Government of **Western Australia**
Department of **Water and Environmental Regulation**

Guideline

Waste Categorisation for Controlled Waste

Activities regulated under the:

Environmental Protection Act 1986

Environmental Protection Regulations 1987

June 2020

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Disclaimer

Contents

1. Purpose....2
1.1 Shortened Forms....2
2. Scope....2
3. Context....3
4. Legislation....3
5. Outcome....3
6. Waste categorisation....3
6.1 Principles for assigning a waste code to a controlled waste....4
6.2 Categorisation guide for category G — Organic solvents into relevant waste codes....5
6.3 Determining relative hazard of constituents....6
6.4 Categorising controlled waste treatment outputs....7
7. Controlled waste categorisation and management examples....7
7.1 Case 1 — Galvanising wastes....7
7.2 Case 2 — Industrial waste treatment plant....10
7.3 Case 3 — Controlled waste with multiple contaminants example 1....13
7.4 Case 4 — Controlled waste with multiple contaminants example 2....14
Document implementation....16
Related documents....17
Custodian and review....18
Appendices....19
Appendix A Controlled waste as listed in Schedule 1 of the Regulations....19
Appendix B Descriptive coded waste....22
Glossary....24
References....25

Tables

Table 1: Examples of controlled waste category group G — Solvents....6
Table 2: Schedule 1 — Prescribed premises categories extract....8
Table 3: Case 3 laboratory results on the landfill stormwater....13
Table 4: Case 3 calculation of relative hazard of each constituent....14
Table 5: Case 4 laboratory results on the wash water from cleaning equipment....15
Table 6: Case 4 calculation of relative hazard of each constituent....15

1. Purpose

The *Waste Categorisation of Controlled Waste Guideline* (the guideline) guides industry in the allocation of appropriate codes for the transport of a controlled waste within the legislative framework of the *Environmental Protection Act 1986* (the Act) and the Environmental Protection (Controlled Waste) Regulations 2004 (the Regulations) administered by the Department of Water and Environmental Regulation (the department); and the national framework provided in the *National Environment Protection (Movement of Controlled Waste between States and Territories) Measure 1998* (the NEPM).

1.1 Shortened Forms

Act	*Environmental Protection Act 1986*
CWTF	Controlled Waste Tracking Form
CWTS	Controlled Waste Tracking System
Regulations	Environmental Protection (Controlled Waste) Regulations 2004
department	The Department of Water and Environmental Regulation
guideline	The Waste Categorisation of Controlled Waste Guideline
L	litres
mg	milligrams
NEPM	The *National Environment Protection (Movement of Controlled Waste between States and Territories) Measure 1998.*
NHMRC Guidelines	*National Health and Medical Research Council Australian Drinking Waste Guidelines 6, 2011 Version 3.5 Updated August 2018*
PFOA	Perfluorooctanoate, or perfluorooctanoic acid
PFOS	Perfluorooctane sulfonate, or perfluorooctane sulfonic acid
µg	microgram

2. Scope

Guidelines provide direction on how the department interprets and applies the legislation it administers.

This document does not provide guidance on determining if a waste should be considered a controlled waste, only how waste identified as controlled waste should be coded for transport.

The guideline would be applicable to decision-making authorities, proponents, industry consultants and other interested parties involved in the movement of controlled waste on a road in Western Australia (WA).

3. Context

This document aligns with the department's regulatory best-practice principles and environment regulation framework. Refer to the *Related documents* section of the guideline for other relevant department documents, including information on whether waste is a controlled waste (refer: *Glossary*), to be read in conjunction with this document.

4. Legislation

The guideline relates to the *Environmental Protection Act 1986* (the Act) and the Environmental Protection (Controlled Waste) Regulations 2004 (the Regulations) administered by the department; and the national framework provided in the *National Environment Protection (Movement of Controlled Waste between States and Territories) Measure 1998* (the NEPM).

It comes into effect on the day it is published.

The guideline will not generally be used retrospectively. However, where there is evidence of unacceptable activity the department may initiate a review of the waste holder, carrier (refer: *Glossary*), or waste facility occupier, informed by this guideline.

