	Organization Unit:	Waste Management Department	الوحدة التنظيمية :	
GOVERNMENT OF DUBAI	Form sheet title:	Hazardous Waste Disposal	اسم النموذج :	بالدياة دباي
	Doc Ref.:	DM-WMD-WTS-TG-8	رقم النموذج :	DUBAI MUNICIPALITY

Waste Treatment Section

Waste Management Department

# Technical Guideline No. 8 Disposal of Hazardous Waste

(WTS-TG No. 8)

December 2021

	Organization Unit:	Waste Management Department	الوحدة التنظيمية :	
GOVERNMENT OF DUBAI	Form sheet title:	Hazardous Waste Disposal	اسم النموذج :	بلدية ديق
	Doc Ref.:	DM-WMD-WTS-TG-8	رقم النموذج :	DUBAI MUNICIPALITY

## **Table of Contents**

Conten	t	Page
1.0	Introduction	1
2.0	Legal Framework, Circulars, and Guidelines	1
3.0	Scope and Coverage	2
4.0	Application for the Disposal of Hazardous Wastes	2
5.0	Required Documents to be attached in the Application	3
6.0	Collection and Storage of Hazardous Waste	5
7.0	Pre-Transport Requirements	6
8.0	Disposal Fees	6
9.0	Transport and Disposal of Approved Wastes	7

#### <u>Tables</u>

Table 1: Laboratory Analysis Parameters	3
	6
Table 2: Fees of Disposal	

#### <u>Annexes</u>

	8
Annex 1 : Definition of Terms	11
Annex 2 : Online Registration & WDS Application Procedure	
Annex 3 : Dubai Wastewater Discharge Limits	12
Annex 5. Dubai Wastewater Discharge Linits	13
Annex 4: Classification of Hazardous Wastes	

# List of Abbreviations

DM – Dubai Municipality
EIAC – Emirates International Accreditation Centre

- HWG Hazardous Waste Generator
- WTS Waste Treatment Section
- WMD Waste Management Department

-	
Dage	
гадс	

	Organization Unit:	Waste Management Department	الوحدة التنظيمية :	
GOVERNMENT OF DUBAI	Form sheet title:	Hazardous Waste Disposal	اسم النموذج :	بلدية دين
	Doc Ref.:	DM-WMD-WTS-TG-8	رقم النموذج :	DUBAI MUNICIPALITY

## **1.0** Introduction:

Hazardous wastes pose a significant risk and danger to humans, properties and to environment if not managed properly. In accordance to this threat, **W**aste **M**anagement **D**epartment (WMD), **D**ubai **M**unicipality (DM) published this guideline to regulate the handling, storage, and preparation of hazardous waste for transportation to disposal sites. This covers the responsibility of the individual/company generating the wastes in accordance with the local and federal laws and in relation with the Basel Convention and International Treaty.

The application for permit to dispose of hazardous waste is made by online submission of request/application through the Request for Permit of Waste Disposal (Hazardous/Trade Waste/Unwanted Materials) (**WDS**) system - one of the many e-services of Dubai Municipality. The WDS can be accessed at the Dubai Municipality's website – <u>waste.dm.gov.ae</u> - upon log-in with a UAE Pass/ User Management ID and password. The WDS system conveniently allows applicants to file disposal request 24/7, views request status, including online payment of disposal charges and for printing on-line Permit for Disposal of Hazardous Waste upon approval.

To gain access of this on-line service, **H**azardous **W**aste **G**enerators (HWG) must register online to secure a UAE PASS and PASSWORD to the DM's portal or web page. *Annex 2* shows the registration procedures.

## 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 technical guideline:
  - <u>Federal Law No. 12 of 2018</u> On the Integrated Waste Management
  - Executive Council Resolution No. (58) of 2017 Approving the Fees and Fines for Waste Disposal in the Emirate of Dubai
  - 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. (115) of 1997 Concerning Medical Wastes Management in the Emirate of Dubai
  - Code of Practice on The Management of Medical Wastes from Hospitals, Clinics and Related Health Care Premises in Dubai (1997)

GOVERNMENT OF DUBAI	Organization Unit:	Waste Management Department	الوحدة التنظيمية :	
	Form sheet title:	Hazardous Waste Disposal	اسم النموذج :	بالدياة دباي
	Doc Ref.:	DM-WMD-WTS-TG-8	رقم النموذج :	

