

Australian Waste Definitions

Defining waste related terms by jurisdiction in Australia

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1 Summary

Summary table of Australian waste definitions and classifications

The following table draws on consultant reports, desktop research, legislation, regulations and some policy or strategy documents. The objective of the table is to provide a concise summary of some key definitions (or absent definitions) related to waste and resource recovery, by jurisdiction, and at the same time indicate some of the different waste classifications in use in those jurisdictions for different purposes. The following sections outline in more detail how each jurisdiction deals with each definition and classification.

Table 1: Summary of waste definitions & classifications, by jurisdiction

Juris.	'Waste' definition	'Resource' definition	'Resource recovery' definition	'Hazardous waste' definition	Key solid waste classifications (some contain some liquids)	Sources
Commonwealth	[1] a substance or objects that: (a) is proposed to be disposed of; or (b) is disposed of; or (c) is required by a law of the Commonwealth, a State or a Territory to be disposed of [2] waste , in relation to a product, means waste associated with the product after it is disposed of	Not defined	[1] The Hazardous Waste Act 1989 details operations which may lead to resource recovery, recycling, reclamation, direct re-use or alternative use	[1] (a) waste prescribed by the regulations, where waste has any of the characteristics mentioned in Annex III of the Basel Convention; or (b) wastes covered by paragraph 1(a) of Article 1 of the Basel Convention; or (c) household waste; or (d) residues arising from the incineration of household waste; but does not include wastes covered by paragraph 4 of Article 1 of the Basel Convention.	<ul style="list-style-type: none"> Hazardous waste classifications (linked to Movement of Controlled Waste NEPM classifications) Data and reporting classifications Product Stewardship related classifications 	[1] <i>Hazardous Waste (Regulation of Exports and Imports) Act 1989</i> [2] <i>Product Stewardship Act 2011</i>



Juris.	'Waste' definition	'Resource' definition	'Resource recovery' definition	'Hazardous waste' definition	Key solid waste classifications (some contain some liquids)	Sources
Australian Capital Territory	<p>[3] Any solid, liquid or gas, or any combination of them, that is a surplus product or unwanted by-product of any activity, whether the product or by-product has value or not.</p> <p>[4] Includes:</p> <p>(a) any substance (whether solid, liquid or gaseous) that is discharged, emitted or deposited in the environment in such volume, constituency or manner as to cause an alteration in the environment;</p> <p>(b) any discarded, rejected, unwanted, surplus or abandoned substance, whether or not intended for sale, recycling, reprocessing, recovery or purification by a separate operation from that which produced it;</p> <p>(c) any other substance declared by regulation to be waste.</p>	<p>Not defined.</p> <p>[3] <i>Environment Protection Act 1997</i> does refer to a principle of 'improved valuation and pricing of environmental resources'.</p>	Not defined.	<p>[5] Any waste that meets the criteria for assessment as dangerous goods under the Australian Code for the Transport of Dangerous Goods by Road and Rail (categorised as one or more of 9 types), Pharmaceuticals and poisons (being waste generated by activities carried out for business, or other commercial purposes and that consists of pharmaceutical or other chemical substances specified in the Poisons List under the Poisons and Therapeutic Goods Act 1966 (NSW)), Clinical waste, Cytotoxic waste, Sharps waste, and Quarantine waste.</p>	<ul style="list-style-type: none"> ▪ Management classification: Inert, solid, industrial, hazardous. [5] ▪ Hazardous classification ▪ Data and reporting classification: <ol style="list-style-type: none"> 1. ACT General Waste Data 2. ACT Annual Recycling Industry Statistics Survey 	<p>[3] <i>Environment Protection Act 1997</i></p> <p>[4] <i>Waste Minimisation Act 2001</i></p> <p>[5] <i>ACT Environmental Standards: Assessment and Classification of Liquid & Non-liquid Wastes June 2000.</i></p>



