diethyl-O-3,5,6-trichloro-2-pyriylnphosphorothioate, dimefox, O, O-dimethyl-S- (1, 2-ethylthioethyl phosphorodithioate, dimethyl 2,2-dichlorovinylphosphate, dimethyl etylthicethyl dithiophosphate, dimethylhydrogen phosphite, dimethylmethylcarbamoylthioethyl thiophosphate, O,O-dimethyl-N-methylcarbamoyl-methyl dithiophosphate, -dimethyl -S- (N-methyl-N- formoylcarbamoylmethyl) dithiophosphate O, O-dimethyl-O-[3-methyl-4-(methylthio) phenyl] thiophosphate, O,O-dimethyl-O-(3-methyl-4-nitrophenyl) thiophosphate, O,O-dimethyl-S-(phenylaceticacidethylester) dithiophosphate, O,O-dimethyl phthaloimide methylthiophosphate, dimethylthiophosphory chloride, dimethyl 2, 2, 2-trichloro-1-hydroxyethyl phosphate, dioxathion, diphenyl-2, 4, 6-trimethylbenzoylphosphine-oxide, edifenphos, endothion, ethion, ethoate methyl, ethoprophos, O-ethyl-O-2-isopropoxycarbonylphenyl=isopropylphospholoamidthioate O-ethyl=O-p-nitrophenylthionobenezephosphate, fenamiphos, fensulfothion, fonofos, hexaethyl tetraphosphate, hexamethylphosphoric triamide, heptenophos, isodecyl diphenylphosphate, 2-isopropyl-4-methylpyrimidyl- 6-diethylthiophosphate, isothioate, mecarbam, menazon, mephosfolan, methamidophos, 2-methoxy-4H-1, 3, 2-benzodioxaphosphorin-2-sulfide, S-[5methoxy-2-oxo-2, 3-dihydro-1, 3, 4-thiadiazolyl- (3) - methyl]dimethylphospholothiolothionate, methyl parathion, methyltrithion, mevinphos, naled, omethoate, oxydisulfoton, oxydemetonmethyl, paraoxon, parathion, pirimiphosethyl, phenkapton, phorate, phosfolan, phosphamidon, prothoate, propaphos, pyrazophos, pyrazoxon, quinalphos, schradan, sulprofos, tetraethyl dithiopyrophosphate, thionazin, temephos, terbfos, tris (1-aziridinyl) phosphine oxide, triamiphos, triazophos, trichloronate,

triethylphosphate tris(1-aziridinyl) phosphine sulphide, tris (4-methoxy-3, 5-dimethylphenyl) phosphine, trixyly phosphate, tributyl phosphates's 3-(dimethoxyphosphinyloxy)-N-methyl-cis-crotonamide, di-(2-ethylhexyl) phospholic acid, di-(ethylhexyl) phosphoric acid, triallyl phosphate, tricresyl phosphate, tris(isopropylphenyl) phosphate, tris(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 O-ethyl-S-propyl phosphorothioate, bromophosethyl, butamifos, O-buthyl-S-benzyl-S-ethyl phosphorodithioate, 2-chloro-1-(2, 4-dichlorophenyl) vinyl dimethyl phosphate, DEF, demeton, demeton-O, dialkyl phosphodithioate, O-2, 4-dichlorophenyl-O-ethyl-S-propyl phosphorodithioate, diethyl-S-benzyl thiophosphate, diethyl-4-chlorophenylmercaptopethyl dithio-phosphate, diethyl-(1,3-dithiocyclopentylidene) - thiophosphoramidate, diethyl-4-methylsulfinylphenyl-thiophosphate, O, O-diethyl-O-(3-oxo-2-phenyl-2H-pyridazin-6-yl) phosphorothionate diethyl-paradimethylamino sulfonylphenylthio phosphate diethylthiophosphorylchloride, O,O-diisopropyl-S-benzylthiophosphate, diisopropyl-S-(ethylsulfinylmethyl) - dithiophosphate, dimethyl-S-p-chlorophenylthiophosphate, O,O-dimethyl-O-4-cyanophenyl phosphorothioate, 2,3-(dimethyldithiophosphro)-paradoxan, O,O-dimethyl-S-2(ethylsulfinyl)- isopropyl-thiophosphate, dimethyl-[2-(1'-methylbenzyloxycarbonyl)-1-methylethylen]-phosphate O,O-dimethyl-O-(3,5,6-trichloro-2-pyridinyl) phosphorothioate, ethyl-2,4-dichlorophenylthionobenzene phosphorate, O-6-ethoxy-2-ethylpyrimidin-4-yl=O, O-dimethyl=phosphorothioate, fosthiazate, leptophos, mesulfenfos, meythylcyclohexyl-4-chlorophenylthiophosphate, octyldiphenyl phosphate, phenylphosphonic dichloride, phenylphosphorous thiodichloride, piperophos, propetamphos, pyraclofos, sulfotep, tetraethylpyrophosphate, temivinphos, tributoxyethyl phosphate, tri-n-butyl phosphine, s, s, s-tributyl phosphorotrithioate, triethyl phosphite, 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 to D4 or R10 of