- 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
- 2.2 The related circulars, guidelines, and posted information bulletin of this guideline is posted in Dubai Municipality's website -https://www.dm.gov.ae/municipality-business/Waste Department Circulars.
- 2.3 The classification of hazardous wastes in the Emirate of Dubai is presented in *Annex 5.*

## 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 Application for the Disposal of Hazardous Waste

- 4.1 Only companies who generate hazardous waste should submit their Request for Permit of Waste Disposal (Hazardous/Trade Waste/Unwanted Materials) (WDS) system. Relevant documents as described in *Section 5* shall be attached in the WDS application. File attachments should be in **PDF** formats only.
- 4.2 Total amounts of waste to be declared in the disposal request shall be in metric tons estimated for the wastes already accumulated plus waste to be generated for next three (3) months, since permit once approved will be valid for Three (3) months only. There is no possibility of validity extension in case the paid permit remained unused or partially used after the permit expiry.
- 4.3 Any company that will generate or has history of generation of at least or more than 300 m<sup>3</sup>/year (12 months) of hazardous wastewater will be required to install an onsite wastewater treatment plant (WTP). Otherwise, waste generator have the option to subcontract the treatment of liquid hazardous waste to a private 3<sup>rd</sup> party Company that have an approved facility for the activity of Waste Water & Hazardous Liquids Treatment. A "Permit for Disposal of Hazardous Waste" is required to transport the liquid waste to 3<sup>rd</sup> party facility.
- 4.4 Wastewater that exceeded the sewer discharge limit as presented in Annex 3 shall be neutralized at the source to a non-corrosive state.
- 4.5 Exact address of the facility where wastes are generated and stored shall be specified in the waste location details in the application.

		2
- P	ag	eΖ

	Organization Unit:	Waste Management Department	الوحدة التنظيمية :	
GOVERNMENT OF DUBAI	Form sheet title:	Hazardous Waste Disposal	اسم النموذج :	بالدياة دباي
	Doc Ref.:	DM-WMD-WTS-TG-8	رقم النموذج :	

## 5.0 Required Documents to be Attached in the Application

5.1 Analysis Report from any accredited laboratories from Emirates International Accreditation Centre (EIAC) for the following waste types and the minimum required parameters to be analyzed as per the *Table 1* below.

Waste Type	Parameters		
	Oil/grease(emul	ended Solids, Total Dissolved Solids, BOD5, COD, sified), Free Oil, Sulfates, Sulfides, Ammo niacal s (Al, As, Cd, Cr, Cu, Pb, Mn, Hg, Ni, Ag, Se, Zn), and als.	
		Metal Processing Industries: Chlorides, Cyanides as CN, Fluoride, Ammonia- Nitrogen, Phenols, % HCl, Metals (B, Fe, % Iron).	
For Wastewater	ater To add the following parameters for specific industry	Food Processing Industries: Ammonia-Nitrogen, Fecal Coliform, E-Coli.	
		Wastewater mixed with ink, paints, solvents, etc: water content.	
		<b>Mixed with Solvent:</b> <i>to include parameters for</i> <i>Solvent wastes if waste has more than 10%</i> <i>solvent or include Flash Point if COD exceeded</i> <i>100,000mg/L.</i>	
For Sludge & contaminated soil	pH, % Solids (fixed/volatiles/total), moisture content (%), chloride, Oil content (% by weight), flash point (°C), Metal Concentration and Metal TCLP (As, Cd, Cr, Co, Cu, Pb, Hg, Ni, Se, Sn, Zn). For contaminated soil due to fuel spill more than 10 liters: Total Petroleum Hydrocarbon and BTEX (benzene, toluene, ethyl benzene, and xylenes).		
For Used Chemicals, inks, paints, solvents, etc.	pH, % Solids ,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.		

