



حكومة أبوظبي
GOVERNMENT OF ABU DHABI

WASTE CLASSIFICATION TECHNICAL GUIDELINE

WM-1205



WASTE CLASSIFICATION TECHNICAL GUIDELINE



EAD-EQ-PR-TGD-01

This publication is available for download in pdf format from "Resources" at www.ead.ae

© ENVIRONMENT AGENCY - ABU DHABI (EAD) 2016

All rights reserved. No part of this document may be reproduced in any material form (including photocopying or storing in any medium by electronic means) without the written permission of the copyright holders. Application for the copyright holders' written permission to reproduce any part of this document should be addressed to the publisher, in accordance with the international copyright Act 1956 and the UAE federal law no. (7) of 2002, concerning copyrights and neighboring rights, any person acting in contravention of this will be liable to criminal prosecution and civil claims for damages.

For inquiries or feedback, contact
ENVIRONMENT AGENCY - ABU DHABI
Tel.: +971 2 4454777
E-mail us: customerservice@ead.ae
www.ead.ae

TABLE OF CONTENTS

I	Introduction	2
1.1	How to Use the Waste Classification Technical Guideline?	2
1.2	Who Should Use the Waste Classification Technical Guideline?	2
1.3	The Next Steps	2
2	Is the Material I Have Waste or Not?	4
2.1	If a Material is Waste When Does it Cease to be Waste?	6
3	Classifying Waste	8
3.1	Non-hazardous Solid Waste	8
3.1.1	Putrescible Solid Waste	8
3.1.2	Non-recyclable and Non-putrescible Solid Waste	9
3.1.3	Recyclable and Non-putrescible Solid Waste	9
3.2	Non-hazardous Liquid Waste	12
3.3	Hazardous Waste	13
3.3.1	Pre-classified as Hazardous Waste	13
3.3.2	Waste Possessing Hazardous Characteristics	15
3.3.3	Determining a Waste's Classification Using Chemical Assessment	16
3.3.4	Measurable Properties of Waste	16
3.3.5	Test Methods for Determining SCC and TCLP	16
4	Waste Classification Flow Chart	18
5	Glossary	19
6	References	20
	Annex I	20

I. INTRODUCTION

It is important that waste is classified accurately at the point of generation, whether this is before or after treatment, or at the point of collection to ensure the correct transport, storage, treatment and disposal options are selected. By classifying waste accurately we will:

1. Ensure the waste is handled appropriately and receives the correct treatment to protect human health and the environment
2. Maximize the potential to divert waste from landfill through reuse, recycling, composting or energy recovery
3. Optimize the planning for new facilities for handling, storage, treatment and disposal of waste
4. Allocate appropriate tariffs to create incentives to drive the waste hierarchy (reduce, reuse, segregate, sort, recycle, recover energy, treat and finally dispose)

I.1 How to Use the Waste Classification Technical Guideline?

This technical guideline explains how to classify waste which will then help ensure that the correct transport, storage, treatment and disposal options are selected. There are two basic steps for classifying waste, which are then explained in more detail within this document:

Step 1: Determine if the material is waste or not.

Step 2: Classify the waste.

I.2 Who Should Use the Waste Classification Technical Guideline?

This technical guideline should be used by all parties (sectors) involved in waste management as well as by waste generators/producers in the Emirate of Abu Dhabi. The parties involved in waste management are defined in Abu Dhabi Law No. (21) of 2005 for Waste Management in the Emirate of Abu Dhabi and include: The

competent authority; concerned parties; waste generators; storage, treatment and disposal facilities; and environmental service providers. All parties should follow this technical guideline.

This technical guideline has scientifically rationalised the approach of hazardous waste classification as defined in the Cabinet Resolution.

No. (37) of 2001 regarding the regulations of the Federal Law No. (24) of 1999: Regulation for Hazardous Materials, Hazardous Waste and Medical Waste.

I.3 The Next Steps

Following the classification of waste, waste generators should refer to the waste policy (EAD-EQ-PR-P-05: Waste Reuse, Recycling, Resource Recovery, Treatment and Disposal Policy) issued by Environment Agency - Abu Dhabi (EAD) and the technical guideline (CWM TG # 6: Requirements and Procedures for Registration of Waste Skips and Containers) issued by Tadweer (Center of Waste Management - Abu Dhabi (CWM)) to determine the correct transport, storage, treatment and disposal options for any particular type of waste.



2. IS THE MATERIAL I HAVE WASTE OR NOT?

The following decision making flow chart should be used to determine whether a material, substance or object is waste or not:



Q.1: Is the material produced with the intention that it will be used or marketed or is it being re-used for the same purpose for which it was originally conceived?