Juris.	'Waste' definition	'Resource' definition	'Resource recovery' definition	'Hazardous waste' definition	Key solid waste classifications (some contain some liquids)	Sources
New South Wales	<p>[6]</p> <p>(a) any substance (whether solid, liquid or gaseous) that is discharged, emitted or deposited in the environment in such volume, constituency or manner as to cause an alteration in the environment, or</p> <p>(b) any discarded, rejected, unwanted, surplus or abandoned substance, or</p> <p>(c) any otherwise discarded, rejected, unwanted, surplus or abandoned substance intended for sale or for recycling, processing, recovery or purification by a separate operation from that which produced the substance, or</p> <p>(d) any processed, recycled, re-used or recovered substance produced wholly or partly from waste that is applied to land, or used as fuel, but only in the circumstances prescribed by the regulations, or</p> <p>(e) any substance prescribed by the regulations to be waste</p> <p>[6] A substance is not precluded from being waste for the purposes of this Act merely because it is or may be processed, recycled, re-used or recovered.</p>	Not defined.	[7] Objects of WARR Act include 'encourage the most efficient use of resources' & resource recovery in the waste hierarchy.	<p>[6] Hazardous waste means waste (other than special waste or liquid waste) that includes any of the following:</p> <p>(a) anything that is classified as:</p> <p>(i) a substance of Class 1, 2, 5 or 8 within the meaning of the Transport of Dangerous Goods Code, or</p> <p>(ii) a substance to which Division 4.1, 4.2, 4.3 or 6.1 of the Transport of Dangerous Goods Code applies,</p> <p>(b) containers, having previously contained:</p> <p>(i) a substance of Class 1, 3, 4, 5 or 8 within the meaning of the Transport of Dangerous Goods Code, or</p> <p>(ii) a substance to which Division 6.1 of the Transport of Dangerous Goods Code applies, from which residues have not been removed by washing or vacuuming,</p> <p>(c) coal tar or coal tar pitch waste (being the tarry residue from the heating, processing or burning of coal or coke) comprising more than 1% (by weight) of coal tar or coal tar pitch waste,</p> <p>(d) lead-acid or nickel-cadmium batteries (being waste generated or separately collected by activities carried out for business, commercial or community services purposes),</p> <p>(e) lead paint waste arising otherwise than from residential premises or educational or child care institutions,</p> <p>(f) anything that is classified as hazardous waste pursuant to an EPA Gazettal notice,</p> <p>(g) anything that is hazardous waste within the meaning of the <i>Waste Classification Guidelines</i>,</p> <p>(h) a mixture of anything referred to in paragraphs (a)–(g).</p>	<ul style="list-style-type: none"> ▪ Management: 5 solid waste classes (special, hazardous, restricted solid, general putrescible, general non-putrescible). There are 39 sub classes under these. ▪ Hazardous waste tracking classification ▪ Has additional specific classifications for: <ol style="list-style-type: none"> 1. Monthly/Annual Licensed and Non-licensed landfill reporting 2. Local government annual survey (landfill) 3. Local government annual survey (recycling) 4. Household Chemical Cleanout Reporting 	<p>[6] <i>Protection of the Environment Operations Act (POEO Act) 1997</i>, amended 2008</p> <p>[7] <i>Waste Avoidance and Resource Recovery Act (WARR Act) 2001</i></p>



Juris.	'Waste' definition	'Resource' definition	'Resource recovery' definition	'Hazardous waste' definition	Key solid waste classifications (some contain some liquids)	Sources
Victoria	<p>[8] Any matter whether solid, liquid, gaseous or radioactive which is discharged, emitted or deposited in the environment in such volume, constituency or manner as to cause an alteration in the environment;</p> <p>Any discarded, rejected, unwanted, surplus or abandoned matter;</p> <p>Any otherwise discarded, rejected, abandoned, unwanted or surplus matter intended for—</p> <ul style="list-style-type: none">▪ Recycling, reprocessing, recovery or purification by a separate operation from that which produced the matter; or▪ Sale; and▪ Any matter prescribed to be waste.	Not defined in key documents.	Not defined in key documents	<p>Hazardous waste is called 'prescribed industrial waste' in Victoria. The definition of prescribed industrial waste relies on the definition of industrial waste:</p> <p>Industrial waste refers to:</p> <ul style="list-style-type: none"><i>a) any waste arising from commercial, industrial or trade activities or from laboratories; or</i><i>b) any waste containing substances or materials which are potentially harmful to human beings or equipment.</i> <p>Prescribed industrial waste means "any industrial waste or mixture containing industrial waste other than industrial waste or a mixture containing industrial waste that—</p> <ul style="list-style-type: none"><i>a) is a Schedule 1 industrial waste; or</i><i>b) has a direct beneficial reuse and has been consigned for use; or</i><i>c) is exempt material; or</i><i>d) is not category A waste, category</i>	<p>Management classification at top level is in 3 parts: municipal, industrial and prescribed wastes.</p> <p>Hazardous waste (prescribed waste, including prescribed industrial waste) classification.</p> <p>Data and reporting classifications:</p> <ol style="list-style-type: none">1. Quarterly/Annual Landfill Levy Statement2. Local Government Annual Survey and SEPP Survey3. Victorian Recycling Industry Annual Survey4. Victorian Litter Report.	<p>[8] <i>Environment Protection Act 1970</i></p> <p>[9] <i>Environment Protection (Industrial Waste Resource) Regulations 2009</i></p>