Table 1 – Parameters for Laboratory Analysis	- Parameters for Laboratory Analysis
--	--------------------------------------

Note: Sampling and Test method for all the above parameters shall be approved by EIAC

- 5.1.1 **The laboratory analysis report shall not be more than (one) 1 month from sampling date.** New analysis report is required for every permit application. Other tests may be required by the WDS reviewer to further determine the hazardous nature of the waste.
- 5.1.2 Waste (except for wastewater) generated regularly, well characterized and consistent quality would require a new laboratory analysis report only once every year or as maybe required by the WDS reviewer. To be classified in this waste category, the company should at least applied for the same type of waste

	Organization Unit:	Waste Management Department	الوحدة التنظيمية :	
ځکومټرن <u>ځي</u>	Form sheet title:	Hazardous Waste Disposal	اسم النموذج :	بالدياة دباي
GOVERNMENT OF DUBAI	Doc Ref.:	DM-WMD-WTS-TG-8	رقم النموذج :	

with corresponding laboratory analysis for no less than 5 years. For hazardous wastewater generated regularly, new analysis report is required semi-annually or as may be required by the WDS reviewer.

- 5.1.3 Samples shall be collected only by EIAC Accredited Laboratories from the waste generator's facility. Photo documentation during sampling should also be attached in the WDS Application. Waste sampling and analysis shall be in accordance with the EIAC analysis procedures.
- 5.3 **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, including:
    - o Bill of Lading.
    - Bill of Entry (Customs Declaration).
  - □ Inventory of chemicals for 2 or more items, template as specified in WDS.

**Note:** Any product, goods, or merchandize being applied for disposal will be assessed based on the submitted documents.

- 5.4 Photos of the waste, including:
  - □ Photos of waste inside the container; Photos of the container.
  - □ Photos of the labels including manufacturing and expiry date.
  - □ Photos showing all the wastes (example: photo packed in pallet).
  - □ Photos of the area on where and how the waste is generated and stored.
- 5.5 Instructions and required attachments for specific type of wastes
  - 5.5.1 **Pharmaceuticals, drugs** a Medicine Disposal Certificate approved from Ministry of Health for expired pharmaceutical products generated from drug distributor and traders;
  - 5.5.2 **Medical Wastes** Collection, handling, and disposal procedure of medical/clinical waste are explained in the *Code of Practice on the Management of Medical Wastes from Hospitals, Clinics, and Related Health care Premises in Dubai (1997).*
  - 5.5.3 **Aerosol or pressurized containers –** Aerosol or any pressurized containers in general cannot be disposed of in the landfill due to their explosive/flammable nature. These type of containers shall first be fully depressurized and punctured safely. Supporting photos that the requirements were properly adhered to shall be attached in the WDS application. Expired aerosol products shall be sent back to the manufacturer for processing or to a DM accredited waste processing facility.
  - 5.5.4 **Asbestos contaminated materials** Attach photos of the wastes which will be handled as per the Technical Guideline for Safety in Handling Asbestos.

Page	4
------	---

	Organization Unit:	Waste Management Department	الوحدة التنظيمية :	
حكومة كزلجي	Form sheet title:	Hazardous Waste Disposal	اسم النموذج :	بلدية دبى
ERNMENT OF DUBAI	Doc Ref.:	DM-WMD-WTS-TG-8	رقم النموذج :	

- 5.5.5 **Flammable Wastes –** Provide a separate disposal request for chemicals 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.
- 5.5.6 **Chemical Wastes** Chemical wastes shall be segregated and applied for separately based on their compatibility in the WDS which is categorized according to waste type (e.g. flammables, acids, alkalis, oxidizer, and/or by reactivity). 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.
- 5.5.7 **Sludge** sludge shall be dewatered to spadable consistency and with no free liquid. Sample collection for laboratory analysis shall be conducted only when the sludge condition has been met.
- 5.5.8 **Empty Chemical Containers** Empty tin cans must be pressed/flattened in the waste generator site prior to collection for transport to designated disposal site.
- 5.6 **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.

## 6.0 Collection and Storage of Hazardous Waste

All hazardous waste generators shall observe the general rules below:

- 6.1 Determine a suitable place for the storage of hazardous materials that meets safety requirements and which prevents any harm to the public. Minimum separating distance between incompatible chemicals must be observed.
- 6.2 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 waste.
- 6.3 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.
- 6.4 Set up a time schedule for the collection of hazardous waste so as not to be left for a long period in storage containers.
- 6.5 In case of mobile containers, the hazardous waste generating party shall not place such a container in any public area and shall not damage the environment.

