

Regulation for Handling Hazardous Materials, Hazardous Wastes and Medical Wastes

1 ARTICLES

- 1.1 ARTICLE (1): DEFINITIONS
- 1.2 ARTICLE (2): COMPETENT AUTHORITIES
- 1.3 ARTICLE (3): GENERAL REQUIREMENTS
- 1.4 ARTICLE (4): LICENSES
- 1.5 ARTICLE(5): IMPORT OF HAZARDOUS CHEMICAL MATERIALS
- 1.6 ARTICLE(6): PACKING OF HAZARDOUS CHEMICAL MATERIALS
- 1.7 ARTICLE(7): TRANSPORT OF HAZARDOUS CHEMICAL MATERIALS
- 1.8 ARTICLE(8): STORAGE OF HAZARDOUS CHEMICAL MATERIALS
- 1.9 ARTICLE(9): HANDLING OF HAZARDOUS CHEMICAL MATERIALS
- 1.10 ARTICLE (10) :GENERAL RULES AND PROCEDURES FOR HAZARDOUS WASTE MANAGEMENT
- 1.11 ARTICLE (11)
- 1.12 ARTICLE (12)
- 1.13 ARTICLE (13)
- 1.14 ARTICLE (14)
- 1.15 ARTICLE(15): GENERAL RULES AND PROCEDURES FOR MEDICAL WASTES MANAGEMENT
- 1.16 ARTICLE (16): FINAL PROVISIONS
- 1.17 ARTICLE (17)
- 1.18 ARTICLE (18)
- 1.19 ARTICLE (19)

2 ANNEX (1)

- 2.1 SCHEDULE(1.1): CLASSIFICATION OF HAZARDOUS MATERIALS
- 2.2 SCHEDULE(1.2): CLASSIFICATION OF HAZARDOUS WASTES
- 2.3 SCHEDULE(1.3): HAZARDOUS MATERIALS SEGREGATION REQUIREMENTS
- 2.4 SCHEDULE(1.4) MINIMUM SEGREGATION REQUIREMENTS BETWEEN HAZARDOUS MATERIALS AND PUBLIC

3 ANNEX (2)

- 3.1 SCHEDULE (2.1) MEDICAL WASTE CLASSIFICATION
- 3.2 SCHEDULE(2.2): PACKAGES AND CONTAINERS DETERMINATION

3.3 SCHEDULE (2.3): METHODS DETERMINATION - MEDICAL WASTES PACKING, TRANSPORT AND STORAGE

1 ARTICLES

1.1 ARTICLE (1): DEFINITIONS

For the purposes of this law the following words and phrases shall have the meanings given opposite each unless the text specifies otherwise:

State : United Arab Emirates

Agency : Federal Environmental Agency

Competent Authorities : The concerned local authority in each Emirate of the State

Competent Regularity Unit : The Department, Agency or any other regularity unit established by the competent authority for issuing licenses.

Environment : The biosphere where life exists in various kinds and consists of two elements:

Natural element:

comprises all living species, mankind, animal, plant and other kinds of species, forms of life natural resources including air, water, soil, organic substance, non-organic and natural ecosystems,

and

Unnatural element:

anything introduced by mankind to the natural environment such as fixed and moveable installations, roads, bridges, airports, transportation means and whatever industries, innovations and technologies developed by mankind.

Environment Degradation

: Adverse effects against the environment which lead to degradation or deformation of its environmental nature or depletion of its resources or damage the existing species or archeology.

Environment Pollution

: Pollution resulting from natural or unnatural sources due to mankind, direct or indirect, voluntary or non voluntary introduction of any polluting materials or elements affecting the natural environmental elements which may lead to any hazardous effects against the health of mankind, plants or animals or damages to the environmental resources and Ecosystems.

Pollutant Materials and Factors

: Any solid, liquid, gas, smoke, fume, vapor, odor, noise, radiation, heat, fluorescence or vibration materials which are naturally produced or by acts of mankind and leads directly or indirectly to environmental pollution, degradation, or damage to

mankind or living species

Air Pollution : Every change in the criteria and description of external and confined or semi confined public places air endangering the health of mankind and the environment, whether produced from natural causes or mankind activities.

Water Pollution : The introduction of any material or power in the water environment, whether voluntary or non voluntary, direct or indirect, which adversely affects the living or non-living resources, threatens the human health or impedes water activities including fishing and tourist activities or impairs its serviceability or decreases its benefits or changes its criteria.

Environmental Protection : Conservation of its components, criteria, natural balance, prevent pollution or decrease or fight pollution, conserve natural resources and rationalize its consumption and protect living species with particular attention to those threatened by extinction and devote efforts towards its growth and development.

Hazardous Materials : Solid, liquid or gas materials hazardous to mankind health severely affects the environment such as toxic explosive, flammable or ionized radiation materials.

Harmful Materials : All materials that may lead directly or indirectly to damages of mankind health or the environment, whether such material was chemical, biological or radioactive.