Juris.	'Waste' definition	'Resource' definition	'Resource recovery' definition	'Hazardous waste' definition	Key solid waste classifications (some contain some liquids)	Sources
Queensland	<p>Not defined directly in [10] or [11], but waste hierarchy used in place of a definition in Act:</p> <p>[10] The waste and resource management hierarchy is the following precepts, listed in the preferred order in which waste and resource management options should be considered—</p> <p>(a) AVOID unnecessary resource consumption;</p> <p>(b) REDUCE waste generation and disposal;</p> <p>(c) RE-USE waste resources without further manufacturing;</p> <p>(d) RECYCLE waste resources to make the same or different products;</p> <p>(e) RECOVER waste resources, including the recovery of energy;</p> <p>(f) TREAT waste before disposal, including reducing the hazardous nature of waste;</p> <p>(g) DISPOSE of waste only if there is no viable alternative.</p>	<p>One definition in Act [10]: 'Resource includes a type of resource'</p> <p>Not directly defined in Act, but addressed in object of <i>Waste Reduction and Recycling Act (WARR Act) 2011</i>:</p> <p>(a) to promote waste avoidance and reduction, and resource recovery and efficiency actions;</p> <p>(b) to reduce the consumption of natural resources and minimise the disposal of waste by encouraging waste avoidance and the recovery, re-use and recycling of waste;</p> <p>(c) to minimise the overall impact of waste generation and disposal;</p> <p>(d) to ensure a shared responsibility between government, business and industry and the community in waste management and resource recovery;</p> <p>(e) to support and implement national frameworks, objectives and priorities for waste management and resource recovery.</p>	<p>Broadly means the extraction of useful materials or energy from solid waste.</p>	<p>[11] 'Regulated waste' is defined as follows: <i>Waste</i> generated from non-domestic sources that is listed in Schedule 7 of the Environmental Protection Regulation 2008, such as acids, oil, batteries, tyres and clinical waste. Regulated waste may be a solid or liquid. These wastes require a higher level of control and management.</p> <ul style="list-style-type: none"> ▪ Regulated waste classified as lower-hazard for levy collection purposes would include household and business organic wastes ▪ Higher-hazard regulated wastes would include asbestos or chemical residues from industrial processes. 	<p>Waste categories are Commercial and Industrial (C&I), Construction and Demolition (C&D), Domestic, E-waste, Municipal Solid Waste, Regulated and Residual Waste.</p> <p>Hazardous waste classification, including for tracking</p> <p>Classification for data collection and waste reporting:</p> <ol style="list-style-type: none"> 1. Annual landfill reporting – non-levy zone and prior to levy 2. Monthly landfill reporting – levy zone 3. Annual survey of recyclers 4. Annual local government waste management survey – landfill 5. Annual local government waste management survey - recovery 	<p>[10] <i>Waste Reduction and Recycling Act (WARR Act) 2011</i></p> <p>[11] <i>Queensland's Waste Reduction and Recycling Strategy 2010-2020</i></p>



Juris.	'Waste' definition	'Resource' definition	'Resource recovery' definition	'Hazardous waste' definition	Key solid waste classifications (some contain some liquids)	Sources
South Australia	<p>[12]</p> <p>a) any discarded, rejected, abandoned, unwanted or surplus matter, whether or not intended for sale or for recycling, reprocessing, recovery or purification by a separate operation from that which produced the matter; or</p> <p>b) anything declared by regulation (after consultation under section 5A) or by an environment protection policy to be waste, whether of value or not.</p>	<p>Not defined, but addressed in objects of legislation [12] as (a) to promote the following principles (principles of ecologically sustainable development):</p> <p>(i) that the use, development and protection of the environment should be managed in a way, and at a rate, that will enable people and communities to provide for their economic, social and physical wellbeing and for their health and safety while sustaining the potential of natural and physical resources to meet the reasonably foreseeable needs of future generations.</p>	<p>[12]</p> <p>(a) reusing the waste; or</p> <p>(b) recycling the waste; or</p> <p>(c) recovering energy or other resources from the waste;</p>	<p>'Hazardous waste' not defined in Acts, but sub-groups under main management classification include 'scheduled waste'.</p>	<p>Management classification:</p> <ul style="list-style-type: none"> ▪ municipal solid waste, ▪ construction and demolition waste (inert and mixed) and; ▪ commercial and industrial waste (inert and mixed). <p>Levy classification:</p> <ul style="list-style-type: none"> ▪ solid waste (metropolitan and non-metropolitan) and; ▪ waste fill (clean fill). <p>Likely future landfill reporting classification (5 streams).</p> <ol style="list-style-type: none"> 1. Annual Landfill Reporting 2. Annual Local Government Survey 3. Annual Kerbside Performance Reporting 4. Annual Recycling Activity Survey 5. Household Hazardous Waste Collection program reporting 	<p>[12] <i>Environment Protection Act 1993</i></p> <p>[13] <i>Zero Waste SA Act 2004</i></p>