	Organization Unit:	Waste Management Department	الوحدة التنظيمية :	
حکوم تربخي	Form sheet title:	Hazardous Waste Disposal	اسم النموذج :	بالدياة دباي
GOVERNMENT OF DUBAI	Doc Ref.:	DM-WMD-WTS-TG-8	رقم النموذج :	

## 7 **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 not cause any form of pollution either on ground, water or air environment.

#### 8 Disposal Fees:

8.1 The "*Schedule of Fees and Charges*" in *Table 2* were determined as per <u>Executive</u> <u>Council Resolution No. 58 of 2017</u> Approving the Fees and Fines for Waste Disposal in the Emirate of Dubai.

8.2

Disposal fees for hazardous waste disposal are computed based on the type and nature of waste, quantity, preferred treatment or disposal means as summarized in *Table 2* below.

Waste Type	Fees in AED
Solid difficult waste	200/ton
Wastewater (not complied to any of the maximum allowable limit for discharge to sewerage system)	200 to 500/ton
Hazardous waste <i>(except wastewater)</i>	200 to 500/ton
Hazardous wastes in drums <i>(except wastewater) (200liter cap)</i>	700/ton
Flammables and materials which require special treatment	1,000/ton
Contaminated materials	200 ton
Empty chemical containers	400/ton
Empty contaminated bags	100/100kg
Firework, firecrackers, and other explosives not subject to other legislation	200 ton
Medical waste (Private Sector)	6/kg
Medical waste (Government Sector)	3/kg

## Table 2 – Fees of Disposal

8.3 Note: ton means metric ton = 1,000 kg, and any fraction thereof will be counted as 1 ton or 1m<sup>3</sup> for the purpose of computing fees The applicant will be informed through E-mail and SMS once the application is approved in Request for Permit of Waste Disposal (Hazardous/Trade Waste/Unwanted Materials) (WDS) system. The *"Permit of Disposal/Destruction of Hazardous Waste"* can be obtained by logging in WDS account and click *"Download Permit"*. The payment (amount in AED) will be paid by an Approved transporter with valid NAFITH (smart gate) and RASID (GPS) account in DM designated disposal sites during disposal.

	Organization Unit:	Waste Management Department	الوحدة التنظيمية :	
کوم ترانی ک	Form sheet title:	Hazardous Waste Disposal	اسم النموذج :	بالدياة دباي
GOVERNMENT OF DUBAI	Doc Ref.:	DM-WMD-WTS-TG-8	رقم النموذج :	

#### 8.4

AED 250 fee will be paid by the owner of waste who wishes to obtain a "Destruction Certificate" as a proof that the waste has been accepted and disposed of at any DM controlled waste treatment site. The waste generator/applicant must log-in using **Google Chrome** at <u>waste.dm.gov.ae</u> as business with your UAE pass/DMUM ID. Click Apply for Service - "Request for Permit of Wastes Disposal (Hazardous/Trade Wastes/Unwanted Materials", Choose "**Disposal Certificate**" in the request Type, select for WDS permit on the drop down list, Get details and pay the corresponding fee online.

## 9 Transport and Disposal of Approved Waste:

- 9.1 The HWG or applicant shall contact the DM disposal facility to arrange the waste disposal schedule and any other arrangements. Alternatively, the HWG or applicant has the option to instead contact any of the approved transporters with valid RASID (GPS) and NAFITH (smart gate) account to schedule the disposal on behalf of the HWG/applicant. Fees to be deducted on the NAFITH account of the transporters in the designated disposal sites.
- 9.2 All permitted waste shall be disposed of only at the designated site within three (3) months from the date of approval or as per the schedule set by the disposal facility. Otherwise, the permit is considered invalid.
- 9.3 Delivery of the permitted waste to the disposal site shall be made only through an approved vehicle and transporter that holds a valid permit in accordance with the requirements of Dubai Municipality.
- 9.4 All HWG or applicants must ensure that a copy of the Permit of Waste Disposal (Hazardous/Trade Waste/Unwanted Materials) (WDS Permit) is provided to the designated transporter when delivering the permitted waste to the site. A copy of the approval permit will serve as the consignment document and, without it, the transporter carrying the waste will be prohibited to transport the waste to the designated disposal sites.