Examples of unacceptable activity include, but not limited to:

- incorrect categorisation of controlled waste
- incorrect information recorded in the CWTS
- a controlled waste material not tracked in accordance with the Regulations.

State and national legislation relating to this document can be found in the *Related documents* section.

5. Outcome

To ensure the transport of controlled waste on public roads in WA is categorised correctly, accurately recorded on the controlled waste tracking form (CWTF) (refer: *Glossary*) before transport, and responsibly redirected to a facility that is lawfully able to accept and manage that waste type within legislative parameters.

6. Waste categorisation

In order to categorise a controlled waste, information must be known about its composition, pH, flashpoint and/or the process that generated the waste.

In some instances, knowing how the waste was generated is sufficient to establish the waste category. An example of this is waste from a septic tank.

However, for other wastes, chemical analysis may be needed to determine the composition and characteristics.

The following hierarchical principles should be used to assign a waste category, group and code to a controlled waste.

6.1 Principles for assigning a waste code to a controlled waste

Step 1. Identify the process or industry from which it arises

If the waste can be neatly described by either:

1. the process or industry from which it arises; or,
2. the article or product from which it derives, as listed in Appendix B – Descriptive coded waste,

then assign that waste code.

If this step returns no result, then go to Step 2.

Step 2. Composition

Where Step 1 does not result in the appropriate assignment of a code to a controlled waste, further investigation must be undertaken to accurately understand its composition.

The composition of the controlled waste may be apparent from historical knowledge of the company or industry process from which the waste arises. This may involve testing for a range of chemical constituents or characteristics that appear on Schedule 1 of the Regulations.

When testing chemical constituents:

1. If the waste can be described by a single characteristic that matches a code from the controlled waste category list (refer: *Related documents*), then use that code; for example D120 Mercury, mercury compounds.
2. Where testing indicates that more than one constituent or characteristic is present, use the code that describes that constituent of highest potential hazard (refer to section 6.3, Determining relative hazard constituents).

Note: this may not be the constituent that is present at the highest concentration. Where there may be more than one constituent in the highest hazard category, then the waste code corresponding to the constituent with the highest concentration/ratio should be used.

If Step 2 returns no result, then go to Step 3.

Step 3. Refer to waste examples

If, through steps 1 and 2, you are unable to assign a waste code to a controlled waste, then consult the list of waste examples on the controlled waste category list (refer: *Related documents*). You may wish to consult with the department when assigning an appropriate name and code to a controlled waste.

6.2 Categorisation guide for category G — Organic solvents into relevant waste codes

Controlled waste category group G — Organic solvents, are comprised of halogenated and non-halogenated forms. The information below assists with the correct and accurate categorisation of organic solvents.

Halogenated organic solvents

Generally, a halogenated solvent is one that contains any of the following words in its chemical name:

- chlor
- bromo
- fluoro
- iodo.

Non-halogenated organic solvents

Generally, non-halogenated solvents do not contain the above words in the chemical name.

Table 1: Examples of controlled waste category group G — Solvents

Chemical name	Waste code and name
Ethyl phenyl ether	G110 Non-halogenated organic solvents
Cyclohexane	G110 Non-halogenated organic solvents
Diethyl ether	G110 Non-halogenated organic solvents
Iso-propanol	G110 Non-halogenated organic solvents
Pentachlorophenol	G150 Halogenated organic solvents not otherwise specified
Perchloroethylene	G130 Dry cleaning waste containing perchloroethylene

6.3 Determining relative hazard of constituents

Where testing the constituents of a waste identifies that more than one constituent or characteristic is present, the relative hazard of each constituent can be determined using the health guideline values from the 'Guideline values for physical and chemical characteristics' section (See Table 10.6 pp.176–189 of the *National Health and Medical Research Council Australian Drinking Waste Guidelines 6, 2011 Version 3.5 Updated August 2018* (NHMRC and NRMMC, 2018).