Annex IV, which cannot meet the following criteria—

- (i) wastes in solid form, which cannot meet the ambient soil quality standards in terms of organic phosphorus compounds;
- (ii) wastes in liquid form, which cannot meet the waste water discharge standards to soil in terms of organic phosphorus compounds;
- (e) wastes to be exported for the purposes of other than those listed in the above (d), which cannot meet the following criteria—
  - (i) wastes in solid form, which cannot meet the standards in Attached Table 1 of the verification standards for hazardous wastes 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' - azobis-[2- (hydroxymethyl) propionitrile], 2,2' -azobis-(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' -dimethyl-4, 4' -biphenylenediisocyanate, diphenylmethane-4, 4' -diisocyanate, ethylene cyanhydrin, fenprothrin, ioxynil, isophorone diisocyanate, lactonitrile, malononitrile, methacrylonitrile, methyl isocyanate, phenylacetoneitrile, phenyl isocyanate, O-phthalodinitrile, propionitrile, trimethylhexamethylene diisocyanate, tolylenediisocyanate;
- (b) wastes containing 1% or more by weight of any of the following organic cyanides—acetonitrile, 2,2' -azobis isobutyronitrile, 2,2' -azobis-(2,4-dimethylvalcronitrile), 2,2' -azobis-(2,4-dimethyl-4-methoxyvaleronitrile), 1,1' -azobis (hexahydrobenzonitrile), butyronitrile, N-cyanoethyl monochloroacetoamide, cyanofenphos (CYP), (RS)-a-cyano-3-phenoxybenzyl, cyhalothrin, cyphenothrin, cyfluthrin, 2,3-dibromopropionitrile, 2-dimethylaminoacetonitril, ethyl cyanoacetate, ethyl isocyanate,

fluvalinate, hexamethylene diisocyanate, isobutyl isocyanate, isobutyronitrile, isocyanatobenzotrifluoride, isopropyl 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 phenols and/or phenol compounds—

- (a) wastes containing 0.1% or more by weight of any of the following phenol and/or phenol compounds—2-aminoanthraquinon, 7-amino-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-sec-buthylphenoldimethyl acrylate, 4,6-dinitro-o-cresol, 2,4-dinitrophenol, dinoseb, dinosebacetate, dinoterb, dinoterbacetate, dodecylphenol, o-ethylpheno heptyl-1[2,5-dimethyl-4 (2-methylphenylazo)] phenylazo-2-naphthol, hydroxybenzene, isoamyl salicylate, medinoterb, methyl salicylate, nitrocresols, nitrophenols, nonylphenol, nonylphenol poly (4-12) ethoxylates, pentachlorophenol, 4-phenoxyphenol, picric acid, sodium pentachlorophenate, trichlorophenols, 2-(thiocyanatomethylthio) benzothiasol, xylenols;
- (b) wastes containing 1% or more by weight of any of the following phenol and/or phenol compounds—2-amino-4-chlorophenol, aminophenols, ammonium dinitro-o-cresolate, ammonium pierate, chlorocresols, diazodinitrophenol, 2, 4-dinitro-6-cyclohexylphenol, 2, 4-dinitro-6-(1-methylpropyl)-phenol, dinitrophenolate, alkali metals, dinitroresorcinol, dyes, hydroquinone, 4-hydroxysulfonic acid, N-methylcarbamy-2-chlorophenol (CPMC), B-naphthol, resorcinol, sodium-2, 4-dichloro-6-nitrophenolate (DNCP), sodiumdinitro-o-cresolate, 2,4,6-tri(dimethyl-aminomethyl) hydroxbenzene, 2,4,6-trinitro-m-cresol, 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-dimethoxypyrimidine, 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-hydtropoli(n=17) [2-(2,3-epoxypropoxy) benzylidene-2,3-epoxypropoxyphenylene], ethyleneglycol isopropyl ether, ethyleneglycol phenyl ether, ethyleneglycol methylbutyl ether, ethyleneglycol monoacrylate, ethyleneglycol monobutyl ether, ethyleneglycol monobutyl ether acetate, ethyleneglycol monoethyl ether, ethyleneglycol monoethyl ether acetate, ethyleneglycol monomethyl ether, ethyleneglycol monomethyl ether acetate, ethyleneglycol monon-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 monobutyl ether, di-2-ethoxyethyl peroxydicarbonate, 3,3 diethoxypropene, diethoxymethane 2,5-diethoxy-4-morpholino benzenediazonium zinc chloride, 1,3-dioxane, dioxolan, 2,3 -dihydropylae, diphenylsulphide, dibutyl ether, dipropyl ether, 4-dimethylamino-6 (2-dimethylaminoethoxy) toluene-2-diazonium zinc chloride, dimethyldiethoxysilane, dimethyldioxane, dimethoxy isopropylperoxydicarbonate, 1,1- dimethoxyethane, dimethoxybutyl peroxydicarbonate, 2,2-dimethoxypropane, tetrahydrofurfurylamine, triglycol dichloride, trinitroanisole, trinitrophenetole, nitroanisol, neopentylglycol diglycidyl ether, 3-(2-hydroxyethoxy)-4-pyrrolidin-1-ylbenzenediazonium zinc chloride, isobutyl vinylether, phenetidines, phenetole, phenoxyethylacrylate, ethylbutyl ether, n-butyl methyl ether, furan, furfurylamine, furfurylmercaptan, 2-bromoethylethylether, 4-[benzyl (ethyl) amino] -3- ethoxybenzenediazonium zinc chloride-[benzyl(methyl) amino]-3-ethoxybenzenediazonium zinc chloride, benfuracarb, tetrahydrofurfuryl methacrylate, methylal, methyltetrahydrofuran, 2-methylfuran, methylpropyl ether, methyl-3-methoxybutanol, N-methylmorpholine, 4-methoxy-4-methylpentane-2-one;
- (c) wastes containing ethers other than those listed in (a) and (b) above.