For further information please visit <u>www.dm.gov.ae</u> or contact Waste Treatment Section Tel.: (04) 8834433 / (04) 6066044 / (04) 6066817

#### **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;
- 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;

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.

- EIAC- Emirates International Accreditation Centre (previously Dubai Accreditation Centre) – 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 affect the environment such as toxic explosive, flammable or ionized radiation materials.
- JAHWTF/JADS The Jebel Ali Hazardous Waste Treatment Facility / Jebel Ali Difficult Waste Landfill operated/managed by the Waste Management Department.

	Organization Unit:	Waste Management Department	الوحدة التنظيمية :	
حکوم تکن <u>جت</u>	Form sheet title:	Hazardous Waste Disposal	اسم النموذج :	بلدية دبى
OVERNMENT OF DUBAI	Doc Ref.:	DM-WMD-WTS-TG-8	رقم النموذج :	

- **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.
- **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, Hybrid and Electric Vehicle Battery (EVB) such as Li-ion and NiMH & other EVB, automobiles, WEEE, and many other similar discarded used products.
- **Sludge** Means a solid waste 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.
- **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.
- **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 Waste Management Department.
- **Difficult Waste** is the non-hazardous material which requires special handling to avoid any unacceptable annoyance or environmental impact.
- **Electric-Vehicle battery** (EVB) is a battery used to power the electric motors of a battery electric vehicle (BEV) or hybrid electric vehicle (HEV).
- **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 as hazardous waste:
  - (a) Medical wastes,
  - (b) WEEE or E-Waste, EVB (Li-ion/NiMH) due to its harmful components,

	Organization Unit:	Waste Management Department	الوحدة التنظيمية :	
حكومة لزلجت	Form sheet title:	Hazardous Waste Disposal	اسم النموذج :	بالدياة دباي
VERNMENT OF DUBAI	Doc Ref.:	DM-WMD-WTS-TG-8	رقم النموذج :	

- (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.
- **Trade Wastewater** is a non-hazardous wastewater generated and discharged from industrial operations or commercial other than domestic wastewater.
- **Unwanted material** is any material/goods declared by their owner to be unwanted and require disposal, or of which a decision for their destruction/disposal is issued by a competent authority, or that proper disposal requires a special care.
- **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.
- **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** Request for Permit of Waste Disposal (Hazardous/Trade Waste/Unwanted Materials) an online permitting system for disposal of all types of waste/wastewater (except domestic waste) generated in the Emirate of Dubai.
- **WEEE** Refers to the discarded obsolete or broken waste electrical and electronics equipment. 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**.

	Organization Unit:	Waste Management Department	الوحدة التنظيمية :	
GOVERNMENT OF DUBAI	Form sheet title:	Hazardous Waste Disposal	اسم النموذج :	بالدياة دباي
	Doc Ref.:	DM-WMD-WTS-TG-8	رقم النموذج :	

#### **Online Registration & Request for Permit of Waste Disposal Procedures**



	Organization Unit:	Waste Management Department	الوحدة التنظيمية :	
ځلوم ټر <u>نې</u>	Form sheet title:	Hazardous Waste Disposal	اسم النموذج :	بالدياة دباي
GOVERNMENT OF DUBAI	Doc Ref.:	DM-WMD-WTS-TG-8	رقم النموذج :	DUBAI MUNICIPALITY