Wastes : All hazardous or non hazardous offal or wastes including nuclear wastes to be disposed or required to be disposed off according to the terms of law, including:

Solid Wastes:

Like domestic, industrial, agricultural, medical, construction and demolition wastes.

Liquid Wastes:

Effluents from residential, commercial and industrial premises and others.

Gas, Fume, Vapor and Dust Wastes:

produced by crushers houses, bakeries, incinerators, factories, , quarries, power stations, oil works, and transportation and commuting various means.

Hazardous Wastes:

the residual or ash of the various activities and operation having hazardous contents.

Medical Wastes:

Any wastes made in whole or part of human tissue, animal tissue, blood or other body liquids, secretions, drugs or other pharmaceutical products, bandages, syringes, needles or other medical sharp objects, or any other wastes whether contagious chemical or radioactive produced by medical activities, nursing, treatment, medical care, dental, veterinary or pharmaceutical or processed activities or others, tests, research works or study materials or sampling or storage of the same.

Handling & Dealing : Import / transport / storage / production / utilization / trade / any other activities.

Waste Management : Collection, storage, transportation, recycling and disposal of wastes including further care and protection of disposal points.

Waste Handling : All operations beginning from the time of producing waste until safe disposal off, including collection, storage, transportation, treatment, recycling or disposal off wastes.

Disposal of Wastes : Any Process that does not lead to scavenging or

recycling of materials, such as burial, deep injection, biological process, physical / chemical treatment, permanent storage, destruction or any other process approved by the competent Authorities.

Re-cycling of Wastes : The process of extraction or reuse of materials of wastes for using them as fuel or extraction of metals or biological materials, soil treatment or refinement of oil.

Firm : Industrial and tourist firms as well as electricity production and generation plants and corporations working in the field of oil exploration, production, transportation and use in addition to all infrastructure projects and any other firm.

Oil : All kinds of crude oil and its products including any kind of liquid Hydrocarbons, greasing oil, fuel oil, refined oils, oven oil, bitumen and other materials produced from oil or its derivatives or wastes.

Drainage : Every leak, spill, emission or discharge of any contaminating materials, or drainage of the same in water, soil or air environment.

Dumping

: A) Any intentional discharge into marine environment of contaminated or surplus from vessels, aircrafts, docks or others.

B) Any intentional dumping in marine environment of vessels or industrial installations or others.

**Transportation
Vehicles**

: Aircrafts, automobiles, trains, tractors or motorcycles or any other machinery intended for operation on roads.

[Top](#)

1.2 ARTICLE (2): COMPETENT AUTHORITIES

Handling or dealing in hazardous material, hazardous waste and medical wastes without license issued by the competent authorities as determined in the following schedule, within their respective prerogatives, shall be prohibited:

Kind of Material or Waste	Competent Authority
Chemical materials	<ul style="list-style-type: none">• Ministry of Health• Ministry of Interior• Ministry of Finance and Industry• Ministry of Agriculture and Fisheries• Municipality
Hazardous medical wastes	<ul style="list-style-type: none">• Ministry of Health• Municipality
Other hazardous materials	Municipality
Chlorofluorocarbons and Halon compounds.	Federal Environmental Agency

[Top](#)

1.3 ARTICLE (3): GENERAL REQUIREMENTS

Within their respective prerogations and in coordination with Federal Environmental Agency, Ministers or Municipality Chairmen shall promulgate the administrative and technical procedures necessary for handling or dealing in hazardous material, hazardous wastes and medical wastes provided such procedures shall, in particular, include the following:

1. The establishment of a competent regularity unit for the issue of licenses for materials specified in of Article (2) herein.
2. Establishment of national databases for hazardous materials, hazardous wastes and medical wastes.
3. Cooperation with the competent authorities and international organizations in following up hazardous materials, hazardous wastes or those wastes internationally listed and taking necessary actions on national level.
4. Evaluation of license applications for carrying out works and business mentioned in Article (2) herein and issuing the relevant licenses.
5. Examination of hazardous material and determination of their dangers through laboratories and specialized equipment, if necessary.
6. Coordination with the concerned authorities within the state in respect of pollutants analytical studies.
7. Dissemination of awareness of probable environmental and health risks and dangers arising from irrational use of hazardous materials.
8. Any other controls or commissions the Ministry of the Municipality deems necessary to add.

[Top](#)

1.4 ARTICLE (4): LICENSES

Without prejudice of the special conditions and procedures related to each handling and dealing operation in hazardous material, hazardous wastes and medical wastes under this regulation. The license applicant shall submit his

application to the competent authorities specified in Article (2) hereof under the following procedures and conditions:

1. License Issue Procedures

Handling and dealing in hazardous wastes, hazardous materials and medical wastes shall be issued for five years by the competent regularity unit (competent authority) as follows:

a) Any party purporting to undertake any business or works mentioned in Article (2) hereof shall submit its application to the regularity authority for obtaining business or work license.

b) Each party applying to the competent regularity unit shall enclose all relevant data and information necessary for supporting its application particularly:

1) Information related to the person undertaking hazardous materials, hazardous wastes and medical wastes handling operations:

- Firm's name and nationality;
- Address and telephone number.
- Firm's location and area (plus stores).
- Safety equipment available with the firm.
- Surrounding environment monitoring system applied by the firm.