If the answer to either of these questions is “yes”, then it is likely that the material is not waste.

Q.2a: Is the material a production residue?

Q.2b: Does the material meet all of the steps necessary to be classified as a by-product?

Production residues are likely to be waste. However, production residues can be classified as by-products if specified conditions are met. If a material is a by-product, it is not waste. If the answer “yes” can be given to all of the following four questions, this will help indicate that a residue is a by-product and not waste:

1. Is further use of the material not just a possibility, but a certainty?
2. Can it be used directly, without any further processing prior to its use?
3. Has it been produced as an integral part of a production process?
4. Is its further use lawful in the sense that:
 - It fulfills all relevant product, environmental and health requirements for the specific use to be made of it; and
 - It will not have an adverse impact on the environment or human health?

The answers to the following questions are likely to be helpful in deciding whether the four basic conditions for classification as a by-product have been met:

- Is the substance or object fully suitable for the proposed use?
- Can it be used without any special precautions being taken to ensure protection environment or human health?
- Is there a genuine market for it?
- Is it free of any contaminants that could have an adverse effect on its use?
- Can it be used without any additional risk to the environment or human health, when compared with an equivalent raw material?

Q.3: Does the material need to be disposed of?

A material might have to be disposed of because of a legal requirement (e.g. mercury or some animal by-products). It might also have to be disposed of because of its condition or its continued use might be dangerous (e.g. some out-of-date medicines). If so, it is waste.

Q.4: Has the material been transferred to a disposal or recovery operation?

If a material is sent on for disposal or recovery, which will indicate that it is waste.

It is sometimes difficult to tell what a “recovery operation” is and what the normal use of a product is. For example, “use as a fuel” could be either depending on the circumstances. However, if a particular operation is generally accepted as being a common way of recovering waste, that may indicate that it is a recovery operation.

A residue is a material, which results from a production process which is not, in itself, sought for a subsequent use.

Q.5: Does the material have a low economic value?

If the material has a low or negative economic value, this points to it being waste since it is a burden on the producer or holder who then may have an incentive to get rid of it.

It does not automatically follow that a material with a good economic value to the producer is not a waste.

Q.6: Is the material hazardous or polluting?

Wastes can be quite harmless in themselves, and they may be processed without harmful impacts on the environment. On the other hand, some non-waste products are polluting or hazardous (e.g. poisonous chemicals). So, this question of harm is not always relevant to the issue of whether something is waste.

The question does become relevant where the material has become or is contaminated, is leftover, unwanted, or a burden on its holder. It is also relevant when a material has become contaminated with something that presents a risk. In these circumstances, the hazardous or polluting nature of the material can indicate that it is waste.

Q.7: Is the material still suitable for its use i.e. suitable to be used for the same purpose for which it was conceived?

Materials that can no longer be used for their original purpose (e.g. because they are out-of-date) or have become damaged or unsuitable for use are likely to be waste.

Q.8: Is the material being passed on as second hand good?