It should be noted that the use of the NHMRC Guidelines (NHMRC and NRMMC, 2018) is solely for the purpose of determining the relative hazard of each constituent. Refer to section 7 'Controlled waste categorisation and management examples' for examples on the use of information from Table 10.6 of the NHMRC Guidelines (NHMRC and NRMMC, 2018).

The use of the values from Table 10.6 requires the values of all test results to be in the same units of measure.

Where a health value is not present in Table 10.6 of the NHMRC Guidelines (NHMRC and NRMMC, 2018) then the *Australian and New Zealand Guidelines for Fresh and Marine Water Quality* (ANZECC and ARMCANZ, 2018) is also available for reference.

When determining the relative hazard of each constituent in a controlled waste ensure that:

- the units or measure are the same for each of the constituents
- the reference health values from the same guideline are used (do not use values from different guidelines).

6.4 Categorising controlled waste treatment outputs

The outputs resulting from the treatment of controlled waste should, themselves, be designated controlled waste(s). Unless the treated controlled waste has been chemically altered by the treatment, then the controlled waste will remain as was originally categorised.

Undertaking a chemical assessment of a treated controlled waste may provide the only certainty when re-categorising a controlled waste after the original controlled waste has been treated. For further guidance, refer to Case 2 in section 7 Controlled waste categorisation and management examples.

7. Controlled waste categorisation and management examples

7.1 Case 1 – Galvanising wastes

A galvaniser has generated waste liquids from spent pre-treatment solutions and from quenching activities after galvanising. The process does not use cyanide.

After determining that the waste meets the definition of controlled waste, the waste holder (refer: *Glossary*) commences categorisation. Step 1 - a review of Appendix B Descriptive coded wastes reveals a waste type 'Waste resulting from surface treatment of metals and plastics'. The galvaniser knows this waste type accurately describes the process that produced the waste and therefore provides this information to the carrier before collecting the waste. The carrier or driver then assigns the corresponding alphanumeric code of A100 on the CWTF before collection.

The following two options were considered by the carrier before collection and unloading of the waste.

Waste management option 1

A nearby waste facility, QoP Pty Ltd, accepts municipal solid waste (refer: *Glossary*) and commercial and industrial waste plus liquid waste.

When contacted by the carrier, the occupier of the waste facility advises that their prescribed premises licence allows the facility to accept A100 for storage.

The licence has been granted under the Act for prescribed premises categories (refer Table 2).

Table 2: Schedule 1 — Prescribed premises categories extract

Category number	Category description
64	Class II or III putrescible landfill site: premises on which waste (as determined by reference to the waste type set out in the document entitled *Landfill Waste Classification and Waste Definitions 1996* published by the Chief Executive Officer and as amended from time to time) is accepted for burial.
61	Liquid waste facility: premises on which liquid waste produced on other premises (other than sewerage waste) is stored, reprocessed, treated or irrigated.

Subregulation 3(6)(b) provides that the Regulations do not apply when:

"*a controlled waste may be lawfully accepted at a Class I inert landfill site, a Class II putrescible landfill site or a Class III putrescible landfill site (as determined by reference to the waste types set out in the Landfill Waste Classification and Waste Definitions 1996 published by the CEO and as amended from time to time) other than*

i. asbestos; or

ii. clinical or related wastes; or

iii. tyres; or

iv. *encapsulated, chemically fixed, solidified or polymerised controlled wastes.*"

Case 1 – option 1 - question 1

Does subregulation 3(6)(b) apply to the A100? That is, do the Regulations no longer apply to the A100 waste because it is being accepted at a prescribed premises that holds a category 64 (Class II or II putrescible landfill)?

Answer

No.

The physical state of the A100 is liquid and therefore the controlled waste cannot be lawfully buried at the facility under the prescribed premises category 64 Class II or III landfill site in reference to the waste types set out in the *Landfill Waste Classification and Waste Definitions 1996 (as amended 2019)* (refer: *Related documents*).