Juris.	'Waste' definition	'Resource' definition	'Resource recovery' definition	'Hazardous waste' definition	Key solid waste classifications (some contain some liquids)	Sources
Western Australia	[14] Matter, whether useful or useless, which is discharged into the environment, or matter which is prescribed by the regulations to be waste.	No definition of 'resource' in key State documents. Implied aspects in [16]: The users of goods and services should pay prices based on the full life cycle costs of providing goods and services, including the use of natural resources and assets and the ultimate disposal of any wastes. The Waste Avoidance and Resource Recovery Act 2007 states; 1. The primary objects of this Act are to contribute to sustainability, and the protection of human health and the environment, in Western Australia and the move towards a waste-free society by (a) promoting the most efficient use of resources, including resource recovery and waste avoidance; and (b) reducing environmental harm, including pollution through waste; and (c) the consideration of resource management options against the following hierarchy: (i) avoidance of unnecessary resource consumption; (ii) resource recovery (including reuse, reprocessing, recycling and energy recovery); (iii) disposal.	[14] Reuse, reprocessing, recycling and energy recovery.	[15] 'Controlled wastes'. Schedule 1 of the <i>Environmental Protection (Controlled Waste) Regulations 2004</i> provides a long list of what substances are controlled wastes, but does not define the term. A short definition of controlled waste from the DEC website is: 'Controlled Waste is defined as all liquid waste, and any waste that cannot be disposed as a Class I, II or III landfill site. Controlled Waste also includes asbestos, clinical or related waste, tyres and waste that has been immobilised or encapsulated.'	Management classification: <ul style="list-style-type: none"> ▪ municipal solid waste, ▪ commercial and industrial waste, ▪ construction and demolition waste. Levy classification. Hazardous waste classification & tracking system Quarterly Metropolitan Landfill Reporting Local Government Census – Landfill Local Government Census – Recovery Reprocessing Industry Survey	[14] <i>Waste Avoidance and Resource Recovery Act 2007</i> [15] <i>Environmental Protection (Controlled Waste) Regulations 2004</i> [16] <i>Environment Protection Act 1986</i>



Juris.	'Waste' definition	'Resource' definition	'Resource recovery' definition	'Hazardous waste' definition	Key solid waste classifications (some contain some liquids)	Sources
Tasmania	<p>[17] (a) discarded, rejected, unwanted, surplus or abandoned matter, whether of any value or not; or (b) discarded, rejected, unwanted, surplus or abandoned matter, whether of any value or not, intended— (i) for recycling, reprocessing, recovery, reuse or purification by a separate operation from that which produced the matter; or (ii) for sale.</p>	Not defined.	Not defined	<p>[17] 'Controlled waste' is defined in the 1994 Act: controlled waste means – (a) a substance that is controlled waste within the meaning of (i) the National Environment Protection Measure entitled the Movement of Controlled Waste Between States and Territories made by the National Environment Protection Council on 26 June 1998, as amended from time to time; or (ii) any National Environment Protection Measure substituted for the Measure referred to in paragraph (a), as amended from time to time; and (b) a substance that is prescribed by the regulations to be controlled waste;</p>	<p>Management:</p> <ul style="list-style-type: none"> ▪ municipal, ▪ commercial & industrial, ▪ construction and demolition wastes. <p>Hazardous waste (tracking) classification. Classification for voluntary waste levy? Reporting by regulated waste depots.</p>	<p>[17] <i>Environmental Management and Pollution Control Act 1994</i> [18] <i>Environmental Management and Pollution Control Amendment (Environment Protection Authority) Act 2007</i> [19] <i>Environmental Management and Pollution Control (Waste Management) Regulations 2000</i></p>
Northern Territory	<p>[20] (a) a solid, a liquid or a gas; or (b) a mixture of such substances, that is or are left over, surplus or an unwanted by-product from any activity (whether or not the substance is of value) and includes a prescribed substance or class of substances.</p>	Not defined.	Not defined	<p>[21] 'any waste containing significant quantities of a substance which may present a danger to the life or health of living organisms when released into the environment. These wastes may both include medical and radioactive wastes.'</p>	<p>Management:</p> <ul style="list-style-type: none"> ▪ domestic garbage, ▪ hazardous waste, clinical waste, ▪ putrescible waste. <p>Hazardous waste (tracking) classification Annual Audit and Compliance Report for Licensed Waste Facilities</p>	<p>[20] Waste Management and Pollution Control Act 2009 [21] Guidelines for the Siting, Design and Management of Solid Waste Disposal Sites in the Northern Territory 2003</p>



2 Introduction

The following report is a compilation of Australian waste definitions for each jurisdiction. The key definitions included are 'waste', 'resource'/'resources', 'resource recovery' and 'hazardous waste'.