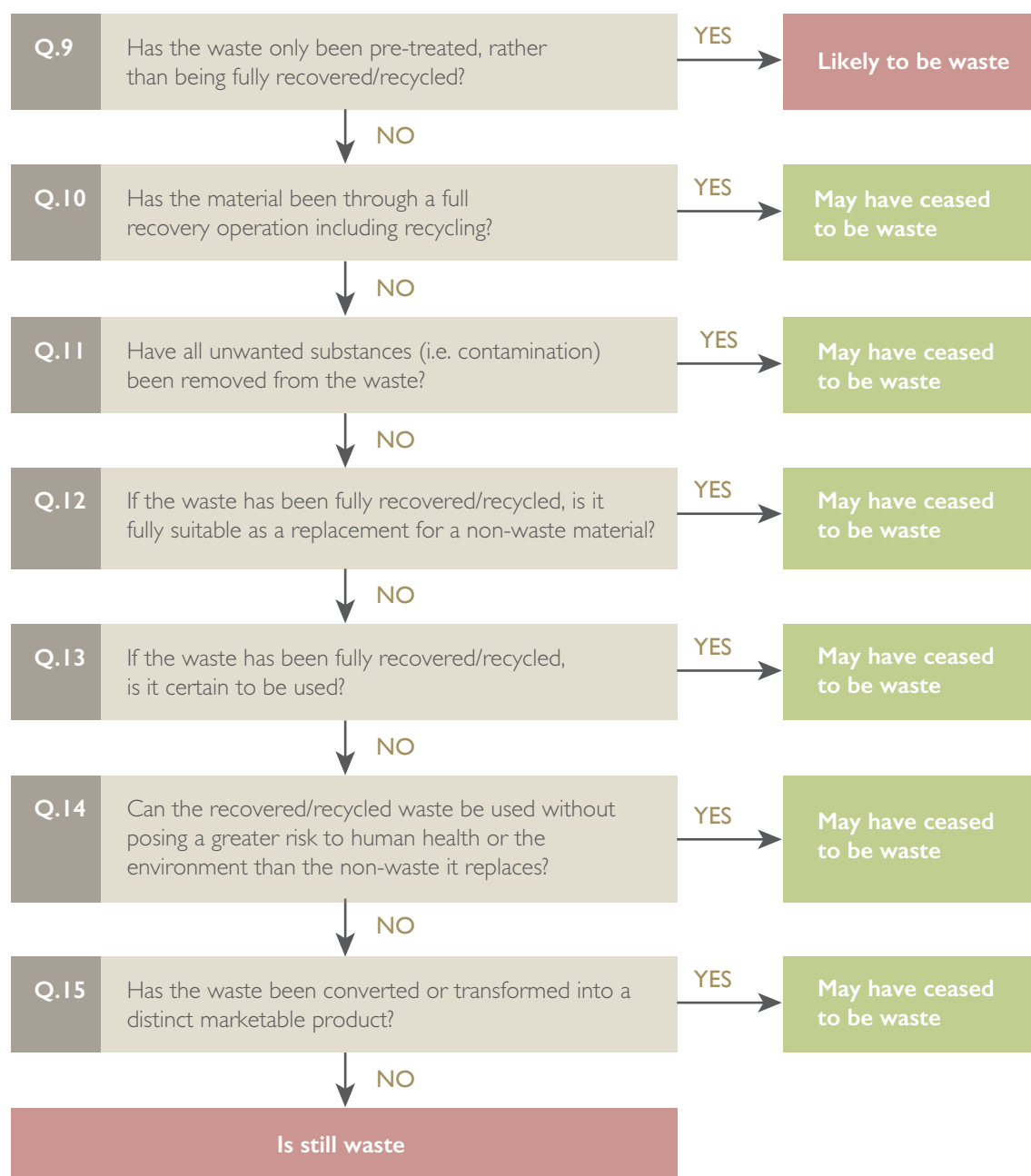
A material may be unwanted by one owner, but it is passed on to be used for its original purpose without needing any processing or treatment. If so, it is generally not waste.

2.1 If a Material is Waste When Does it Cease to be Waste?

Once a material has been discarded and is waste, something usually needs to be done to it for it to cease to be waste. This can range from something relatively minor to quite extensive processing, comprising one or more recovery operations. It may be necessary for the waste to undergo a series of recovery operations before it ceases to be waste.

When does a material cease to be waste?

The following decision making flow chart should be used to help determine whether waste has ceased to be waste:



Q.9: Has the waste only been pre-treated, rather than being fully recovered/recycled?

If the waste has gone through one treatment, but needs further treatment before being ready for re-use, this will indicate that it has not ceased to be waste. Sorting and size reduction often fall into this category.

Q.10: Has the material been through a full recovery operation including recycling?

If the waste has been through a full recovery operation including recycling, then it may cease to be waste.

Q.11: Have all unwanted substances (i.e. contamination) been removed from the waste?

Often, waste is contaminated because of its origins or previous use. It will not cease to be waste until the contamination is removed – either so that it can be used again for its original purpose or made into a new product.

Q.12: If the waste has been fully recovered/recycled, is it fully suitable as a replacement for a non-waste material?

To cease to be waste, the material that results from the recovery or recycling of the waste must be fully suitable as a replacement for the non-waste material for which it is substituting.

Q.13: If the waste has been fully recovered/recycled, is it certain to be used?

Only if there is a genuine market for the recovered or recycled material and its future use is certain, is it likely to cease to be waste. Otherwise it will remain waste.

Q.14: Can the recovered/recycled waste be used without posing a greater risk to human health or the environment, than the non-waste it replaces?

The recovered or recycled material will not cease to be waste, if it poses greater risk to the environment or human health, than the non-waste material it replaces.

Q.15: Has the waste been converted or transformed into a distinct marketable product?

If the waste has been converted or transformed to the extent that it has become a new product in its own right, it may no longer be waste. The new product needs to be distinct from the original waste and minor changes to its composition are unlikely to be sufficient.