The A100 can be lawfully received by the facility due to the prescribed premises category 61 Liquid waste facility, where it will be stored. Therefore the waste holder, carrier and waste facility obligations, set out by the Regulations apply when transporting the controlled waste.

Case 1 – option 1 - question 2

If the waste holder solidified the A100, by mixing the liquid with saw dust, can the waste be transported to the category 64 landfill without being tracked under the Regulations?

Answer

No.

The act of solidifying the liquid A100 into a spadeable (refer: *Glossary*) state by adding sawdust triggers subregulation 3(6)(b)(iv). That is, the act of solidifying the controlled waste does not preclude the waste from being captured by the Regulations. The waste facility, in determining to accept the waste for burial at the category 64 Class II or III landfill site should request an analysis of the waste to determine its acceptability for burial at landfill.

Regardless of the lawful acceptability of the waste at landfill, the transportation of the solid (refer: *Glossary*) controlled waste must be tracked by a licensed controlled waste carrier.

Waste management option 2

Using the categorisation hierarchical principles has resulted in the galvaniser's liquid waste being assigned A100 Waste resulting from surface treatment of metals and plastics. However, one of the characteristics of the liquid waste is that it is highly acidic.

The occupier of a nearby liquid waste facility, DMC Pty Ltd, has indicated it can accept waste type B100 Acidic solutions or acids in solid form (B100) but not A100.

Case 1 – option 2 - question 1

Can the carrier code the galvaniser's controlled waste as B100 and unload it at DMC Pty Ltd?

Answer:

No.

Under subregulation 25(3) the waste holder is obligated to provide the carrier with accurate information on the type of controlled waste before collection.

Under subregulation 39(4) the carrier must ensure that any controlled waste is unloaded at a waste facility that may lawfully receive that type of controlled waste.

By following the categorisation hierarchical principles, the galvaniser's liquid waste is most accurately categorised using the descriptive waste code A100. While it may be acidic in nature, the hierarchy of categorisation assigns descriptive waste codes first and proceeds to characteristic and constituent-based codes only where the descriptive code cannot be assigned.

Environmentally sound management of a waste may be achieved by using the categorisation hierarchical principles and meeting the obligation to unload at a waste facility that may lawfully accept the waste.

7.2 Case 2 – Industrial waste treatment plant

A licensed waste facility, ABC Pty Ltd, offers a range of industrial and hazardous waste treatment services including:

- consolidation and disposal of packaged chemicals
- stabilisation, solidification and fixation
- physiochemical treatment
- concrete encapsulation.

Through its prescribed premises licence issued under Part V of the Act (refer: *Related documents*), ABC Pty Ltd can lawfully accept controlled waste D130 Arsenic and arsenic compounds (D130) in a liquid state.

Waste management option 1

Upon receipt of the controlled waste, ABC Pty Ltd mixes the D130 with sawdust or "kitty litter" and subsequently, the D130 mixture is now spadeable (refer: *Glossary*).

ABC Pty Ltd, in its capacity as the current waste holder of a solid waste, engages a carrier to transport the D130-sawdust mix to another waste facility for further treatment, handling or disposal.

Case 2 – option 1 - question 1

Is the D130/sawdust mix a controlled waste?

Answer

Yes.

Unless the chemical categorisation of the controlled waste changes, then the controlled waste will remain as was originally categorised (refer to section 6.4 ‘Categorising controlled waste treatment outputs’ above for further details).

Undertaking a chemical assessment of a controlled waste may provide the only certainty on any re-categorisation of the controlled waste from the original categorisation.

The act of solidifying the liquid D130 into a spadeable (refer: *Glossary*) state by adding sawdust triggers subregulation 3(6)(b)(iv). That act of solidifying the controlled waste does not exclude it from being captured by the Regulations.

Regardless of the lawful acceptability of the waste at landfill, the transportation of the solid controlled waste (refer: *Glossary*) must be tracked by a licensed controlled waste carrier.

Case 2 – option 1 - question 2

Does ABC Pty Ltd have an obligation to tell the carrier the waste is D130?

Answer

Yes.