Definitions are compiled from legislation (including regulations and subordinate instruments) as well as key policy and strategy documents.

3 Commonwealth

3.1 Key legislation and responsible bodies

Hazardous Waste (Regulation of Exports and Imports) Act 1989

The main purpose of the *Hazardous Waste (Regulation of Exports and Imports) Act 1989* ('the Act') is to regulate the export and import of hazardous waste to ensure that hazardous waste is disposed of safely so that human beings and the environment, both within and outside Australia, are protected from the harmful effects of the waste.

3.2 Definitions and classifications

Waste and hazardous waste

According to the *Hazardous Waste Act*, *waste* means a substance or objects that: (a) is proposed to be disposed of; or (b) is disposed of; or (c) is required by a law of the Commonwealth, a State or a Territory to be disposed of. ***within Australian jurisdiction*** means within or over Australia or Australian waters. **Hazardous waste** means: (a) waste prescribed by the regulations, where the waste has any of the characteristics mentioned in Annex III to the Basel Convention; or (b) wastes covered by paragraph 1(a) of Article 1 of the Basel Convention; or (c) household waste; or (d) residues arising from the incineration of household waste; but does not include wastes covered by paragraph 4 of Article 1 of the Basel Convention.

Note 1: Section 4A provides for an extended meaning of ***hazardous waste***. The extended meaning relates to the following matters: (a) a case where a foreign country has classified a particular substance or object as hazardous waste; (b) a case where a foreign country has classified waste collected from households as hazardous waste.

Note 2: Section 4F provides for an extended meaning of ***hazardous waste***. The extended meaning relates to substances or objects subject to notification or control under Article 11 arrangements

Note 3: Section 4G provides for exclusions from the definition of ***hazardous waste***. The exclusions relate to substances or objects not subject to notification or control under Article 11 arrangements.

Note 4: Before regulations are made for the purposes of paragraph (a) of the definition of ***hazardous waste***, the Minister must consult the Hazardous Waste Technical Group: see section 58D.

According to the *Product Stewardship Act 2011*, ***waste***, in relation to a product, means waste associated with the product after it is disposed of.

Resources

There is no definition of resources in any key Federal documents

Resource Recovery

Key Federal documents do not explicitly define resource recovery, however Annex Four, Section B of the *Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal* which forms a schedule to the Act outlines "Operations which may lead to resource recovery,



recycling, reclamation, direct re-use or alternative uses". These encompass "all such operations with respect to materials legally defined as or considered to be hazardous wastes and which would otherwise have been destined for operations in Section A [disposal operations]".

Table 1 - Resource recovery / recycling / reuse options

R1	Use as a fuel (other than in direct incineration) or other means to generate energy
R2	Solvent reclamation/regeneration
R3	Recycling/reclamation of organic substances which are not used as solvents
R4	Recycling/reclamation of metals and metal compounds
R5	Recycling/reclamation of other inorganic materials
R6	Regeneration of acids or bases
R7	Recovery of components used for pollution abatement
R8	Recovery of components from catalysts
R9	Used oil re-refining or other reuses of previously used oil
R10	Land treatment resulting in benefit to agriculture or ecological improvement
R11	Uses of residual materials obtained from any of the operations numbered R1-R10
R12	Exchange of wastes for submission to any of the operations numbered R1-R11
R13	Accumulation of material intended for any operation in Section B.

4 Australian Capital Territory

4.1 Key legislation and responsible bodies

Waste regulation and policy in the Australian Capital Territory (ACT) sits broadly within the Environmental Protection Act 1997. The Waste Minimisation Act 2001 also enables legislation for waste management in the ACT.

The ACT Environment Protection Agency (EPA), a subdivision of the Department of Territory and Municipal Services, is the regulatory authority with regards to waste and also has the power to enforce legislation. The ACT Government holds the legislative power. In developing the legislation it receives policy advice from the EPA, NO Waste and the ACT Commission of the Environment. The EPA has statutory powers relating to certain activities, such as authorising commercial landfills.

The ACT Commission of the Environment is an independent agency that also provides strategic policy advice and review to the ACT Government, partly through the annual State of the Environment Report.

4.2 Definitions and classifications

Waste and hazardous waste

Waste is defined under the Environment Protection Act 1997 as "waste means any solid, liquid or gas, or any combination of them, that is a surplus product or unwanted by-product of an activity, whether the product or by-product is of value or not."

There are 4 solid waste classifications: inert, solid, industrial and hazardous (as taken from the ACT's Environmental Standards: Assessment & Classification of Liquid & Non-liquid Wastes June 2000).