2) Party producing hazardous materials or wastes and medical wastes:

- Firm's name and nationality.
- Address and telephone number.

3) Kind of handling or dealing the license is purported in respect thereof.

- 4) Full description of hazardous materials, hazardous wastes and medical wastes intended to be handled and the nature and concentration of hazardous elements therein as per international classifications applicable in schedule 1.1 of Annex No. 1 to this regulation.
- 5) Determination of the quantity of hazardous materials, hazardous wastes and medical wastes intended to be handled every year and the description of packing methods (barrels, tanks, bulk).
- 6) Description of intended storage methods for hazardous materials, hazardous wastes and medical wastes and their respective storage periods with an undertaking for making a clear statement on the packages disclosing the contents thereof and the extent of their dangers and actions to be taken in emergency cases.
- 7) Indication of transport means.
- 8) Full statement of the method intended to be adopted for treating and disposing of hazardous materials, hazardous wastes and medical wastes application is made for obtaining handling license therefore.
- 9) Undertaking for maintaining records reflecting ample description of the quantities of hazardous materials, hazardous wastes and medical wastes and their sources, rates and collection periods as well as their transport and treatment methods and to maintain such records for five years from the date of their compilation.

- 10) Previous experience certificate in the field of handling hazardous materials, hazardous wastes and medical wastes.
- 11) The licensed party shall prepare an accident emergency plan to be submitted to the competent regularity unit for approval.
- c) The competent regularity unit may suspend the license, refrain from issuing the license or finally cancel the license if violations, breaches or non-compliance of the requirements mentioned in federal Law No. 24 of 1999 in respect of Environment Protection and Development or in this regulation were proven.**

2. License Issue Conditions

- Submission of all required information.
- Availability of licensed personnel responsible for handling hazardous materials, hazardous wastes and medical wastes.
- Federal Environmental Agency's approval of the competency of such personnel for handling hazardous materials or obtaining a certificate indicating the completion of a specialized hazardous material handling course from the Civil Defense Institute.
- The availability of necessary requirements for meeting hazards arising from accidents during handling.
- Business applied for shall not produce any adverse damaging effects to the environment or public health.
- Display of emergency management plan in the site.

[Top](#)

1.5 ARTICLE(5): IMPORT OF HAZARDOUS CHEMICAL MATERIALS

1. Unless approval was obtained from the competent regularity unit, applicant shall not import any hazardous material mentioned in schedule 1.1 of Annex No. 1 for trade or multi usage purposes.
2. The licensee shall fill in all information mentioned in the import form prepared by the competent regularity unit and shall submit such form to the competent regularity unit before fifteen days from carrying out the import operation enclosed with MSDS including the following.
 - a) The scientific and commercial names of the hazardous material and its chemical composition.
 - b) U.N. serial number and the material serial number in accordance with CAS.
 - c) The physical and chemical characters of the hazardous material
 - d) The extent of the material dangers and its health and environmental impacts.
 - e) The quantity of hazardous material intended to be imported.
 - f) Expected date and time of transport.
 - g) Purpose of import.

- h) Best methods for storage and disposal of such material.
- i) Actions to be taken upon the occurrence of any leakage of the hazardous material.
- j) Actions to be taken for fighting fires arising from the hazardous material.
- k) Certificate of origin and test certificate from the country of export.
- l) Chemical material date of production and its period of validity.
- m) First aid actions for injuries resulting from exposure to the material through eyes skin, inhaling or swallowing.
- n) Protection equipment and personal protective clothes upon dealing with the material.

[Top](#)

1.6 ARTICLE(6): PACKING OF HAZARDOUS CHEMICAL MATERIALS

1. Hazardous materials shall be packed in tightly sealed special packs of a quality which can stand all transport and handling circumstances, vibration impact and changes in temperatures.
2. Packs shall be verified to be conforming, in all respects, with the materials to be placed therein so as not to be affected by the materials packed therein or affect such materials.

3. Internal packs shall be sealed, fixed or placed on a lining material for preventing breakage thereof or leakage therefrom and for controlling their movements within the external packages.
4. The pack shall be of a size providing sufficient space for adhesion all marks and information tags required under MSDS.
5. Tags shall be placed on each pack with strong adhesive so as to stand normal transport circumstances and to ensure the tag and the information thereon not to be exposed to damage or defacing.

[Top](#)

1.7 ARTICLE(7): TRANSPORT OF HAZARDOUS CHEMICAL MATERIALS

The following conditions shall apply to the transport of hazardous chemical materials:

1. Materials shall be transported in a safe manner within the determined speed limits.
2. Metal boards shall be fixed on the external surface on all sides of the transport units for warning against the tank contents and the extent of their danger. Such metal warning boards shall be coated with a weather proof reflective paint of the required colour.

