

# TECHNICAL GUIDELINE

## Number (6)

### Disposal of Hazardous Wastes

May 2017

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## 1.0 Introduction:

Hazardous wastes pose significant threat to human, properties and to environment if not managed properly. In accordance to this threat, Dubai Municipality (DM) Environment Department published this guideline to regulate the handling, storage, and preparation for transportation to disposal site. This covers the responsibility of the individual/company generating the wastes in accordance with the local and federal laws and in consonance with the Basel Convention International Treaty.

The application for permit to dispose hazardous waste is made by online submission of request/application through the **Waste Disposal Service (WDS)** system - one of the many e-services of the Dubai Municipality. The WDS can be accessed at the Dubai Municipality's website - [www.dm.gov.ae](http://www.dm.gov.ae) - upon log-in with a business user id and password. The WDS system conveniently allows applicants to file disposal request 24/7, view request status, including online payment of disposal charges and for printing on-line WDS Permit upon approval.

To gain access of this on-line service, **Hazardous Waste Generators (HWG for brevity)** must register with the DM's e-government office and secure a USERNAME and PASSWORD to the DM's portal or web page. *Annex 1* shows the registration procedures. *Take note that the WDS system is available only for establishments (company & admin user) and not for public user registrants.*

## 2.0 Legal Framework, Circulars, and Guidelines

2.1 The relevant provisions of the following laws and regulations were used as guidance and reference in the preparation of this guideline:

- [Federal Law \(No.\) 24 of 1999](#) and modified by Federal Law (No.) 11 for 2006 regarding Protection & Development of the Environment.
- [Executive Order of Federal Law No. 24 of 1999](#) for Regulation of Handling Hazardous Materials, Hazardous Wastes and Medical Wastes, issued by Cabinet Decree No. 37 of 2001
- [Local Order \(No.\) 61 of 1991](#) on the Environment Protection Regulations in the Emirate of Dubai
- [Local Order \(No.\) 7 of 2002](#) on Management of Waste Disposal Sites in the Emirate of Dubai; as amended by Local Order No. (5) of 2003
- [Local Order No. \(115\) of 1997](#) Concerning Medical Wastes Management in the Emirate of Dubai

2.2 The related circular, guidelines, and posted information bulletin below are in conjunction with this guideline: The related **circular** in conjunction with this guideline:

- Circular No. (3) of 2016 - Notification Regarding Disposal of Hazardous Wastes
- Circular No. (5) of 2014 Regarding Management and Controlling the Handling and Disposal processes of Hazardous Waste;
- Circular to all permit Holders of Collection & Transportation of Waste Oil in the Emirates of Dubai for the Purpose of recycling / reuse, 2014
- Circular to All Chemical Suppliers & Contracting Companies in the Emirate of Dubai, 2013
- Circular to all car garages, transport fleet operators, battery changing shops, and establishments & premises handling lead-acid batteries, 2011

### 3.0 Scope and Coverage

- 3.1 This Guideline is applicable to all hazardous waste resulting from a legal or authorized business activity of a person, party, organization or of industrial or commercial establishment that is duly registered or licensed to operate in the Emirate of Dubai including Free Zone areas.
- 3.2 It also applies to other governmental organizations that, in one way or another, related to the generation and control of the hazardous waste material.

### 4.0 Definition of Terms

For the exclusive use of this guideline, the following terms, phrases, acronyms and definitions apply:

**Disposal** - Refers to any or combination of the following means or processes where a waste is subjected to or rendered for:

- Direct tipping into landfill;
- Deposit to any land or sea environment;
- Incineration, burning or combustion in controlled manner for the purpose of getting rid of waste material;
- Final deposit at any DM waste treatment complex or landfill;
- Export to other Emirate(s); or
- Export to any country outside of UAE

The process of segregation and recovery of the materials for the purpose of recycling or reuse is not considered a disposal.

**Disposal Site** – The site with defined area and boundaries intended for as the final depository of waste. It may be a final depository site of lined or unlined landfill or any dedicated facility for waste treatment.

In the case of waste intended for export, the name of the receiving state or locality shall be referred to as the disposal site.

**Difficult Waste** – is the non-hazardous material which requires special handling to avoid any unacceptable annoyance or environmental impact.