Where subregulation 3(6)(b) does not apply and a re-categorisation of the controlled waste has not occurred, then ABC Pty Ltd, as the waste holder, is required to provide the carrier with information on the type of controlled waste.

It is an offence under subregulation 25(4) for a waste holder to provide information which is false or misleading or likely to deceive.

Case 2 – option 1 - question 3

As a spadeable waste (refer: *Glossary*), do the Regulations continue to apply to the D130-sawdust mix given that the physical state was altered to a solid? Refer: *Glossary*.

Answer

Yes, the regulations continue to apply.

Subregulation 3(6)(b) applies to a controlled waste that may be lawfully received at a Class I inert landfill site, a Class II putrescible landfill site or a Class III putrescible landfill site with the exception of asbestos, clinical or related waste, tyres or encapsulated, chemically fixed, solidified or polymerized controlled wastes. Even if the waste may lawfully be accepted for burial by the landfill (refer: *Glossary*), the waste must be transported in accordance with the Regulations as the physical state of the waste has been changed to a solid without any other treatment of its constituents or chemical characteristics.

As subregulation 3(6)(b) only applies to waste that may be lawfully buried at a Class I, II or III landfill, to ensure the carrier is undertaking the correct activity for the transport of controlled waste, the carrier may request from the waste holder an accredited laboratory analysis certifying that the waste meets the relevant aforementioned criteria. This should be requested before the waste is transported,

Similarly, the waste facility may not accept a waste if it is apparent that it does not meet the acceptance criteria set out in the *Landfill Waste Classification and Waste Definitions 1996 (as amended 2019)* or the waste acceptance conditions of their prescribed premises licence granted under the Act (refer: *Related documents*).

Note: A controlled waste that meets the criteria to be buried at a Class I, II or III landfill [note the controlled waste type exceptions listed in subregulations 3(6)(b) (i), (ii), (iii), or (iv)] may proceed to a waste facility where it can be lawfully accepted, with other waste management types such as recycling, reclaiming, or composting.

Waste management option 2

ABC Pty Ltd encapsulated the D130 in concrete. In its new capacity as the waste holder of the encapsulated controlled waste, ABC Pty Ltd engages a carrier to transport the cement encapsulated D130 to another waste facility.

Case 2 – option 2 - question 1

As the physical state of the controlled waste has been modified from liquid to solid (refer: *Glossary*) do the Regulations no longer apply under subregulation 3(6)(b))?

Answer

The Regulations continue to apply.

Subregulation 3(6)(b)(iv) exception from the Regulations does not apply if a waste has been encapsulated, chemically fixed, solidified or polymerised.

7.3 Case 3 – Controlled waste with multiple contaminants example 1

An occupier of a Part V licensed landfill (refer: *Glossary*) requires the removal of landfill stormwater run-off and, given the industrial nature of the site, the landfill occupier has determined the stormwater may be contaminated with one or more controlled wastes.

As the occupier is in control of the suspected controlled waste on the premises they meet the definition of a waste holder (refer: *Glossary*).

The occupier follows the steps of the categorisation hierarchical principles to determine the categorisation of the controlled waste to ensure that the carrier is provided with information on the type of waste before collection.

Step 1: The occupier finds the waste cannot be neatly described as one of the descriptive coded wastes listed in Appendix B.

Step 2: The occupier commissions an accredited laboratory to analyse the stormwater for a range of possible controlled waste constituents. Table 3 below shows the results of the laboratory test.

Table 3: Case 3 laboratory results on the landfill stormwater

Constituent	Laboratory results (mg/L)
Lead (Pb)	150 mg/L
Mercury (Hg)	100 mg/L
Cyanide (CN)	75 µg/L
Cadmium (Ca)	180 mg/L

Step 2 (a): Does not apply as more than one constituent was identified in the stormwater.

Step 2 (b): The laboratory test identified more than one constituent in the stormwater, the landfill occupier proceeds to section 6.3 ‘Determining relative hazard of constituents’ of this guideline.