3. The tank containers used in transporting hazardous materials shall be constructed in accordance with the internationally approved technical rules and regulations.
4. All vehicle drivers handling hazardous materials must be trained and licensed. Ready emergency and accident plans must be available.
5. All vehicles transporting bulk hazardous chemical materials shall be provided with a yellow flash light fixed on the drivers cabin and shall be operated throughout the transport voyage.
6. Drivers shall be provided with documents including necessary main information of the transported hazardous materials (the scientific chemical name and U.N. number). The traffic police at all times may stop any vehicle and carry out necessary examinations and inspection procedures for determining the vehicle safety and integrity. All transit drivers crossing the State must abide by the conditions stipulated in this Article.

7. The Agency and the concerned authorities will coordinate with the concerned department at Ministry of Interior in implementation of the rules of this article.

[Top](#)

1.8 ARTICLE(8): STORAGE OF HAZARDOUS CHEMICAL MATERIALS

The licensed owner of the store shall observe the following:

1. Design the store in a manner restricting fire, spillage and injury hazards.
2. Provision of emergency exits easy to open in the dark or in case of heavy smoke.
3. Provision of sufficient ventilation.
4. Floorings must be liquid impermeable, soft, non slippery and free from cracks to enable easy cleaning, and shall be designed so as to contain leakage and fire fighting water.
5. Upon the storage of low flash point solvents or smoldering chemicals, heavy duty equipment or systems shall be used.
6. Upon storage of hazardous materials in the open air, storage arrangements, ceilings or protective covers against sun and rain shall be provided.

7. Provision of suitable fire fighting equipment in accessible places with a fire alarm system. This fire alarm system shall be periodically inspected and tested to verify its suitability.
8. Stow materials in a manner not impeding forklift and handling equipment or emergency systems movement.
9. Hazardous materials shall be separated in accordance with the U.N. classification system and in accordance with the requirements mentioned in schedule No. 1.3 of Annex No. (1) enclosed herewith.
10. Storage of hazardous chemical materials must be provided for within the industrial installations with a separating distance of not less than three meters from any inflammable material production facility and not less than ten meters between flammable materials and any source of flame.
11. Maintenance of complete records of hazardous materials existing in the stores and keeping of a copy thereof in the head office.
12. Spillage and leakage shall be dealt with after referring to suitable MSDS.
13. Setting up an emergency management plan on site.
14. All damaged packages shall be disposed of in a suitable manner with the maintenance of the surrounding area cleanliness at all times.

[Top](#)

1.9 ARTICLE(9): HANDLING OF HAZARDOUS CHEMICAL MATERIALS

Handling instructions determined by the manufacturer in accordance with the nature of each material including any special precautions to be made for the protection of personnel and environment, shall be observed.

[Top](#)

1.10 ARTICLE (10) :GENERAL RULES AND PROCEDURES FOR HAZARDOUS WASTE MANAGEMENT

1. Generation of Hazardous Wastes

Parties generating hazardous wastes shall observe the following:

- a) Endeavour to reduce generation rates of such wastes in both quality and quantity by developing the utilized technologies and adopting clean production principle and the selection of product or raw material alternatives of lesser damage to the environment.
- b) Describe and record the quality and quantity of generated wastes.
- c) Construction and operation of waste treatment units in the source subject to the competent authority's approval of treatment method, technical specifications and operation programmes of such units. If the treatment or disposal of hazardous wastes in their source was impossible, the generating party shall collect and transport them to the places allocated to such purpose as determined by the competent authority.

2. **Collection and Storage of Hazardous Waste**

Parties generating hazardous wastes shall observe the following:

- a) Determine certain places for storing hazardous materials meeting safety conditions preventing any damages to the public.
- b) Storage of hazardous wastes in special containers made of block material free from holes resisting leakage provided with tight caps and seals and of enough capacity to hold the hazardous wastes.
- c) Clear marks shall be placed on hazardous waste storage containers stating the containers contents and indicating the hazards which might arise upon improper handling of such materials.
- d) Set up a time programme for the collection of hazardous waste so as not to be left for a long period in storage containers.
- e) In case of mobile containers, the hazardous wastes generating party shall not put such containers in public areas and shall not damage the environment.

3. **Transport of Hazardous Wastes**

Hazardous wastes shall not be transported by any means other than those belonging to parties licensed to manage hazardous wastes and such means must meet the following conditions:

- a) Transport vehicles shall be equipped with all safety equipment.

- b) Hazardous waste transport vehicles must be capable of containing hazardous wastes without any leakage.
- c) Transport vehicles shall be of capacity suitable to the quantity of hazardous wastes.
- d) These vehicles shall be driven by trained licensed drivers capable of taking necessary actions especially in emergency cases.
- e) Vehicles shall display clear marks indicating the extent of danger of their loads and the best course of action in emergency cases.
- f) Determination of the routes of hazardous wastes transport vehicles and immediately advising the Civil Defense Authorities of any change in such routes enabling Civil Defense Authorities to take immediate sound actions in emergency cases.