**DAC– Dubai Accreditation Center** – The competent authority who is responsible for the accreditation of private company laboratories for environmental testing.

**Environmental Standards** - Within the context of this document and pursuant to Local Order on the Environment Protection Regulations in the Emirate of Dubai, are the specified values of environment quality indicators or allowable limit of pollutants in the waste stream when discharge into a segment of environment, beyond which, it can cause pollution and impair the quality of the environment.

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

**Hazardous waste (a)** – is a waste or mixture of wastes containing one or more properties of a hazardous substance, i.e., being toxic, infectious, corrosive, flammable, oxidizing, radioactive, reactive or explosive which, at certain concentration or condition and improper handling, can cause substantial harm to human, properties or to the environment.

**Hazardous waste (b)** – In addition to the above descriptions, the following wastes are also considered a hazardous waste:

- (a) Medical wastes
- (b) WEEE or e-wastes due to its harmful components
- (c) Any other waste unsuitable for direct disposal into the traditional landfill or sewer system due to the presence of hazardous chemical or physical components harmful to the environment.

**JAHWTF/JADS** - The Jebel Ali Hazardous Waste Treatment Facility / Jebel Ali Difficult Waste Landfill operated/managed by the Waste Management Department..

**Landfill** - An area generally used for disposal of solid wastes by burial. It is either an ordinary unlined landfill or an engineered landfill with basal lining of an impervious material and fitted with leachate collection system.

**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 other, tests, research works or study materials or sampling or storage of the same.

**MSDS** – Material Safety Data Sheet – is a document that contains information on the hazard evaluation on the use, storage, handling and emergency procedures related to that material.

**Recyclables** – Waste materials that are broadly classified, within the context of this Policy, as the “*recyclables*” which contain valuable materials meant for recycling or reuse. Recyclables include, for example, papers, plastics, cartons, wood, metals, glass, tyres, textile, lead-acid batteries, automobiles, WEEE, and many other similar discarded used products.

**Sludge** - Means a solid wastes or granular waste at spadable consistency with no free liquid which has been obtained from the treatment of waste or process refuse from a commercial or industrial operation.

**Trade Wastewater** – Is a non-hazardous wastewater generated and discharged from industrial operations or commercial other than domestic wastewater.

**Treatment (of waste)** - Means an induced change, normally carried out in a treatment facility, in the physical or chemical composition of the waste so as to make it less hazardous, less in volume, and acceptable for final disposal.

**Unwanted material** – is any material/goods declared by its owner to be unwanted and requires disposal, or of which a decision for its destruction/disposal is issued by a competent authority, or that is proper disposal requires a special care.

**Waste** – means any material disposed of because it is no longer needed. It includes general wastes, hazardous wastes, difficult waste and other wastes as classified so by ED.

**Wastewater** - All spent water discharged from any activity of man or industrial process. For the purpose of this document it is further classified into 2 types namely; a) domestic wastewater, and b) trade wastewater.

**Waste Generator (WG)** – Any person or party who produces the waste material and/or the Occupier and/or Owner of the premises or facility where the waste is generated. The waste generator is also the “*Owner of waste*”

**WDS** – Waste Disposal Service

**WEEE** - Refers to the discarded obsolete or broken waste electrical and electronics equipments. WEEE is classified, in this document, both as special waste and as hazardous waste due to the economic value of the recyclable components and to the hazardous nature of some parts thereof. It is also called **e-waste**.



## 5.0 Application for the Disposal of Hazardous Waste

- 5.1 Only the company who generated the hazardous waste should submit their hazardous waste disposal request/ application online to Dubai Municipality through the WDS system. Relevant documents as described in point *Section 6* shall be attached in the WDS application. File attachments should be in **tif, jpg, gif, bmp or PDF** formats only.
- 5.2 Total amount of wastes to be inputted in the disposal request shall be in metric tons estimated for the wastes already accumulated plus waste to generated for 3 months, since permit once approved will be valid for 3 months only.
- 5.3 Exact address of the facility where wastes are generated and stored shall be specified in the waste location details in the application.