## Dubai Wastewater Discharge Limits

		*Maximum Allow		
INDICATORS		Sewerage	Land as for Irrigation	
Physico-Chemical	Units	System	Drip	Spray
Biochemical Oxygen Demand	mg/l	1,000	20	10
Chemical Oxygen Demand	mg/l	3,000	100	50
Chlorides	mg/l		500	350
Chlorine – residual	mg/l	10	Not less than	
Overides es CN	100 cr //	1	30 min co	0.05
Cyanides as CN	mg/l	30	0.05	0.05
Detergents Fluorides	mg/l		4	1
	mg/l	40	1 5	1
Nitrogen, ammoniacal	mg/l	40		1
Nitrogen, organic (Kjeldhal)	mg/l		10	5
Nitrogen, total	mg/l	450	50	30
Oil & Grease – Emulsified	mg/l	150		
Oil & Grease – Free oil	mg/l	50	5	5
pH (range)	units	6 – 10	6.0 - 8.0	6.0 - 8.0
Pesticides, non-chlorinated	mg/l	5		
Phenols	mg/l	50	0.1	0.1
Phosphorous (P)	mg/l	30	20	20
Sulfates, total	mg/l	500	200	200
Sulfides as S	mg/l	10	0.05	0.05
Surfactants	mg/l			
Suspended Solids (SS)	mg/l	500	50	10
Temperature	°C	45 or > 5 of ambien	t	
Total Dissolved Solids (TDS)	mg/l	3,000	1,500	1,000
Metals				
Total Metals	mg/l	10		
Aluminum (AI)	mg/l		2	2
Arsenic (As)	mg/l	0.50	0.05	0.05
Barium (Ba)	mg/l		1	1
Beryllium (Be)	mg/l		0.1	0.1
Boron (B)	mg/l	2.0	2.0	2.0
Cadmium (Cd)	mg/l	0.3	0.01	0.01
Chromium (Cr)	mg/l	1.0	0.1	0.1
Cobalt	mg/l		0.1	0.1
Copper (Cu)	mg/l	1.0	0.2	0.2
Iron (Fe)	mg/l		2.0	2.0
Lead (Pb)	mg/l	1.0	0.5	0.5
Magnesium (mg)	mg/l		100	100
Manganese (Mn)	mg/l	1.0	0.2	0.2
Mercury (Hg)	mg/l	0.01	0.001	0.001
Molybdenum (Mo)	mg/l	0.01	0.01	0.01
Nickel (Ni)	mg/l	1.0	0.2	0.2
Selenium (Se)	mg/l	1.0	0.02	0.02
Silver (Ag)	mg/l	1.0	0.02	0.02
Sodium (Na)	mg/l	1.0	500	200
Zinc (Zn)	mg/l	2.0	0.5	0.2
Bacteriological	nign	2.0	0.0	0.2
Fecal Coliforms MPN/100 I	ml	500	20	+
		500	20	

*Ref: Environmental Standards and Allowable Limits of Pollutants on Land, Water, and Air Environment, May 2003* 

	Organization Unit: Waste Management Department		الوحدة التنظيمية :		
GOVERNMENT OF DUBAI	Form sheet title:	Hazardous Waste Disposal	اسم النموذج :	بلدية ديه	
	Doc Ref.:	DM-WMD-WTS-TG-8	رقم النموذج :		

## Classification of Hazardous Wastes in the Emirate of Dubai

Class Code	Waste Type	Sub-class Code	Sub-class Waste
W1	Medical Waste and Infectious Waste	1.1	Human-based biomedical or clinical wastes
		1.2	Biomedical waste from veterinary clinics
		1.3	Infected Dead Animals
		2.1	2.1.1 (Wastewater) Inorganic source - others
W2	Wastewater		2.1.2 (Wastewater) Inorganic source - Vehicle Maintenance Activity
		2.2	2.2.1 (Wastewater) Organic source - others
			2.2.2 (Wastewater) Organic source - Ink and Painting Activity
			2.2.3 (Wastewater) Organic source - Food Industry
		2.3	(Wastewater) Oily source
		3.1	(Paint, Resin, Ink, Latex, etc.) - Expired (unused) product - Solid
	Datas Dasta Inf. Lata	3.2	(Paint, Resin, Ink, Latex, etc.) - Expired (unused) product - liquid
W3	Paint, Resin, Ink, Latex, etc.	3.3	(Paint, Resin, Ink, Latex, etc.) - Residues from use or process - solid
		3.4	(Paint, Resin, Ink, Latex, etc.) Residues from use or process - liquid
		4.1	(Contaminated Materials) - Contaminated Empty Chemical Containers
		4.2	(Contaminated Materials) - Used oil filters
W4	Contaminated Materials	4.3	(Contaminated Materials) - Contaminated Used Rags
		4.4	(Contaminated Materials) - Contaminated Soil
		4.6	(Contaminated Materials) - Empty Pesticide Containers
		4.5	(Contaminated Materials) - Other contaminated materials
		5.1	(Organic Waste ) - Waste treatment residues Solids
	Organic Waste	5.2	(Organic chemical wastes) Expired product
W5		5.3	(Organic chemical wastes) Process refuse
		5.4	(Organic Waste ) - (STP sludge) Digested/treated
		5.5	(Organic Waste ) - Pump pit/holding tank cleaning
	Inorganic Waste	6.1	(Inorganic Waste ) - (Waste treatment residues) Solids
14/5		6.2	(Inorganic chemical wastes) Expired product
W6		6.3	(Inorganic chemical wastes) Spent catalyst
		6.4	(Inorganic chemical wastes) Process refuse
	Grits waste	7.1	(Grits waste) - Garnet (blasting activity)
W7		7.2	(Grits waste) - Waterjet cutting abrasives
		7.3	(Grits waste) - Grits of iron/other metal
		7.4	(Grits waste) - Copper grits
		7.5	(Grits waste) - Other abrasive media (non-metallic)
W8	Pharmaceutical Waste	8.1	(Pharmaceutical Waste ) - Expired solids and unsafe medicines, drugs, pharmaceuticals