4. Treatment and Disposal of Hazardous Wastes

- a) The licensed party shall, in coordination with the concerned authorities, select the sites of hazardous waste treatment and disposal plant in an area of not less than five kilometers away from residential and urban gatherings. The following conditions, equipment and installations must be available:
 - 1) The site area shall commensurate with the quantity of hazardous wastes expected to be collected.

- 2) Site shall be surrounded by a brick wall not less than 2.5 meters high.
 - 3) Site shall be provided with more than one door of suitable opening permitting easy entrance of hazardous waste transport vehicles.
 - 4) Site shall be provided with water source, toilets and a telephone line.
 - 5) Site shall be provided with all mechanical equipment facilitating work movement therein.
 - 6) Site shall be provided with equipped stores for keeping hazardous wastes until treatment and disposal thereof.
 - 7) Site shall be provided with an incinerator for burning all kinds of hazardous wastes.
 - 8) Site shall be provided with the necessary equipment and installations for sorting and classifying some hazardous wastes for recycling purposes.
 - 9) Site shall be provided with sanitary burial hole of a suitable capacity for burying incineration leftovers.
- b) Hazardous wastes treatment operations for recycling shall be carried out within the following frame:
- 1) Using some hazardous wastes as fuel for power generation.

- 2) Retrieval of organic solvents and reusing them in extraction operations.
 - 3) Recycling and reusing of some organic materials from hazardous wastes.
 - 4) Reusing of ferrous and non ferrous metals and their compounds.
 - 5) Recycling and reusing some in-organic materials found in the hazardous wastes.
 - 6) Retrieval and recycling of acids or alkalis.
 - 7) Retrieval of used oils and reusing them after refining.
- c) Treatment operations of hazardous wastes not suitable for recycling or reusing shall be carried out within the following frame:
- 1) Burial of hazardous wastes in special equipped burial holes isolated from other environment elements.
 - 2) Physical and chemical treatment of hazardous wastes.
 - 3) Incineration in special equipped incinerators not permitting gas or vapour emissions in a manner causing damage to the surrounding environment.

- 4) Permanent storage (like placing hazardous waste containers under the ground).
- d) All procedures ensuring the restriction or minimization of hazardous waste generation shall be taken through:
- 1) Development and dissemination of clean technology.
 - 2) Development of hazardous waste management systems.
 - 3) Expanding reusing and incineration of hazardous wastes after treatment whenever possible.
- e) Set up a periodical programme for monitoring the environmental system wastes on site and in hazardous waste treatment and disposal plants and their surroundings.
- f) Parties licensed to handle and manage hazardous wastes and hazardous materials shall be responsible for the damages inflicted on third parties due to the non observance of the provisions hereof.

[Top](#)

1.11 ARTICLE (11)

No installations shall be constructed for treating hazardous wastes without obtaining license to this effect from the competent authorities in coordination with the Federal Environmental Agency under the provisions of Article (2) hereof ensuring such installation to have met all environment and personnel safety conditions.

Disposal of hazardous wastes shall be carried out in accordance with the conditions and criteria stipulated in Article (10) hereof.

In coordination with the Federal Environmental Agency, the competent authority shall determine the places and conditions issuing hazardous wastes disposal licenses.

[Top](#)

1.12 ARTICLE (12)

Transport and disposal of locally produced hazardous wastes through land borders, marine environment limits and air space shall be controlled in accordance with the rules, procedures and controls mentioned and specified in Basel Agreement and in coordination with Federal Environmental Agency.

[Top](#)

1.13 ARTICLE (13)

Parties producing or handling hazardous wastes, whether in liquid, gaseous or solid state shall take all precautions necessary for evading causing any environmental damages and shall in particular observe the following:

1. Selection of the site on which such materials shall be produced or stored under necessary conditions in accordance with the quality and quantity of such materials.
2. Buildings inside which such materials are produced or stored shall be designed in accordance with the engineering standards and criteria which must be observed for each kind of such materials. Such buildings shall be subject to periodical inspection by the competent unit.

3. Technology used for the production of such materials as well as all suitable equipment and systems shall not be causing any damage to the installations, environment or personnel.
4. Buildings shall include security, safety, alarm, fire fighting and first aid systems and equipment in proper quantities and numbers in coordination with Ministry of Health, Civil Defense Directorate and the competent regularity unit.
5. Emergency plan shall be set for facing any expected accidents during production, storage, transport or handling operations of such materials provided such plan shall be approved by the competent regularity unit.
6. Staff of hazardous wastes handling parties shall be subject to periodical medical check up provided the results of such medical check up shall be kept in the file of each person and provided they shall be treated from all occupational diseases under the U.A.E. applied laws, rules and regulations.

[Top](#)

1.14 ARTICLE (14)

The owners of installations generating hazardous wastes under the provisions of this Law shall maintain a record for such a wastes including:

- Full description of wastes showing their dangers and their physical and chemical characteristics.
- Quantities.
- Sources.
- Collection rates and periods.

- Transport means.
- Treatment method.
- The name of the contractor to which these wastes are delivered.