## 6.0 Required documents to be attached in the Application

- 6.1 **Analysis Report from any [DAC accredited laboratories](#)** for the following wastes and the minimum required parameters to be analyzed as per the table below:

**Table 1. Parameters for Laboratory Analysis**

Waste Type	Parameters	
<b>For Wastewater</b>	pH, Total Suspended Solids, Total Dissolved Solids, BOD <sub>5</sub> , COD, Oil/grease(emulsified), Free Oil, Sulfates, Sulfides, Ammoniacal Nitrogen, Metals (Al, Ar, Cd, Cr, Cu, Pb, Mn, Hg, Ni, Ag, Se, Zn), and Total heavy metals.	
	To add the following parameters for specific industry	<b>Metal Processing Industries:</b> <i>Chlorides, Cyanides as CN, Fluoride, Ammonia-Nitrogen, Phenols, % HCl, Metals (B, Fe, % Iron)</i>
		<b>Food Processing Industries:</b> <i>Ammonia-Nitrogen, Fecal Coliform, E-Coli</i>
		<b>Wastewater mixed with ink, paints, solvents, etc:</b> water content
		<b>Mixed with Solvent:</b> <i>to include parameters for Solvent wastes if waste have more than 10% solvent</i>
<b>For Sludge &amp; contaminated soil</b>	pH, % Solids (fixed/volatiles/total), moisture content (%), chloride, Oil content (% by weight), flash point (°C), Metal Concentration and Metal TCLP (Ar, Cd, Cr, Co, Cu, Pb, Hg, Ni, Se, Sn, Zn). <b>For contaminated soil due to fuel spill:</b> Total Petroleum Hydrocarbon and BTEX (benzene, toluene, ethyl benzene, and xylenes)	
<b>For Used Chemicals, inks, paints, solvents, etc.</b>	pH, volatiles, hydrocarbon, water content (%), Flashpoint (°C), Oil content (% by weight), Metals (Al, Cd, Cr, Co, Cu, Pb, Mn, Hg, Ni, Ag, Zn), and Total heavy metals.	

- 6.1.1 Any company that will generate or have history of generation of at least or more than 300 cubic meter/year of hazardous wastewater will be required to install an onsite wastewater treatment plant and/or comply with waste minimization plan as per Environmental Planning and Studies Section – Technical Guideline for Waste Minimization.
- 6.1.2 **The laboratory analysis report shall not be more than 1 month from sampling date.** New analysis report is required for every permit application. EPSS may require other tests to further determine the hazardous nature of waste.
- 6.1.3 Samples shall be collected only by DM Accredited Laboratories on the waste generator's facility. Photos documentation during sampling should also be included in the WDS Application. Waste sampling and analysis shall be in accordance with the DAC analysis and procedures.
- 6.2 **For first time applicant**, the following is required to be attached in the application:
- ☐ Description with flowchart of the process sources of waste
  - ☐ Description and drawing details of waste treatment system plus details of wastewater holding tanks with connection to sewer lines (if any)
  - ☐ Location plan of the premises and site drainage plan
- 6.3 **For all expired/unused goods or products**, which are declared waste and unsuitable for use in its original form, the owner of waste must provide the following:
- ☐ Material Safety Data Sheet (MSDS) (if applicable)
  - ☐ Shipping/importation documents
    - Bill of Lading
    - Bill of Entry (Customs Declaration)
    - Certificate of country of origin
    - Packing List
    - Purchase Order
  - ☐ Certificate of manufacturing & expiry dates
- Note:** Any product, goods, or merchandize being applied for disposal will be assessed based on the submitted documents
- 6.4 Photos of the waste including:
- ☐ photos of waste inside the container
  - ☐ photos of the container
  - ☐ photos showing all the wastes (example: photo of the wastes packed in pallet)
  - ☐ photos of the area where and how the waste is generated
- 6.5 Instructions and required attachments for specific type of wastes
- 6.5.1 **Pharmaceuticals, drugs** – a Medicine Disposal Certificate approved from Ministry of Health is a required attachment for expired pharmaceutical products generated from drug distributor and traders; and Medication Disposal Certificate is required for pharmaceutical wastes generated from pharmacy store, clinic, hospitals, etc. with license from DHA.