Before calculating the relative hazard value for each constituent, the occupier converts the units of measure for cyanide to that of the remaining constituents (µg/L to mg/L) (refer Table 4). Using the health value of each constituent from Table 10.6 of the NHMRC Guidelines (NHMRC and NRMMC, 2018), the occupier calculates the relative hazard value for each constituent by dividing the laboratory results by the health value (refer Table 4 below).

Table 4: Case 3 calculation of relative hazard of each constituent

Constituent	Test results (mg/L)	Table 10.6 health value	Relative hazard value
Pb	150	0.01	15,000
Hg	100	0.001	100,000
CN	0.075	0.08	0.9375
Ca	180	0.002	90,000

Based on the relative hazard value for each constituent, the occupier determines that the constituent of highest potential hazard was mercury.

As the premises has no capacity to treat the waste, the landfill occupier engages a controlled waste carrier that is licensed to transport that type of waste, advises of the waste type and provides the analysis report and relative hazard value calculation to the carrier before collection of the liquid waste.

7.4 Case 4 – Controlled waste with multiple contaminants example 2

During scheduled maintenance of a large dry cleaner operation plant, the wash waters from the cleaning and rinsing of machinery and equipment has been collected for removal from the premises.

The manager has determined that given the processes that occur at the premises the wash water may be contaminated with one or more controlled wastes.

The manager follows the steps of the categorisation hierarchical principles to determine the categorisation of the controlled waste.

Step 1: The manager finds the wash waters cannot be neatly described as one of the descriptive coded wastes listed in Appendix B (refer Case 4 example 1, Step 1).

Step 2: The manager commissions an accredited laboratory to analyse the wash waters for a range of possible controlled waste constituents. Table 5 below shows the results of the laboratory test.

Table 5: Case 4 laboratory results on the wash water from cleaning equipment

Constituent	**Laboratory results (mg/L)**
Xylene	360
Toluene	640
Tetrachloroethane (also known as perchloroethylene)	50

Step 2 (a): Does not apply as more than one constituent was identified in the wash waters.

Step 2 (b): The laboratory test identified more than one constituent in the wash waters, the manager proceeds to section 6.3 ‘Determining relative hazard of constituents’ of this guideline.

The manager checks the laboratory results for each constituent are in the same units of measure, then, using the health value of each constituent from Table 10.6 of the NHMRC Guidelines (NHMRC and NRMMC, 2018), calculates the relative hazard value for each constituent by dividing the laboratory results by the health value (refer Table 6 below).

Table 6: Case 4 calculation of relative hazard of each constituent

Constituent	**Test results (mg/L)**	**Table 10.6 health value**	**Relative hazard value**
Xylene	360	0.6	600
Toluene	640	0.8	800
Tetrachloroethane	50	0.05	1,000

The calculation of the relative hazard value for each constituent established that the constituent of highest potential hazard was tetrachloroethane.

The manager engages a controlled waste carrier that is licensed to transport that type of waste, advises of the waste type and provides the analysis report and relative hazard value calculation to the carrier before collection of the liquid waste.

Document implementation

The guideline will be published on the department website. A broadcast and news alert will be released on the department website and CWTS respectively on the date of publication.

The Controlled Waste Branch of the Compliance and Enforcement Division is responsible for implementation of this guideline.

This guideline comes into effect on the day it is published.

The guideline will not generally be used retrospectively, outside the department's normal controlled waste tracking form audit processes. However, in situations where there is evidence of unacceptable activity the department may initiate a review of the waste holder, carrier (refer: *Glossary*), or waste facility occupier, informed by this guideline.

Examples of unacceptable activity include, but not limited to:

- incorrect categorisation of controlled waste
- incorrect information recorded in the CWTS
- a controlled waste material not tracked in accordance with the Regulations.