	Org
حكومة لزلجي	For
GOVERNMENT OF DUBAI	Do

Organization Unit:	Waste Management Department	الوحدة التنظيمية :	
Form sheet title:	Hazardous Waste Disposal	اسم النموذج :	بلدية دبى
Doc Ref.:	DM-WMD-WTS-TG-8	رقم النموذج :	<b>a</b>

Class Code	Waste Type	Sub-class Code	Sub-class Waste
W8	Pharmaceutical Waste	8.2	(Pharmaceutical Waste ) - Expired liquids and unsafe medicines, drugs, pharmaceuticals
		8.3	(Pharmaceutical Waste ) - Wastes from manufacturing or formulation
		8.4	(Pharmaceutical Waste ) - Controlled substance/ anti- neoplastics
W9	Pesticides & Biocide	9.1	(Pesticides & Biocide ) - Solids
		9.2	(Pesticides & Biocide ) - Aqueous
		10.1	(Organic Solvent ) - Spent solvent in liquid form
		10.2	(Organic Solvent ) - Solvent mixed with solids
W10	Organic Solvent	10.3	(Organic Solvent ) - Expired (unused) Solvent
		10.4	(Organic Solvent ) - Used Percholorethylene (Dry Cleaning Waste)
W11	Inert Waste	11.1	(Inert Waste) - Asbestos wastes, Friable
VVII	mert waste	11.2	(Inert Waste) - Asbestos wastes, Non-Friable
W12	Metal Treatment Waste	12.1	(Metal treatment wastes ) Sludge
VVIZ	Metal Treatment Waste	12.2	(Metal treatment wastes ) Aqueous
14/1 2	Acid	13.1	(Acid wastes) Solids
W13		13.2	(Acid wastes) Aqueous
14/1 /	Alkali	14.1	(Alkaline wastes) Solids
W14		14.2	(Alkaline wastes) Aqueous
	Waste Chemical	15.1	(Waste Chemicals) School Laboratory Chemicals
W15		15.2	(Waste Chemicals) Expired unused product
		16.1	(Oily Waste) - Waste lube oil and similar oil (liquid)
W16	Oily Waste	16.2	(Oily Waste) - Oil sludge
		16.3	(Oily Waste) - Other oil-contaminated wastes
	Explosive not subject to other legislations and reactive wastes	17.1	(Explosive not subject to other legislations and reactive wastes) - Substance that gives off heat when explode
W17		17.2	(Explosive not subject to other legislations and reactive wastes) - Substance that emits toxic fumes when explode
VV17		17.3	(Explosive not subject to other legislations and reactive wastes) - Substance that react violently with water
		17.4	(Explosive not subject to other legislations and reactive wastes) - Flares and other safety device with explosives
	E-Wastes and other special wastes	18.1	(Waste electrical and electronic equipment (WEEE) electronic gadgets, computers, and other electronic gadgets
		18.2	(Spent batteries) Spent lead-acid batteries, whole or crushed
W18		18.3	(Spent batteries) Alkaline and other types such as Li-ion/NiMH
		18.4	Pressurized gas cylinders/aerosols
		18.5	Mercury containing wastes (thermometers, switches, fluorescent lighting, etc.)