1. Inert – natural wastes, building and demolition, asphalt, biosolids, tyres, office and packaging waste

2. Solid – municipal waste, biosolids, Cleaned pesticide, biocide, herbicide or fungicide containers, drained and mechanically crushed oil filters, and rags and oil absorbent materials (not containing free



liquids) from automotive workshops, disposable nappies, incontinence pads and sanitary napkins, food waste, vegetative waste generated from agriculture or horticulture, non-chemical waste generated from manufacturing and services (including metal, timber, paper, ceramics, plastics and composites)

3. Industrial – stabilised asbestos and asbestos fibre and dust waste

4. Hazardous – any waste that meets the criteria for assessment as dangerous goods under the Australian Code for the Transport of Dangerous Goods by Road and Rail (categorised as one or more of 9 types), Pharmaceuticals and poisons (being waste generated by activities carried out for business, or other commercial purposes and that consists of pharmaceutical or other chemical substances specified in the Poisons List under the Poisons and Therapeutic Goods Act 1966 (NSW)), Clinical waste, Cytotoxic waste, Sharps waste, and Quarantine waste.

The Waste Minimisation Act 2001 states;

waste includes the following:

- (a) *any substance (whether solid, liquid or gaseous) that is discharged, emitted or deposited in the environment in such volume, constituency or manner as to cause an alteration in the environment;*
- (b) *any discarded, rejected, unwanted, surplus or abandoned substance, whether or not intended for sale, recycling, reprocessing, recovery or purification by a separate operation from that which produced it;*
- (c) *any other substance declared by regulation to be waste.*

Resources

The definition of ***ecologically sustainable development*** in the Environment Protection Act 1997 includes the following principle;

- (d) improved valuation and pricing of environmental resources.

Resource recovery

There terms resource recovery are not defined in either the Waste Minimisation Act 2001 or the Environment Protection Act 1997.



5 New South Wales

5.1 Key legislation and responsible bodies

The waste regulatory framework is administered under the principal legislation of the Protection of the Environment Operations Act (POEO Act, 1997 and amended in 2008) and the Waste Avoidance and Resource Recovery Act (WARR Act) 2001. The Office of the Premier is the Government department with accountability for waste. The Waste Avoidance and Resource Recovery Strategy (WARR) 2007 outlines the NSW waste strategy.

5.2 Definitions and classifications

Waste and hazardous waste

Under the POEO Act, waste is defined as:

(a) any substance (whether solid, liquid or gaseous) that is discharged, emitted or deposited in the environment in such volume, constituency or manner as to cause an alteration in the environment, or

(b) any discarded, rejected, unwanted, surplus or abandoned substance, or

(c) any otherwise discarded, rejected, unwanted, surplus or abandoned substance intended for sale or for recycling, processing, recovery or purification by a separate operation from that which produced the substance, or

(d) any processed, recycled, re-used or recovered substance produced wholly or partly from waste that is applied to land, or used as fuel, but only in the circumstances prescribed by the regulations, or

(e) any substance prescribed by the regulations to be waste.

A substance is not precluded from being waste for the purposes of this Act merely because it is or may be processed, recycled, re-used or recovered.

Guidelines for waste classification, resource recovery, and landfill are provided by DECC.

There are 5 solid waste classes: special, hazardous, restricted solid, general solid (putrescible), general solid (non-putrescible). Within these there are various sub-classes:

- Special: 3 classes (clinical and related wastes, asbestos wastes, waste tyres)
- Hazardous wastes: 6 classes
- Restricted solid: none to date
- General putrescible: 8 classes
- General non-putrescible: 22 classes.

Resources

There is no definition of resources in any key State documents.

The Waste Avoidance and Resource Recovery Act 2001 No 58 outlines the objects of this Act, which are as follows:

(a) to encourage the most efficient use of resources and to reduce environmental harm in accordance with the principles of ecologically sustainable development,

(b) to ensure that resource management options are considered against a hierarchy of the following order:



- (i) avoidance of unnecessary resource consumption,*
- (ii) resource recovery (including reuse, reprocessing, recycling and energy recovery),*
- (iii) disposal,*

(c) to provide for the continual reduction in waste generation,

(d) to minimise the consumption of natural resources and the final disposal of waste by encouraging the avoidance of waste and the reuse and recycling of waste,

Resource recovery

The Waste Avoidance and Resource Recovery Act 2001 has amongst its objectives:

(b) to ensure that resource management options are considered against a hierarchy of the following order:

- (i) avoidance of unnecessary resource consumption,*
- (ii) resource recovery (including reuse, reprocessing, recycling and energy recovery),*
- (iii) disposal.*

Schedule 1 of the POEO Act defined scheduled premises under the Act. Clause 34 highlights those activities relating to resource recovery:

(1) This clause applies to the following activities:

recovery of general waste, meaning the receiving of waste (other than hazardous waste, restricted solid waste, liquid waste or special waste) from off site and its processing, otherwise than for the recovery of energy.

recovery of hazardous and other waste, meaning the receiving of hazardous waste, restricted solid waste or special waste (other than asbestos waste or waste tyres) from off site and its processing, otherwise than for the recovery of energy.

recovery of waste oil, meaning the receiving of waste oil from off site and its processing, otherwise than for the recovery of energy.

recovery of waste tyres, meaning the receiving of waste tyres from off site and their processing, otherwise than for the recovery of energy.