3. CLASSIFYING WASTE

Once a material has been determined to be waste, it must be accurately classified to ensure the waste is appropriately transported, stored, treated and disposed of. Within this technical guideline, the waste is categorised into the three waste classes below which are then explained in more detail:

1. Non-hazardous solid waste
 - a. Putrescible solid waste
 - b. Non-recyclable and non-putrescible solid waste
 - c. Recyclable and non-putrescible solid waste
2. Non-hazardous liquid waste
3. Hazardous waste (liquid and solid)

3.1 Non-hazardous Solid Waste

3.1.1 Putrescible Solid Waste

The following wastes are classified as non-hazardous putrescible (something that could become rotten) solid waste, which can be either recyclable or non-recyclable:

- Household waste that contains putrescible organics
- Waste from litter bins that contains putrescible organics
- Disposable nappies, incontinence pads or sanitary napkins
- Animal waste from slaughterhouse except for infected animals and animal waste from infected animals, which shall be considered as veterinary - hazardous waste
- Any mixture of the wastes referred to above



3.1.2 Non-recyclable and Non-putrescible Solid Waste

The following wastes classified as non-hazardous, non-recyclable and non-putrescible solid waste:

- Household waste from municipal clean-up, that does not contain food waste and recyclables
- Waste collected by or on behalf of Tadweer (Center of Waste Management - Abu Dhabi) from street sweepings, that do not contain food waste and recyclables
- Grit and screenings from potable water and water reticulation plants, that have been dewatered so that they do not contain free liquids
- Fully cured and set thermosetting polymers and fiber-reinforcing resins
- Any mixture of the wastes referred to above

3.1.3 Recyclable and Non-putrescible Solid Waste

The following wastes are classified as non-hazardous recyclable and non-putrescible solid waste:

- Glass, plasterboard, ceramics, bricks, concrete
- Metal
- Paper or cardboard
- Plastic, rubber
- Textiles
- Wood waste
- Used/broken furniture (e.g. bulky waste)
- Construction and demolition waste
- Tyres
- End of life vehicles (ELV) and machinery after removing the hazardous waste components
- Waste electronic and electrical equipment (WEEE) after removing the hazardous waste components
- Virgin excavated natural material except for naturally occurring radioactive materials (NORM)
- Asphalt waste including asphalt resulting from road construction and waterproofing works
- Cured concrete waste from a batch plant
- Foam
- Styrofoam
- Perlite



Wood Waste

Wood waste means sawdust, timber offcuts, wooden crates, wooden packaging, wooden pallets, wood shavings and similar materials, and includes any mixture of those materials, but does not include wood treated with chemicals, such as copper chrome arsenate, high temperature creosote, pigmented emulsified creosote, and light organic solvent preservative.

Virgin Excavated Natural Material

Virgin excavated natural material means natural material (such as clay, gravel, sand, soil or rock fines):

- That has been excavated or quarried from areas that are not contaminated with manufactured chemicals, or with process residues, as a result of industrial, commercial, mining or agricultural activities
- That does not contain naturally occurring radioactive materials

Construction and Demolition Waste

Construction and demolition waste means unsegregated material (other than material containing asbestos waste) that result from:

- The demolition, erection, construction, refurbishment or alteration of buildings other than:
 - Chemical works
 - Mineral processing works
 - Container reconditioning works
 - Waste treatment facilities
- The construction, replacement, repair or alteration of infrastructure development such as roads, tunnels, sewage, water, electricity, telecommunications and airports, and includes materials such as bricks, concrete, paper, plastics, glass and metal, and timber including unsegregated timber, but not including timber treated with chemicals such as copper chrome arsenate, high temperature creosote, pigmented emulsified creosote and light organic solvent preservative and does not include excavated soil (for example, soil excavated to level off a site prior to construction or to enable foundations to be laid or infrastructure to be constructed)





3.2 Non-hazardous Liquid Waste

Non-hazardous liquid waste, that includes sewage or wastewater which contains contaminants less than the concentrations listed in the Annex 1 of this technical guideline.

Also, liquid waste is any waste that:

- Has an angle of repose of less than 5 degrees above horizontal
- Becomes free flowing at or below temperatures of 60 degrees Celsius or when it is transported
- Is generally not capable of being picked up with a spade or shovel



3.3 Hazardous Waste

Hazardous waste includes any waste which, through toxicity, carcinogenicity, mutagenicity, teratogenicity, flammability, explosive nature, chemical reactivity, corrosive nature, infectiousness or other biologically damaging properties, which may present danger to the life or health of living organisms when released into the environment.