- 6.5.2 **Medical Wastes** – Collection, handling, and disposal procedure of medical/clinical waste are explained in the Technical Guideline for Transportation and Handling of Hazardous Wastes.
- 6.5.3 **Aerosol or pressurized containers** – Aerosol or any pressurized containers in general cannot be disposed in the landfill due to its explosive /flammable nature. These type of containers shall first be depressurized and punctured safely with supporting photos that the requirements were properly adhered to. A statement of the requirements shall be provided in the remarks of the WDS application . Expired aerosol products shall be sent back to the manufacturer for depressurization or to a DM accredited waste processing facility.
- 6.5.4 **Asbestos contaminated materials** – Attach photos of the wastes which will be handled as per the Technical Guideline for Safety in Handling Asbestos.
- 6.5.5 **Flammable Wastes** – Provide a separate application for flammable chemicals for disposal with a flash point of below 60°C. The flash Point can be found in the MSDS and/or through a Flash Point analysis by a DM accredited laboratory.
- 6.5.6 **Chemical Wastes** – Chemical wastes shall be segregated and applied for separately based on its compatibility in the WDS which is categorized according to waste type (e.g. flammables, acids, alkalis, reactive wastes). Incompatibles are those pairs of substances that, when mixed, will either react violently or emit flammable or poisonous gases or vapors. Compatibility information is available on the MSDS of the chemical.
- 6.5.7 **Sludge** – sludge shall be dewatered to spadable consistency and with no free liquid. Laboratory analysis shall be conducted only when the sludge condition has been met.
- 6.6 **Waste from Vessel or Ship in Port** – Waste coming from Vessel/Cruise Ship arriving in any port of Dubai shall attach Advance Notification Form for Waste Delivery signed by the captain of the vessel or ship and by the Port Reception Facility.
- 6.7 **Waste from Jebel Ali Freezone Companies (JAFZA)** – Attach Trakhees-EHS Approval and Inspection Report for each disposal request made online.

## 7.0 Collection and Storage of Hazardous wastes

All hazardous waste generators shall observe the general rules below:

- 7.1 Determine a suitable place for the storage of hazardous materials that meet safety requirements and which prevent any harm to the public.
- 7.2 Provide special containers with the following requirements: a) are made of block material which are free of holes; b) which will resist any leakage; c) which are

provided with tight caps and seals and d) are of a sufficient capacity to store the hazardous wastes.

- 7.3 Place clear marks on hazardous waste storage containers that state the containers' content and indicate the hazards which might arise upon improper handling of such materials.
- 7.4 Set up time a schedule for the collection of hazardous wastes so as not to be left for a long period in storage containers.
- 7.5 In case of mobile containers, the hazardous wastes generating party shall not place such a container in any public area and shall not damage the environment.

## 8.0 Pre-Transport Requirements

Before waste are transported, waste generators shall ensure that the risk of untoward incident which can arise during transport shall be minimized and shall comply with the requirements of Technical Guideline for the Transportation and Handling of Hazardous Wastes.

## 9.0 Disposal Fees:

- 9.1 The "*Schedule of Fees and Charges*" were determined and as per *Local Order No. 7 of 2002*. All concerned parties are required to pay for and comply with it.
- 9.2 Disposal fee for hazardous waste disposal is computed based on the type and nature of waste, quantity, preferred treatment or disposal means as summarized in *Table 2* below.

**Table 2 – Fees of Disposal**

Waste Type	Fees in AED
Solid difficult waste	50/ton
Wastewater (not complied the maximum allowable limit for discharge to sewerage system)	150/ton
Hazardous waste ( <i>except wastewater</i> )	150 to 200/ton
Hazardous wastes in drums ( <i>except wastewater</i> ) ( <i>200liter cap</i> )	200 to 250/ton
Flammables and materials which require special treatment	100dhs/drum
Contaminated materials	150 ton
Medical waste	4dhs/kg

*Note : ton means metric ton = 1,000 kg, and any fraction thereof will be counted as 1 ton or 1m<sup>3</sup> or 1 drum for the purpose of computing fees*

- 9.3 A AED 250 fee will be paid by the owner of waste who wishes to obtain a “Waste Disposal Certificate” as a proof that his/her wastes has been accepted and disposed of at any DM controlled waste treatment site. Payment shall be made at the disposal site and Certificate of Disposal can be obtained by submitting the receipt to Waste Management Department’s Office in Abu Hail.
- 9.4 Upon the approval of the WDS application, an e-mail message will be sent to the HWG/applicant which will indicate payment details (amount in AED and voucher number), which can be paid through the Dubai Municipality’s E-payment services system.
- 9.5 An application with approved pending payment status will be considered invalid 30 days after the approval date if no payment is made.