6 Northern Territory

6.1 Key legislation and responsible bodies

Waste policy and regulation is determined by the Department of Natural Resources, Environment, The Arts and Sport (NRETAS), within the Waste Management and Resource Recovery Group. NRETAS administers the Waste Management and Pollution Control Act (in force as of March 2009, replacing 1998 Act), which:

- Gives a definition of waste.
- Excludes waste arising from mining or petroleum exploration activity.
- Sets-out legislation for development and use of 'environmental protection objectives'.
- Requires environment protection approvals for waste treatment and disposal facilities (including recycling activities). The Waste Management and Pollution Control (Administration) Regulation 2001 provides for the setting of fees for activities to implement the Act, defines listed wastes as a class of wastes, and specifies the content requirements of Infringement Notices issued for offences under the Act.

The Environment Protection Authority (EPA) was created in 2007, and is an independent organisation with an advisory role. The EPA:

- Operates under the Environment Protection Authority Act 2007.
- Provides independent strategic advice to Government, businesses and the community.
- Has significant independent powers to publicly recommend contemporary legislative and policy frameworks.
- Not responsible for undertaking environmental regulation directly.
- Focuses on improving guidelines and standards for environmental practice, monitoring and evaluation.
- Issues the 'Guidelines for the Siting, Design and Management of Solid Waste Disposal Sites in the Northern Territory' (2003).

The 2007 Re-thinking Waste Disposal Behaviour and Resource Efficiency Interim Action Plan aims to:

- Identify effective incentives for appropriate disposal behaviour in the Northern Territory
- Identify opportunities to maximise resource efficiency and minimise environmental impacts in the Northern Territory
- Establish a sustainable resource-not-waste management framework and effective implementation mechanisms
- Promote greater awareness of resource efficiency issues in the Northern Territory

6.2 Definitions and classifications

Waste and hazardous waste

The Act defines waste as:

(a) a solid, a liquid or a gas; or

(b) a mixture of such substances,

that is or are left over, surplus or an unwanted by-product from any activity (whether or not the substance is of value) and includes a prescribed substance or class of substances.

Under the Guidelines for the Siting, Design and Management of Solid Waste Disposal Sites in the Northern Territory 2003 there are 4 waste classifications:

- Domestic garbage: "Wastes generated from household sources - may include hazardous or putrescible waste".
- Hazardous waste: "any waste containing significant quantities of a substance which may present a danger to the life or health of living organisms when released into the environment. These wastes may both include medical and radioactive wastes".



- Clinical waste: “is that which has the potential to cause sharps injury, infection or public offence, and includes sharps, human tissue waste, laboratory waste, animal waste resulting from medical, dental or veterinary research or treatment that has the potential to cause disease”.
- Putrescible waste: “Organic wastes capable of decomposition by micro-organisms”.

Resources

No definition of resources is provided.

Resource recovery

Resource recovery is not defined in government documents nor the Act, despite the naming of the Waste Management and Resource Recovery Group.



7 Queensland

7.1 Key legislation and responsible bodies

The Waste Reform Division of the Department of Environment and Resource Management developed a new Waste Management Strategy for Queensland to provide a framework within which waste can be managed sustainably under the Environmental Protection Act 1994. “Queensland’s Waste Reduction and Recycling Strategy 2010 – 2020” represents a plan to achieve lower waste in Queensland. Its broad objectives are to:

- Reduce waste
- Optimise recovery and recycling; and
- Develop sustainable waste industries and jobs.

This strategy was followed by the Waste Reduction and Recycling Act 2011 (WARR) which provides the legislative background to support the strategy. This Act includes mechanisms to reduce waste in Queensland including a disposal levy, waste management plans for government agencies and local governments, product stewardship arrangements and stronger anti-littering offences.