A detailed classification of hazardous waste can be found in Table 1.2 of the Cabinet Resolution No. (37)

of 2001 regarding the regulations of the Federal Law No. (24) of 1999: Regulation for Hazardous Materials, Hazardous Waste and Medical Waste. This should be used in conjunction with Annex I of this technical guideline, which defines the concentration of contaminants in the waste to be classified as a hazardous waste.

3.3.1 Pre-classified as Hazardous Waste

Some commonly generated wastes have been pre-classified as hazardous waste. Wastes that have been classified by the EAD cannot be reclassified by any other party in the Emirate of Abu Dhabi.

The following wastes have been pre-classified by the EAD as hazardous waste:

- Medical / clinical waste including, but not limited to veterinary waste and dead animals which have died of an infectious disease
- Asbestos waste
- Any material containing asbestos
- Radioactive waste
- Containers, having previously contained a substance of classes listed in Annex I of this technical guideline, from which residues have not been removed
- Coal tar or coal tar pitch waste (being the tarry residue from the heating, processing or burning of coal or coke) comprising of more than 1% (by weight) of coal tar or coal tar pitch waste
- Lead paint waste
- Nickel - cadmium batteries
- Lead - acid batteries from vehicles
- Used / waste engine oil
- Used oil filters (mechanically crushed), rags and oil-absorbent materials that contain petroleum hydrocarbons
- Residues of waste oils and solvent paints, varnishes and paint strippers in containers
- Used pesticides containers / cans including pesticide residues or waste
- Residual or waste bleach and other cleaning agents
- Used florescent tubes and energy saving light bulbs
- Used aerosol cans
- Hazardous components of end of life vehicles
- Hazardous components of waste electronic and electrical equipment
- Any mixture of the wastes referred to above

EAD may pre-classify additional wastes as hazardous waste from time to time by a notice published officially.

Medical / Clinical Waste

Medical / clinical waste are hazardous waste resulting from medical, nursing, dental, pharmaceutical including expired medicines or other related clinical activity, being waste that has the potential to cause injury, infection or offence. A full classification for medical waste can be found in Table 2.1 of the Cabinet Resolution No. (37) of 2001 regarding the regulations of the Federal Law No. (24) of 1999: Regulation for Hazardous Materials, Hazardous Waste and Medical Waste. The bio-hazardous waste shall be considered as medical waste.

Veterinary waste should be treated as medical waste.

Individual dead animals, which have died of an infectious disease should be disposed of as medical waste following the process outlines in Regulation for Handling Hazardous Materials, Hazardous Waste and Medical Waste.

Dead animals which have died as part of an epidemic / outbreak of an infectious disease e.g. foot and mouth or bird flu, should be incinerated.

Asbestos Waste

Asbestos waste means any waste that contains asbestos. Asbestos means the fibrous form of those mineral silicates that belong to the serpentine or amphibole groups of rock-forming minerals, including actinolite, amosite (brown asbestos), anthophyllite, chrysotile (white asbestos), crocidolite (blue asbestos) and tremolite (AD EHSMS CoP # 1.1: Management of Asbestos Containing Materials and CWM TG # 08: Management of Asbestos and Asbestos Containing Material in the Emirate of Abu Dhabi).

Radioactive Waste

Radioactive wastes are wastes that contain radioactive material. Radioactive wastes are usually by-products of nuclear power generation and other applications of nuclear fission or nuclear technology, such as research, nondestructive testing, thickness and level meter, nuclear medicine, etc. Radioactivity naturally decays over time, so radioactive waste has to be isolated and confined in appropriate disposal facilities for a sufficient period of time until it no longer poses a hazard.

Hazardous Components of End of Life Vehicles

End of life vehicles are motor vehicles, that are categorized as waste. Their components and materials are also classed as waste. End of life vehicles contain multiple type of materials including metal, glass, plastic, fabric, hazardous waste like oil filter, gaskets containing asbestos, etc. There are two broad categories of end of life vehicles:

- End of life vehicles which are quite new cars resulting from accident write-offs
- End of life vehicles which have reached the end of their life technically or economically

Hazardous Components of Waste Electronic and Electrical Equipment (WEEE)

Waste electronic or electrical equipment covers appliances such as air conditioners, refrigerators, televisions, washing machines, computers and monitors from home or work. This equipment should be taken to a dedicated facility to refurbish and resell if possible or to be dismantled and the component parts recycled. This process should also include gas recovery for air conditioning and refrigerators. Some WEEE is also classed as hazardous waste such as most computer monitors and televisions, fridges and fluorescent lighting, and should be treated according to the Regulation for Handling Hazardous Materials, Hazardous Waste and Medical Waste.