[Top](#)

1.15 ARTICLE(15): GENERAL RULES AND PROCEDURES FOR MEDICAL WASTES MANAGEMENT

1. All health installations of whatever kind shall be strictly prohibited to dispose of any medical wastes mentioned in Schedule No. 2.1 of Annex No. (1) hereof outside the containers prepared to this purpose under the directions of the Ministry of Health.
2. Health installations shall segregate their medical wastes from any other wastes and municipalities.
3. Health installations shall sort their medical wastes under the provisions of the classification schedule mentioned in Schedule No. 2.1 of Annex No. (2) hereof.
4. The group of wastes provided for in the preceding Clause should be packed in packages or containers in the manner stipulated in Schedule No. 2.2 of Annex No. (2) hereof.
5. Medical wastes shall be disposed of as follows:
 - a) Within the health installations by using proper means and equipment safe to the environment (incineration, etc.).

- b) On the site prepared to this purpose in coordination with the concerned authorities provided with the specialized treatment equipment (incineration, etc.).
6. Health installation or those in-charge of medical waste transport shall pack, transport and store such wastes in the manner described in Schedule No. 2.3 of Annex No. (2) hereof. Persons packing, transporting and storing wastes shall be qualified and licensed operators.

[Top](#)

1.16 ARTICLE (16): FINAL PROVISIONS

The provisions of this regulation do not apply to storage, transport and handling of hazardous materials and radioactive wastes.

[Top](#)

1.17 ARTICLE (17)

Parties adopting comprehensive systems and programmes for the protection and development of environment sufficient for the implementation of this regulation shall provide the authority with such systems and programmes for approval by the Authority's Board of Directors. Parties for which a Board of Directors Resolution shall pass approving their systems and programmes shall be exempted from the implementation of the provisions of this regulation.

[Top](#)

1.18 ARTICLE (18)

Rules mentioned in the regulation for lesions insecticides, fertilizers and agricultural additives apply to dangerous agricultural materials and wastes.

[Top](#)

1.19 ARTICLE (19)

This regulation is considered as part of the executive act of Federal Law No. 24 of 1999 in respect of environment protection and development and the agency official and the concerned authorities who are approved as juridical control officials have the right to seize any violation to its rules and to refer the violations in accordance with applicable rules in the country to the concerned judicial authorities for enforcement of legally prescribed penalties.

[Top](#)

2 ANNEX (1)

2.1 SCHEDULE(1.1): CLASSIFICATION OF HAZARDOUS MATERIALS

Hazardous materials shall be classified as follows subject to reference to the U.N. current directions:

- | | |
|---------------------|--|
| Category (1) | Explosives |
| Category (2) | Pressurized on, liquefied and inflammable and poisonous gases. |
| Category (3) | Inflammable fluids. |
| Category (4) | Inflammable solid materials, self-igniting solid materials, solid materials inflammable upon touching water. |
| Category (5) | Oxidized materials and organic peroxides. |
| Category (6) | Poisonous materials and contagious materials. |
| Category (8) | Corrosives. |
| Category (9) | Other hazardous materials. |

[Top](#)

2.2 SCHEDULE(1.2): CLASSIFICATION OF HAZARDOUS WASTES

A. Continuously Flowing Wastes:

- * Wastes resulting from manufacturing chemical materials for wood, their preparation and usage.
- * Wastes resulting from production of organic solvents, their preparation and usage.
- * Wastes resulting from thermal treatment and processing containing cyanide.
- * Wastes of mineral oil unsuitable for its original aim.
- * Wastes of oils / waters and hydrocarbon sludge / waters and emulsions.
- * Wastes of materials and compounds containing PCBs bi-vinyl or/and PBBs bi-vinyl.
- * Wastes of tar sediments resulting of refining, filtration and any other treatment by thermal analysis.
- * Residual wastes resulting from production of ink, paint, color materials, paints, varnish and their preparation and use.
- * Residual wastes resulting from production of resins, gum emulsions, plastics, glue/adhesive materials and their preparation and use.
- * Wastes of chemicals resulting from researches and developing or unclassified and/or new activities, whose effects are known on human beings and environment.
- * Wastes of exclusive nature which are not subject to another legislation.

- * Residual wastes resulting from production of chemicals, photographic treatment materials and their preparation and use.
- * Wastes resulting from surface treatment of minerals and plastics.
- * Sediments resulting from disposal operations of industrial wastes.

B. Wastes in which the following materials are used:

- * Mineral carbonates.
- * Beryllium - Beryllium compounds.
- * Hex-valence chromium compounds.
- * Copper compounds.
- * Zinc Compounds
- * Arsenic - Arsenic Compounds.
- * Selenium – Selenium Compounds.
- * Cadmium – Cadmium Compounds.
- * Antimony – Antimony Compounds.
- * Tellurium – Tellurium Compounds.
- * Thallium – Thallium Compounds.
- * Lead – Lead Compounds.
- * Inorganic Fluorine Compounds except calcium fluoride.
- * Inorganic Cyanide Compounds.
- * Acidic Solutions or Acids in the solid state.