Related documents

Non-department documents	
Author	**Title**
WA State parliament	*Environmental Protection Act 1986*
WA State parliament	*Environmental Protection (Controlled Waste) Regulations 2004*
Australian Government	*National Environment Protection (Movement of Controlled Waste between States and Territories) Measure 1998*
Australian Government	*Australian Drinking Water Guidelines 6, 2011 Version 3.5 Updated August 2018*
Australian Government	*Australian and New Zealand Guidelines for Fresh and Marine Water Quality*

Department documents	
Author	**Title**
The department	*Regulatory best practice principles*
The department	*Environment regulation framework*
Controlled Waste Branch	*"What is controlled waste?" fact sheet*
Controlled Waste Branch	*Controlled Waste Category List*
The department	*Landfill Waste Classification and Waste Definitions 1996*

Custodian and review

The currency of this document will be continuously evaluated and reviewed no later than three years from the date of issue or sooner if required.

Document details	
Lead group (custodian)	Controlled Waste Branch
Current version	1.0
Corporate file number	DER2015/000136
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Appendices

Appendix A Controlled waste as listed in Schedule 1 of the Regulations

Acidic solutions or acids in solid form

Animal effluent or residues (including abattoir effluent, poultry and fish processing waste)

Antimony; antimony compounds

Arsenic; arsenic compounds

Asbestos

Barium compounds other than barium sulphate

Basic solutions or bases in solid form

Beryllium; beryllium compounds

Boron compounds

Cadmium; cadmium compounds

Ceramic based fibres with physico-chemical characteristics similar to those of asbestos

Chlorates

Chromium compounds (hexavalent or trivalent)

Clinical waste

Cobalt or cobalt compounds

Containers or drums that are contaminated with residues of a controlled waste

Copper compounds

Cyanides (inorganic)

Cyanides (organic) and nitriles

Encapsulated, chemically fixed, solidified or polymerised controlled wastes

Ethers

Filter cake containing controlled wastes

Fire debris or fire washwaters

Fly ash excluding fly ash generated from Australian coal fired power stations

Halogenated organic solvents

Highly odorous organic chemicals (including mercaptans and acrylates)

Inorganic fluorine compounds excluding calcium fluoride

Inorganic sulphides

Isocyanate compounds

Lead; lead compounds

Mercury; mercury compounds

Metal carbonyls

Nickel compounds

Non toxic salts

Organic phosphorous compounds

Organic solvents excluding halogenated solvents

Organochlorine pesticides (OCPs)

Organohalogen compounds other than substances referred to elsewhere in this Schedule

Oxidising agents

Perchlorates

Phenols, phenol compounds including chlorophenols

Phosphorous compounds other than mineral phosphates

Polychlorinated biphenyls (PCBs)

Polychlorinated dibenzo-furan (any congener)

Polychlorinated dibenzo-p-dioxin (any congener)

Reactive chemicals

Reducing agents

Residues from industrial waste treatment or disposal operations

Selenium; selenium compounds

Sewage

Soils contaminated with a controlled waste

Surface active agents (surfactants), containing mainly organic constituents and which may contain metals and inorganic materials.

Tannery wastes (including leather dust, ash, sludge or flours)

Tellurium; tellurium compounds

Thallium; thallium compounds

Triethylamine catalysts for setting foundry sands

Tyres

Vanadium compounds

Vegetable and food processing waste

Waste chemical substances arising from research and development or teaching activities which substances are not identified or are new or the effects of which on human health or the environment are not known

Waste containing peroxides other than hydrogen peroxide

Waste from grease traps

Waste from heat treatment or tempering operations containing cyanides

Waste from production or formulation, or use of photographic chemicals or processing materials

Waste from production or preparation of pharmaceutical products

Waste from the manufacture, formulation, or use of wood-preserving chemicals

Waste from the production, formulation, of use of organic solvents

Waste from the production, formulation, or use of biocides and phytopharmaceuticals

Waste from the production, formulation, or use of inks, dyes, pigments, paints, lacquers or varnish.