3.3.2 Waste Possessing Hazardous Characteristics

Waste must be classified as hazardous waste if it is a dangerous good under any of the following characteristics:

- 1 Explosives
- 2 Gases (compressed, liquefied or dissolved under pressure)
- 3.1 Flammable solids (excluding garden waste, natural organic fibrous material and wood waste and all physical forms of carbon such as activated carbon and graphite)
- 3.2 Substances liable to spontaneous combustion (excluding garden waste, natural organic fibrous material and wood waste and all physical forms of carbon such as activated carbon and graphite)
- 3.3 Substances which in contact with water emit flammable gases
- 4 Oxidizing agents and organic peroxides
- 5 Toxic substances
- 6 Corrosive substances
- 7 Radioactive



3.3.3 Determining a Waste's Classification Using Chemical Assessment

Waste generators should chemically assess their waste to determine its classification where:

- The waste is not sewage / domestic liquid waste or a waste pre-classified by the EAD or a waste possessing hazardous characteristics
- The composition of the waste is not known

The chemical assessment process is based around the waste's potential to release chemical contaminants into the environment through contact with liquids, mainly water, which leads to the production of leachate.

Where waste generators are unsure of the appropriate sampling or analytical methods for a particular waste, they are strongly encouraged to seek expert help, either from a laboratory that specialises in waste analysis or someone specialising in waste management issues, or both. Chemical analysis shall be undertaken by a laboratory approved by Abu Dhabi Quality and Conformity Council (ADQCC) or accredited with Emirates Standardisation and Metrology Authority (ESMA).

Where a waste generator does not wish to undertake this chemical assessment, the waste must be managed as if it is hazardous waste, which cannot be disposed of and must be treated.

3.3.4 Measurable Properties of Waste

The two measurable properties of chemical contaminants used to classify waste are:

- The specific contaminant concentration (SCC) of any chemical contaminant in the waste, expressed as milligrams per kilogram (mg/kg)

- The leachable concentration of any chemical contaminant using the toxicity characteristics leaching procedure (TCLP), expressed as milligrams per liter (mg/l)

The specific contaminant concentration and the leachable concentrations for various pollutants are listed in Annex I of this technical guideline. In case a specific contaminant is found to exceed the concentration limit given in Annex I, it is clearly a hazardous waste. Any hazardous waste that has been treated, the final treated product should be tested for TCLP and the levels should be less than those given in Annex I to be disposed of safely in the waste landfill.

3.3.5 Test Methods for Determining SCC and TCLP

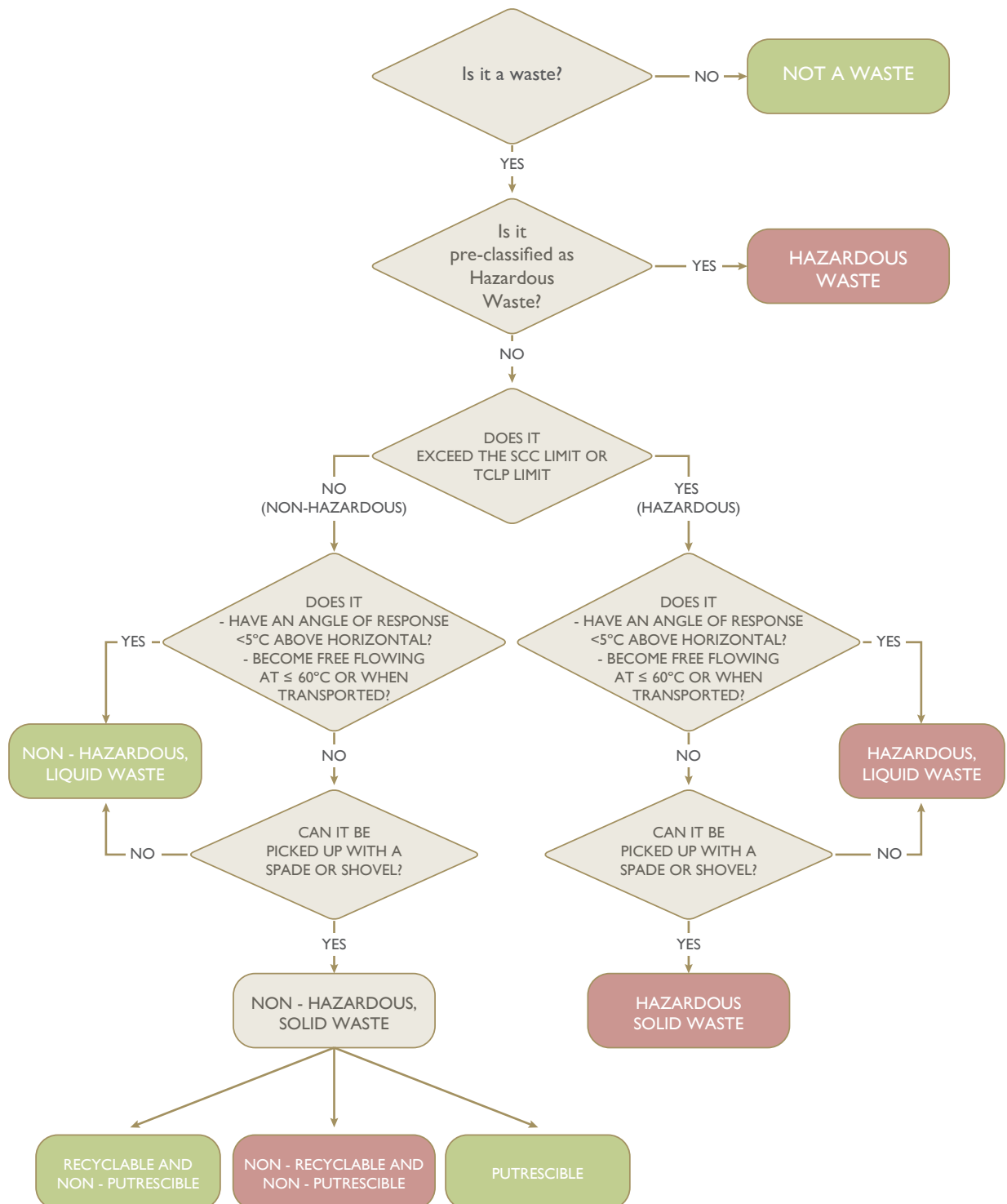
The reference test methods for determining both the SCC and TCLP values are as described in the