- * Alkaline Solutions or Alkaline in the solid state.
- * Asbestos (dust and fibers).
- * Organic phosphorus compounds.
- * Organic Cyanide Compounds.
- * Phenol – Phenol Compounds including Chloro-phenol.
- * Ether Compounds.
- * Homogenated Organic Solvents.
- * Any other materials similar to PCBs Furan bi-benzene.
- * Any other materials similar to PCBs Dioxin bi-benzene.
- * Organic Halogen Compounds except the materials referred to herein above.

[Top](#)

2.3 SCHEDULE(1.3): HAZARDOUS MATERIALS SEGREGATION REQUIREMENTS

Category	1-1	2-1	2-2	2-3	3-1	4-1	4-2	4-3	5-1	5-2	6-1	8
1-1		C	C	C	C	C	C	C	C	C	C	C
2-1	C			C	B	B	C	B	C	C	B	B
2-2	C			C	A	A	B	A	A	B	A	A
2-3	C	C	C		C	C	C	C	C	C	C	C
3-1	C	B	A	C		B	B	B	C	C	B	A
4-1	C	B	A	C	B		B	B	C	C	B	A
4-2	C	C	B	C	B	B		B	C	C	B	A
4-3	C	B	A	C	B	B	B		C	C	B	B
5-1	C	C	A	C	C	C	C	C		B	B	B
5-2	C	C	B	C	C	C	C	C	B		C	B
6-1	C	B	A	C	B	B	B	B	B	C		A
8	C	B	A	C	A	A	A	B	B	B	A	

Note:

Segregation between two different categories of hazardous materials shall be made by using the Code at the intersection between the vertical line representing First Category and the horizontal line representing the other Category.

- a) Minimum separating distance shall be 3 meters.
- b) Minimum separating distance shall be 5 meters.
- c) Storage in the same room or area shall be prohibited. The minimum separating distance between storage areas shall be ten meters.

[Top](#)

**2.4 SCHEDULE(1.4) MINIMUM SEGREGATION REQUIREMENTS
BETWEEN HAZARDOUS MATERIALS AND PUBLIC**

Category	Minimum Separating Distance (Meters)
1	50
2-1	5
2-2	5
2-3	15
3-1 to 3-3	10
4-1 to 4-3	5
5-1 to 5-2	5
6-1 to 6-3	5
8	5

[Top](#)

3 ANNEX (2)

3.1 SCHEDULE (2.1) MEDICAL WASTE CLASSIFICATION

1. Group (A) Wastes

Dirty bandages, bed sheets, etc... polluted wastes such as cloth other than clothes and bed sheets arising from the treatment of contagious diseases and all human tissues (contaminated or un-contaminated), animal remains and all materials on which animals lay or cloth or any other materials used for animals whether contaminated or not or which might be probably be contaminated and all related matters of cloth and bandages, etc...

2. Group (B) Wastes

Used syringes and needles, surgical tools, different medicine and medical equipment vessels, broken glass and all other sharp equipment, tools and materials.

3. Group (C) Wastes

Blood, tissue and microbiology laboratories wastes mortuary wastes not specified under Group (A) or Group (B).

4. Group (D) Wastes

Pharmaceutical wastes and chemical wastes to which medical specifications apply.

5. Group (E) Wastes

Disposable linings used in the patients beds for covering the vessels receiving secretions, caps of bottles and vessels for receiving and storing urine, blood and urine diapers, bags or vessels used for receiving stomach wastes and similar materials.

6. Group (F) Wastes

Wastes resulting from treatment with radio active materials and wastes resulting from all operations related to radio active materials will be classified in accordance with international principles.

[Top](#)

3.2 SCHEDULE(2.2): PACKAGES AND CONTAINERS DETERMINATION

1. Group (A) Wastes

Heavy duty polyethylene (gauge 400) red colour bags clearly marked with the phrase “Contiguous Wastes - for Incineration Only” shall be used for packing all wastes mentioned in group A of the Schedule No. 2-1 in Annex No. 2.

2. Group (B) Wastes

Heavy-duty thick polyethylene plastic boxes of yellow colour internationally know as “Sharp Object Boxes” clearly marked with the phrase (Sharp Objects - for Incineration Only) for wastes mentioned in group (B) of Schedule No. 2.1 in Annex No.2. The said boxes used for preserving such wastes shall be tightly sealed with a cap or lock or any other means so as not to be opened and must not be stowed for more than 75% of their capacity.

3. Group (C) Wastes

3/1 Wastes to be sterilized before disposal

All laboratory wastes such as contaminated clothes, covers or sheets, gloves, bacterial plates (bacteriology laboratories culture plates and other plastic plates) and vessels used for handling organic tissues, blood, bacteria, etc... These wastes shall be placed in blue transparent bags made of special material clearly marked up “Medical Wastes - to be Sterilized Before Disposal”. These bags shall be tied from the neck by temporary locks and shall not be packed for more than 65% of their capacity.