Y41. Wastes containing halogenated organic solvents listed as follows—

- (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, methylenchloride, dibromoethanes, tetrachloroethane, tetrachloroethylene, tetrabromoethane, tetrabromomethane, trichloroethanes, trichloroethylene, trichloro-trifluoroethane, 1,2,3trichloropropane, 1,2,4 trichlorobenzene, 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 tetrachloro-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 in Attached Table 1 of the verification standards for hazardous wastes in terms of tetra-chloro-ethylene and/or tri-chloro-ethylene;
    - (ii) wastes in liquid form, which cannot meet the standards in Attached Table 1 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, benzyl benzoate, methyl benzoate, isoamyl alcohol, isooctanol, isooctane, isononyl alcohol, isobutanol, iso-butylamine, 4-methyl-2-pentanone, isopropylamine, isopropyl alcohol, isopropylcyclohexane, isopropyltoluene, 3-methyl-2-butanone, isopentane, isopentene, isobutyric acid, ethanolamine, ethylanilines, ethylamine, ethylcyclohexane, N-ethyl cyclohexylamine, 2-ethylbutanol, N ethyl butylamine, ethyl-butyl ketone, 2-ethyl-3-propyl acrolein, ethyl n-propyl ketone, 2-ethylhexanol, 2-ethylhexylamine, ethyl n-pentyl ketone, 2-butanone, ethylene glycol 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, NC, diethylaminoethanol, diethylamine, diethylenetriamine, cyclohexanol, cyclohexanone, cyclohexane, cyclohexylamine, cycroheptane, cyclopentane, cyclopentene, dicyclohexylamine, di-n--butylamine, dipropylamine, dipentene, N, N-dimethylacetamide, N, N-dimethylaniline, dimethylamino azobenzene, 2-dimethylaminoethanol, 2,6-dimethyl-4-heptanol, N, N-dimethyl formamide, diethyl oxalate, camphor oil, styrene, butyl stearate, tetrahydrothiophene-1, I-dioxide, petroleum naphtha, petroleum benzine, dimethyl sebacate, solvent naphtha, diethyl carbonate, dimethyl carbonate, decanol, decene, tetraethylenepentamine, tetrahydronaphthalene, turpentine oil, dodecanol, 1-dodecylamine, triethanolamine, triethylamine, triethylenetetramine, 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-xylylethane, 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, methylalcohol, methylamine, methyl iso-amylketone, 7-methyl-1, 6-octadiene, 2-methylcyclohexanol, methylcyclohexanone, methylcyclohexane, methylcyclopentane, I-methyl naphthalene, methyl n-pentyl ketone, methyl butanol metju; nitu; letame, methyl butanol, 2-methyl hexane, methyl n-hexylketone, methyl heptyl ketone, methylpentanol, 2-methyl pentane, 2-methyl-1-pentane, 4-methyl-1-pentane, ethyleneglycol monoacetate,