Waste from the production, formulation, or use of resins, latex, plasticisers, glues and adhesives

Waste mineral oils unfit for their intended use

Waste of an explosive nature not subject to any other written law

Waste oil and water, or hydrocarbon and water, mixtures or emulsions

Waste pharmaceutical drugs and medicines

Waste resulting from the surface treatment of metals or plastics

Waste substances, or articles containing or contaminated by polychlorinated biphenyls (PCBs), polychlorinated naphthalenes (PCNs), polychlorinated terphenyls (PCTs), or polybrominated biphenyls (PBBs)

Waste tarry residues arising from refining, distillation, or pyrolytic treatment

Wool scouring wastes

Zinc compounds

Appendix B Descriptive coded waste

Waste code	Waste description (from controlled waste category list)
Process/Industry described wastes	
A100	Waste resulting from surface treatment of metals and plastics
A110	Waste from heat treatment and tempering processes which use cyanides
F100	Aqueous-based waste from the production, formulation and use of inks, dyes, pigments, paints, lacquers and varnish
F110	Aqueous-based waste from the production, formulation and use of resins, latex, plasticisers, glues and adhesives
G160	Waste from the production, use and formulation of organic solvents not otherwise specified
H100	Waste from the production, formulation and use of biocides and phytopharmaceuticals
H170	Waste wood-preserving chemicals
J160	Waste tarry residues arising from refining, distillation, and any pyrolytic treatment
K100	Animal effluent and residues
K110	Waste from grease traps
K130	Sewage waste from the reticulated sewerage system
K140	Tannery wastes not containing chromium
K190	Wool scouring wastes
K200	Food and beverage processing wastes
K210	Septage wastes
N140	Fire debris and fire wash waters (not containing PFOS or PFOA, refer to M160 for PFOS or PFOA contaminated waste)
N160	Encapsulated, chemically fixed, solidified or polymerised controlled wastes
N190	Filter cake containing a controlled waste
N205	Industrial waste treatment/plant residues
R100	Clinical and related wastes
R140	Waste from the production and preparation of pharmaceutical products
T100	Waste chemical substances arising from research and development or teaching activities
T120	Waste from the production, formulation and use of photographic chemicals and processing materials
Article/ product described wastes	
M230	Triethylamine catalysts
N100	Containers or drums contaminated with residues of a controlled waste.
N150	Fly ash, excluding fly ash generated from Australian coal fired power stations
R120	Waste pharmaceuticals, drugs and medicines

Waste code	Waste description (from controlled waste category list)
T140	Used tyres
Inherent characteristics	
J100	Waste mineral oils unfit for their intended purpose
M260	Highly odorous organic chemicals including mercaptans and acrylates
E120	Waste of an explosive nature not subject to other legislation

Glossary

Carrier	As defined in the Regulations
Controlled waste	As defined in the Regulations
Controlled waste category list	As published by the department, and amended from time to time, the Controlled waste category list arranges controlled wastes into groups and assigns a unique alpha-numeric code to each controlled waste.
Controlled waste tracking form	As defined in the Regulations
Controlled waste tracking number	As defined in the Regulations
Landfill	As defined in the document *Landfill Waste Classification and Waste Definitions 1996 (as amended 2019)*
Solid	As defined in the document *Landfill Waste Classification and Waste Definitions 1996 (as amended 2019)*
Spadeable	As defined in the document *Landfill Waste Classification and Waste Definitions 1996 (as amended 2019)*
Waste	As defined in the *National Environment Protection (Movement of Controlled Waste Between States and Territories) Measure 1998* (Refer: *Related documents*)
Waste Holder	As defined in the Regulations

References

Australian and New Zealand Guidelines for Fresh and Marine Water Quality, 2018. Australian and New Zealand Environment and Conservation Council, Agriculture and Resource Management Council of Australia and New Zealand, Commonwealth of Australia, Canberra (ANZECC and ARMCANZ, 2018)

www.waterquality.gov.au/anz-guidelines

Australian Drinking Water Guidelines 6, 2011, Version 3.5 updated August 2018 National Water Quality Management Strategy. National Health and Medical Research Council, National Resource Management Ministerial Council, Commonwealth of Australia, Canberra (NHMRC and NRMMC, 2018)

www.nhmrc.gov.au/about-us/publications/australian-drinking-water-guidelines#block-views-block-file-attachments-content-block-1