#### **10.0 Transport and Disposal of Approved Wastes:**

- 10.1 Upon payment of disposal fee, the HWG/applicant shall contact the disposal facility to arrange the waste disposal schedule and any other arrangements. Alternatively, the HWG/applicant has the option to instead contact any of the approved hazardous waste transporters to schedule the disposal on behalf of the HWG/applicant.
- 10.2 All permitted wastes shall be disposed off only at the designated site within three months (90 days) reckoned from the date of approval or as per the schedule set by the disposal facility, otherwise the permit will be considered invalid.
- 10.3 Delivery of the permitted waste to the disposal site shall be made only through an approved vehicle and transporter which holds a valid permit in accordance with the requirements of Technical Guideline for the Transportation and Handling of Hazardous Wastes.
- 10.4 All HWG/applicants must ensure that a printed copy of the WDS Permit is provided to the designated transporter when delivering the permitted waste to the site. A copy of the approval certificate will serve as the consignment document and, without this, the transporter carrying the waste will be prohibited to transport the waste.
- 10.5 All waste delivered and accepted at the disposal facility that are in excess of the approved quantity will be accounted for. The HWG/applicant will be automatically notified through e-mail and SMS message of such excess and payment for this shall be settled within 7 days. No succeeding request will be approved if there are unsettled payment.

**For further information please visit**

**[www.dm.gov.ae](http://www.dm.gov.ae)**

**or call**

**Environmental Planning and Studies Section**

**Tel.: 6066832 / 6066834 Fax: 7033568**

## Annex

### Online Registration & WDS Application Procedures

#### **Step 1: Online Registration**

1. Click on the "[Log-in](#)" button in DM Portal
2. Click "*Register*"
3. Click on "*Company and Admin User Registration*" under the "*Business Services*" tab;
4. Complete and submit the online-registration form.
5. Select the "*Request for Permit of Wastes Disposal (Hazardous/Trade Wastes/ Unwanted Materials)*" under "*Environment Department*" tab.

#### **Step 2 : Submit Documents to E-Service**

1. Required Document: Copy of Trade License
2. An admin username and password will be received thru email

#### **Step 3: Using the Online Services**

1. Log-in with admin username & password
2. Create a Business User from "*User Management*" tab
3. Assign "*Request for Permit of Wastes Disposal (Hazardous/Trade Wastes/ Unwanted Materials)*" to the Business User

#### **Step 4 Apply for the Waste Disposal Service**

- Scan all the required documents such as a recent analytical report that represent the waste, photos (if applicable), etc. properly before logging in to DM Portal; Scanned documents must be saved as tif, or pdf files with dedicated names that describe each of the attachments; example WW.pdf, or LAB.tif ;
- Open the DM website: [www.dm.gov.ae](http://www.dm.gov.ae). Click on e-Services. Log in using your business user name and password. **Use Internet Explorer only.**
- At the left bottom corner, look for "*Request for Permit of Wastes Disposal (Hazardous/Trade Wastes/ Unwanted Materials)*", Click on that button;
- The next window will open with a number of command buttons;
- Click on "*Apply for Waste Disposal*" button;
- The next window will open showing your company trade license no. & company name, contact nos., activity. Fill in the necessary data, i.e. the waste description, source of waste, etc.
- At the bottom of the page, click the "*Continue*" button. Another page will open to fill in the required data;
- Attach the required documents by clicking on the "*Attach document*" doc button (paper clip symbol). A new window will open. Select either the "*Drag and drop*" option or click on the "*File*" button and select a file to attach. Do not forget to click on the "*Done*" button once finished. Note: The system accepts a maximum of 10 MB only.
- Click on the small box "*I accept the terms & conditions*" button. Finally, click the "*Submit*" button and submit your application.

There will be notification that your application has been sent successfully.

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