- methyl laurate, butyric acid, ethyl butyrate, vinyl butyrate, n-butyl butyrate, methyl butyrate, ligroin, dimethylsulfide, dimethylsulfate;
- (b) wastes containing 1% or more by weight of any of the following organic solvents—allylamine, methyl valerate, methyl isopropenyl ketone, isobutyl isobutyrate, isopropyl isobutyrate, ethyl isobutyrate, N-undecane, ethyl alcohol, N-ethyltoluidine, allyl formate, ethyl formate, propyl formate, pentyl formate, allyl acetate, isopropenyl acetate, tert-butyl acetate, diallilamine, diisopropyl ketone, diethyl ketone, diethylenglycol, cyclohexene, cycloheptene, cyclopentanol, cyclopentanone, dipropyl ketone, dimethylcyclohexane, dimethyl sulfoxide, 2,3-dimethylbutane, 1,3-dimethylbutylamine, dioctyl sebacate, dibutyl sebacate, thiophene, n-decane, tetrahydrothiophene, terpinolene, triallilamine, trimethylene glycol, methyl lactate, dimethyl disulphide, acetyl methyl carbinol, vinyltoluene, piperidine, 3-butanol, butylmercaptan, 1,4-butyndiol, n-propanol, isopropyl propionate, isobutyl propionate, 4-methyl-1,3-dioxacyclopentan-2-one, 1,2-propylenediamine, 2-methyl-2,4-pentanedil, pentamethylheptane, pentane-2,4-dione, triisopropyl borate, ethyl borate, trimethyl borate, butyric anhydride, N-methylaniline, methyl vinyl ketone, N-methylpiperidine, methyl propyl ketone, 5-methylhexan-2-one, isopropyl butyrate, isopentyl butyrate, pentyl butyrate;
- (c) wastes containing organic solvents other than those listed in (a) and (b) above.

Y43. Any congener of polychlorinated debenzo-foran.

Y44. Any congener of polychlorinated dibenza-p-dioxin.