3/2 Wastes to be treated

These wastes include the remaining wastes under Group (C) not listed under those mentioned in the preceding Para and which must be placed in medium duty (gauge 200) polyethylene bags of yellow colour clearly marked up (Medical Wastes - for Incineration Only). These bags shall not be stowed for more than 65% of their capacity and shall be tied from the neck and stored awaiting collection and disposal by incineration under the provisions hereof.

4. Group (D) Wastes
4/1 Pharmaceutical Wastes

All packed pharmaceutical material partially used or expired shall be returned to the pharmacy to be returned to their original containers, then stored in bags of polyethylene of medium duty (gauge 300) of yellow colour marked up (Medical Wastes - for Incineration Only). These bags shall be tied from the neck and shall not be filled for more than their capacity and shall be stored awaiting collection and disposal.

4/2 Poisonous Wastes

All cellular or poisonous materials shall be returned to a predetermined point inside the pharmacy in which such materials are prepared or issued. All poisonous cellular medicines and other materials contaminated with cellular poisonous drugs and medicines (except for under skin needles and other sharp objects classified under Group (B) wastes) shall be placed in heavy duty (gauge 400) polyethylene bags of yellow colour clearly marked up "Poisonous Cellular Wastes - for Incineration Only" and such bags shall not be filled for more than 65% of their capacity and shall be tied from the neck and stored waiting collection and disposal thereof by incineration.

4/3 Chemical Wastes

All chemical wastes to which medical wastes characteristics apply such as industrial solvents and other liquid materials used in diagnostic tests in addition to all remaining chemical materials shall be returned to a predetermined point within the pharmacy or the central laboratory store where they shall be tagged according to their respective kinds and types either by using adhesive tags or by cards attached thereto. Tags and marks placed on each pack shall indicate its components and hazards. Bags after that shall be stored awaiting collection and disposal.

5. Group (E) Wastes

All used bed materials of linings used for covering vessels receiving patient secretions and stomach wastes and other wastes (except for those used by patients suffering contagious diseases listed under Group (A) wastes) shall be placed in medium duty (gauge 300) yellow polyethylene bags. These bags shall not be filled in for more than 65% of their capacity and shall be tied from the neck after placing wastes therein and at the neck of each bag a tag clearly indicating the contents thereof to be “Medical Wastes of Group (E)” shall be hanged. These bags must be isolated in a separate place from other medical wastes if not incinerated on site.

6. Group (F) Wastes

Must be kept in special security places allocated for storing this kind of wastes until the expiry of half of their expected lives then incinerated or buried.

[Top](#)

3.3 SCHEDULE (2.3): METHODS DETERMINATION - MEDICAL WASTES PACKING, TRANSPORT AND STORAGE

1. Containers

Bags used for keeping medical wastes shall be of a minimum density of one cubic meter. Bags used for sterilization shall be made of special material and shall be carefully selected to this purpose and shall be clearly marked to this effect and to whether the contents thereof were treated or not (Sterilization Strip for example). After sealing each medical wastes bag for the disposal thereof, it shall be marked indicating the place in which such wastes were generated and the place in which such wastes shall be disposed of.

2. Transport on Site

Upon transporting any waste bag or container to its storage place within the site or to its disposal place within the site, such transport shall be made through secured trolleys marked "Medical Wastes" and any unauthorized or unlicensed person shall be denied access thereto. such trolleys shall be equipped so as to prevent any waste bags, packages or containers to fall therefrom. Trolleys used for transporting wastes from one point to another within the site shall be secured against leakage or spillage or shall be wrapped with clothes to absorb any liquid materials which might leak or spill from the bag or containers. Such cloth shall be either of a disposable kind or shall be made of materials which can be sterilized and shall be actually sterilized after each use before using them again.

3. Storage on Site

Upon storage of waste on site, such storage shall be in the nearest possible point to that from which transport has taken place and shall be placed inside packages or containers suitable to the kind of wastes in accordance with the classification determined for the medical wastes group. Such points shall also be allocated to this purpose only. The place

in which such containers or packages shall be kept must be of a suitable temperature degree so as to prevent germs reproduction and shall be far away from the patients, public or loose animals reach unless such place was always and in all times subject to the control of qualified and efficient personnel in the medical care profession field. Packages or containers shall be tightly sealed and tied or secured so as not to be easily opened.

4. Transport of Wastes Outside the Site

All vehicles, transport means or containers used for transporting medical wastes on public roads must be made, equipped or prepared and amended so as to be suitable for transporting medical wastes in a safe and secure manner. Such vehicles must also be capable of preventing leakage or spillage of any materials loaded therein and must be capable of carrying heavy loads and standing strong impacts without being liable to explode or crush so as to ensure that their load of wastes shall not spill or leak. Such vehicles shall also be provided with strong and secure locking devices and all vehicles or other means of transportation or containers used for transporting medical wastes shall always be kept tightly secured and closed so as to prevent any leakage or spillage.

5. Disposal of Wastes on Site

Wastes shall be disposed of on sites determined by the Municipality Department and prepared and equipped with the necessary plant for the disposal thereof whether by incineration or by any other means under the instructions of Ministry of Health.

[Top](#)