- United States Environmental Protection Agency's Test Methods for Evaluating Solid Waste, Physical/Chemical Methods (USEPA 1986) and Updates I, II, IIIA, IIIB, IVA and IVB, available at www.epa.gov/epaoswer/hazwaste/test/sw846.htm
- Hazardous Waste Management System: Identification and Listing of Hazardous Waste - Toxicity Characteristics Revisions, Final Rule (USEPA 1990) for TCLP levels



4. WASTE CLASSIFICATION FLOW CHART

Waste generator should use the waste classification flow chart in conjunction with the waste definition in section 3 to classify waste:



5. GLOSSARY

Angle of repose - the maximum slope, measured in degrees from the horizontal at which material will remain in place without sliding.

By-product - a product that is produced from a process in addition to the primary product.

Hazardous waste - any waste which, through toxicity, carcinogenicity, mutagenicity, teratogenicity, flammability, explosive nature, chemical reactivity, corrosive nature, infectiousness or other biologically damaging properties, which may present danger to the life or health of living organisms when released into the environment.

Naturally occurring radioactive materials (NORM) - are materials, usually industrial wastes or by-products enriched with radioactive elements found in the environment, such as uranium, thorium and potassium and any of their decay products, such as radium and radon. These natural radioactive elements are present in very low concentrations in the earth's crust and are brought to the surface through human activities, such as oil and gas exploration or mining and through natural processes like leakage of radon gas to the atmosphere or through dissolution in ground water.

Poisonous - material causing or capable of causing death or illness if it exposed to the body including inhalation, cutaneous exposure, etc.

Production residue - material that remains unutilised at the end of a production process e.g. ash from combustion, inedible plant material from food processing, metal fines.

Putrescible waste - waste that is able to be decomposed by bacterial action. It may be suitable for composting or recycled for stock feed e.g. food wastes. Problems associated with handling putrescible waste include vermin, seagulls, dust, odor, flies and other insects, as well as surface and ground-water contamination by leachate.

Resource recovery from waste - the extraction of materials or energy from waste for further use or processing, including metal extraction, composting, etc.

Treatment - the use of a chemical, physical, or biological process to change the properties of waste.

Waste - all hazardous and non-hazardous remnants and wastes, including nuclear wastes, disposed of or need to be disposed of including solid wastes, liquid wastes, hazardous wastes and medical wastes.

Waste disposal - operations such as burial, deep injection, permanent storage are considered as disposal, but not involving extraction or reuse of substances, biological or physical-chemical treatment including destruction or any other method approved by the competent authorities.

Waste recycling - operations carried out on wastes, for the extraction or reuse of substances such as use for fuel, extraction of metals and organic substances, soil treatment or waste oil refining.