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

- (a) wastes containing 0.1% or more by weight of any of the following organohalogen compounds—1-(acetylamino)-4-bromoanthraquinone, atrazine, 2-amino-2-chloro-5-nitrobenzophenone, (6R,7R)-7-amino-3-chloromethyl-8-oxo-5-thia-1-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 chlorohydrine, epichlorohydrin, acetyl chloride, anisoil chloride, allyl chloride, choline chloride, chlorinated paraffins (C10-13), pyrosulphuryl chloride, benzylidene chloride, benzyl chloride, benzoyl chloride, endrin, captafol, canphechlor, coumachlor, crimidine, chloral, chlordimeform, chlordane, chlorendic acid, chloroacetaldehyde, chloroacetone, chloroanilines, 4-chloro-2-aminotoluene hydrochloride, 1-chlorooctane, 1-chloroethylchloroformate, 1-chloro-3-(4-chlorophenyl)hydrazone-z-propanol monochloroacetic acid, chlorodinitrobenzene, 3-chloro-1,2-dibromopropane, 1-chloro-3,3-dimethyl-2-butanol, ethylchlorothioformate, 2-chloro-5-trifluoromethylnitrobenzene, chlorotoluidines, chlorotoluenes, 2-chloronicotinic acid, chloronitroanilines, 4-chloro-2-nitrotoluene, N-(2-chloro-3-nitro-6-pyridyl) acetamide, 4-(2-chloro-4-nitrophenylazo)-N-(2-cyanoethyl)-N-phenety aniline, chloronitrobenzenes, chloropicrin, chlorohydrins, chlorophacinone, 4-chloro-o-phenylenediamine, 3-chloro-2-fluoronitrobenzene 3-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-(methoxycarbonylmethoxyimino)-3-oxobutyric acid, 2-chlorobutyric acid, kepone, kelevan, 1-chloroformyl-1-methylethyl acetate, 1-bromoformyl-1-methylethyl acetate, benzotrichloride, 3,5-diaminobenzene, diallate, silicon tetrachloride, diglycol chlorohydrin, cycrohaexenyltrichlorosilane, 3,4-dichloroaniline 4,5-dichloro-p-n-octylisothiazole-3-one, dichloroacetic acid, methyldichloroacetate, 3,3'-dichloro-4,4'-diaminodiophenylmethane, 3,5-dichloro-4-(1,1,2,2-tetrafluoroethoxy) aniline, 1,4-dichloro-2-trichlorosiryl-2-butee, 2,4-dichloro-5-trifluoromethylnitrobenzene, 1,4-dichloro-2-nitrobenzene, 2,2-dichloro-5-nitrobenzophenon, 2,4-dichlorophenoxyacetic acid diethanolamine, 2,4-dichlorophenoxyacetic acid diethylamine, 2,4-dichlorophenoxyacetic acid triisopropanolamine, 2,4-dichloro-3-fluorene trobenzene, 1,3-dichloro-4-fluorobenzene, 2,3-dichloro-1-propanol, 2,2-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-pentanon, 2,4-dichloro-3-pentanon, 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, sulfalate, cyclohexyl-1-iodoethylcarbonate, DDT (chlorophenothane), 2,4-DB((2,4-dichlorophenoxy) butyric acid), dieldrin, 2,2,6,6-tetrachlorocyclohexanon 2,2', 4,4'-tetrachlorobenzophenon, tetrahydro-5, 5-dimethyl-2(1H)-pyrimidinone [p-trifluoromethyl]-a-[p-(trifluoromethyl)styryl]cinnamylidene]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'-+bis(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-benzoxazole, 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, perfluoropropoxy-1,1,2-trifluoroethylene, 1-benzyl-2-(chloromethyl)imidazole=chloride, hexachloro-hexahedra-methanodioxathiepine oxide, N-[B-(benzol) furan-2-yl] acryloyl-N'-trichloroacetohydrazid, pentachloronaphthalene, pentafluoroiodoethane, mirex, 2-methyl-4-chlorophenoxy-acetic acid, methyltrichlorosilane, 2-methyl-3-trifluoromethylaniline, methylphenyldichlorosilane, methrathlor, 2-mercaptopbenzothiazol, 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,N-dimethylformamizine chloride,
  - oxadiazon,
  - 2-chloro-4,5-dimethylphenyl-N-methylcarbamate,
  - chlorphenamidinel-[3,5-dichloro-4-(3-chloro-5-trifluoromethyl-2-pyridyloxy)phenyl]-3-(2,6-difluorobenzoyl) urea,
  - chlormequat,
  - chloroacetonyl,
  - 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-buthyl bromide,
  - 2-bromobutane,
  - benzyl bromide,
  - thiochlormethyl,
  - 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-piperazinediylbis(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, 1-bromo-3-methylbutane, bromomethylpropane, hexachloroacetone, hexachloro-1,3-cyclopentadiene, hexachlorophene, hexythiazox, permethrin, benzotrifluoride, benzoate pentyltrichlorosilane, methylallyl chloride, methyl bromoacetone, sodium fluoroacetate, monofluoroacet-p-bromoanilide, N-(p-bromobenzyl) monofluoroacetamide, n-butyl iodide, benzyl iodide, 2-iodobutane, iodopropanes, iodomethylpropane, hexafluoroacetone;

- (c) waste containing or contaminated with polychlorinated biphenyls (PCBs) and/or polychlorinated triphenyls (PCTs) and/or polybrominated biphenyls (PBBs) 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;
    - (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 Attached Table 1 of the standards for hazardous wastes in terms of PCB;
    - (ii) wastes in liquid form, which cannot meet the standards in Attached Table I of the effluent quality standards in terms of PCB.
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*Sixth Schedule.*

regs. 6, 8, 13,  
14, 18, 20, 29.

**Fees.**

1. Application for licences—	Shs.
(a) for transportation of waste under regulation 6	50,000
(b) for storage of waste under regulation 6	50,000
(c) to own/operate a waste disposal site/plant under regulation 13	50,000
2. Licences: for a licence to—	
(a) transport waste under regulations 7 and 8	100,000
(b) store waste under regulation 7	200,000
(c) own/operate a waste treatment/disposal site under regulation 14	300,000
(d) export waste under regulation 18	400,000
(e) import waste under regulation 18	500,000
3. Transboundary movement of waste—	
(a) movement document for transboundary movement of waste under regulation 18	150,000
(b) notification document for transboundary movement of waste under regulation 18	150,000

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*Seventh Schedule.*

reg. 21.

**Ports of entry.**

1. Bwera
  2. Entebbe International Airport
  3. Katuna
  4. Malaba
  5. Mutukula
  6. Nimule
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**History:** S.I. 52/1999.

### **Cross References**

Explosives Act, Cap. 298.

Local Governments Act, Cap. 243.

Uganda Revenue Authority Act, Cap. 196.

United Nations Recommendations on the Transport of Dangerous Goods  
(ST/59/AC. 10/1/Rev. 5 United Nations, New York, 1988).

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