Waste reuse - operations by which waste otherwise destined for disposal is cleaned or repaired for use, for the purposes of prolonging the original product lifetime prior to treatment and reprocessing.



6. REFERENCES

Department of Environment and Climate Change NSW, Waste Classification Guidelines, Part 1: Classifying Waste, 2009.

DavisK, S., Regulated Metals: The Rule of 20, State Pollution Prevention Institute, 2001.

Federal Law No. (24) of 1999, Protection and Development of the Environment.

Abu Dhabi Law No. (21) of 2005, Waste Management in the Emirate of Abu Dhabi.

Federal Cabinet Decree No. (37) of 2001, Regulations for the Handling of Hazardous Materials, Hazardous wastes and Medical Wastes.

Waste Management Policy (EAD-EQ-PR-P-05): Waste Reuse, Recycling, Resource Recovery, Treatment and Disposal Policy.

Abu Dhabi Emirate Environment, Health and Safety Management System Regulatory Framework (AD EHSMS RF), Codes of Practice (EHS RI CoP #1.1): Management of Asbestos Containing Materials.

Tadweer (Center of Waste Management - Abu Dhabi) Technical Guidelines (CWM TG #06): Requirements and Procedures for Registration of Waste Skips and Container.

Tadweer (Center of Waste Management - Abu Dhabi) Technical Guidelines (CWM TG #08): Management of Asbestos and Asbestos Containing Material in the Emirate of Abu Dhabi.

http://ec.europa.eu/environment/waste/elv_index.htm

Annex I

Table I. Threshold Values for Specific Contaminant and Leachable Concentrations

(Any waste that has been characterised [tested for chemical analysis] and if the contaminants are above the specific contaminant concentration [SCC] values or toxicity characteristics leaching procedure [TCLP] has been carried out on the waste and found to exceed the leachable concentrations, shall be classified as hazardous waste).

No	Contaminant	Specific Contaminant Concentration (SCC) (mg/kg)	Leachable Concentrations (TCLP Test) (mg/l)
1	Arsenic	100	5.0
2	Barium	100	--
3	Benzene	10	0.5
4	Benzo(a)pyrene	0.8	0.04
5	Beryllium	20	1.0
6	Cadmium	20	1.0
7	Carbon tetrachloride	10	0.5
8	Chlorobenzene	2000	100
9	Chloroform	120	6.0
10	Chlorpyrifos	4	0.2
11	Chromium (VI)	100	5.0
12	m-Cresol	4000	200
13	o-Cresol	4000	200
14	p-Cresol	4000	200
15	Cresol (total)	4000	200
16	Cyanide (amenable)	70	3.5
17	Cyanide (total)	320	16
18	2,4-D	200	10
19	1,2-Dichlorobenzene	86	4.3
20	1,4-Dichlorobenzene	150	7.5
21	1,2-Dichloroethane	10	0.5
22	1,1-Dichloroethylene	14	0.7
23	Dichloromethane	172	8.6
24	2,4-Dinitrotoluene	2.6	0.13
25	Endosulfan	60	3.0
26	Ethylbenzene	600	30
27	Fluoride	3000	150
28	Fluroxypyr	40	2.0
29	Lead	100	5.0
30	Mercury	4	0.2
31	Methyl ethyl ketone	4000	200
32	Molybdenum	100	5.0
33	Nickel	40	2.0
34	Nitrobenzene	40	2.0
35	Phenol (non-halogenated)	288	14.4
36	Picloram	60	3.0
37	Plasticiser compounds	20	1.0
38	Selenium	20	1.0
39	Silver	100	5.0
40	Styrene (vinyl benzene)	60	3.0
41	Tebuconazole	128	6.4
42	1,2,3,4-Tetrachlorobenzene	10	0.5
43	1,1,1,2-Tetrachloroethane	200	10
44	1,1,2,2-Tetrachloroethane	26	1.3
45	Tetrachloroethylene	14	0.7
46	Toluene	288	14.4
47	1,1,1-Trichloroethane	600	30
48	1,1,2-Trichloroethane	24	1.2
49	Trichloroethylene	10	0.5
50	2,4,5-Trichlorophenol	8000	400
51	2,4,6-Trichlorophenol	40	2.0
52	Triclopyr	40	2.0
53	Vinyl chloride	4	0.2
54	Xylenes (total)	1000	50



EnvironmentAbuDhabi



Environment Agency - Abu Dhabi



EAD



Environment Agency - Abu Dhabi



@EADTweets



Environment Agency - Abu Dhabi