7.2 Definitions and classifications

Waste and hazardous waste

Waste is not defined directly in the Waste Strategy or Waste Reduction and Recycling Act 2011, but the waste hierarchy is defined within the Act:

*The **waste and resource management hierarchy** is the following precepts, listed in the preferred order in which waste and resource management options should be considered—*

- (a) AVOID unnecessary resource consumption;*
- (b) REDUCE waste generation and disposal;*
- (c) RE-USE waste resources without further manufacturing;*
- (d) RECYCLE waste resources to make the same or different products;*
- (e) RECOVER waste resources, including the recovery of energy;*
- (f) TREAT waste before disposal, including reducing the hazardous nature of waste;*
- (g) DISPOSE of waste only if there is no viable alternative.*

Further, the WARR Act does not repeal the definition of waste in the Environmental Protection Act (1994) which is:

- (1) materials that are surplus, left over or unwanted by-products from domestic, commercial, industrial or other activities.*
- (2) Waste can be a gas, liquid, solid or energy, or a combination of any of them.*
- (3) A thing can be waste whether or not it is of value.*
- (4) For subsection (1), if the approval of a resource under the Waste Reduction Act, chapter 8, is a specific approval, the resource stops being waste only in relation to the holder of the approval.*
- (5) Despite subsection (1), a resource approved under the Waste Reduction Act, chapter 8, becomes waste—*

- (a) when it is delivered to a levyable waste disposal site; or*



(b) if it is deposited at a place in a way that would, apart from its approval under that chapter, constitute a contravention of the general littering provision or the illegal dumping of waste provision under that Act—when the depositing starts.

The Waste Management Strategy defines waste categories as Commercial and Industrial (C&I), Construction and Demolition (C&D), Domestic, E-waste, Municipal Solid Waste, Regulated and Residual Waste.

Regulated waste is defined as:

***Waste** generated from non-domestic sources that is listed in Schedule 7 of the Environmental Protection Regulation 2008, such as acids, oil, batteries, tyres and clinical waste. **Regulated waste** may be a solid or liquid. These wastes require a higher level of control and management.*

- Regulated waste classified as lower-hazard for levy collection purposes would include household and business organic wastes*
 - Higher-hazard regulated wastes would include asbestos or chemical residues from industrial processes.*
- [11]

Resources

Rather circularly, the Waste Reduction and Recycling Act 2011 defines a resource as follows;

Resource includes a type of resource.

The WARR Act also addresses resources as an objective of the Act:

- (a) to promote waste avoidance and reduction, and resource recovery and efficiency actions;*
- (b) to reduce the consumption of natural resources and minimise the disposal of waste by encouraging waste avoidance and the recovery, re-use and recycling of waste;*
- (c) to minimise the overall impact of waste generation and disposal;*
- (d) to ensure a shared responsibility between government, business and industry and the community in waste management and resource recovery;*
- (e) to support and implement national frameworks, objectives and priorities for waste management and resource recovery.*

Resource Recovery

The Waste Strategy gives the following definition of resource recovery:

Broadly means the extraction of useful materials or energy from solid waste.

8 South Australia

8.1 Key legislation and responsible bodies

The Environment Protection Act 1993 is the umbrella legislation for environmental protection, including waste management, and is supported by a suite of regulations. This Act includes the following provisions for waste management:

- A regulatory scheme for the litter control and waste management of beverage containers. including container deposit and prohibits the sale of certain containers.
- Waste depot levy.
- Collection, storage and treatment of chemical containers may be undertaken by the EPA without a license or other approval.
- The Act also stipulates which wastes are 'listed wastes'.



Relevant regulations under this Act are:

- Environment Protection (Beverage Container) Regulations 2008.
- Environment Protection (Fees and Levy) Regulations 1994, which requires a waste depot levy to be paid based on the volume of waste landfilled.
- Environment Protection (General) Regulations 1994.
- Environment Protection (Used Packaging Materials) Policy 2007, which details requirements of certain brand owners to take responsibility for end-of-life packaging materials.
- Environment Protection (Waste Management) Policy 1994 (which covers mainly medical waste)
- Environment Protection (Waste to Resources) Policy 2010.

The Zero Waste SA Act 2004 established Zero Waste SA, with the function of reforming waste management in the State and producing a state wide strategy, with coordination with the EPA. This Act also established the Waste to Resources Fund, which is partly funded by the waste levy.

South Australia's first state wide strategy 'Waste Strategy 2005-2010' set out the direction for waste management. A previous strategy developed by the EPA for metropolitan Adelaide 'Integrated Waste Strategy for Adelaide 1996-2015, is also still in effect.

8.2 Definitions and classifications

Waste and hazardous waste

The Environmental Protection Act defines waste as:

a) any discarded, rejected, abandoned, unwanted or surplus matter, whether or not intended for sale or for recycling, reprocessing, recovery or purification by a separate operation from that which produced the matter; or

b) anything declared by regulation (after consultation under section 5A) or by an environment protection policy to be waste, whether of value or not.

There are 3 main classifications of waste: municipal solid waste, construction and demolition waste (inert & mixed) and commercial and industrial waste (inert & mixed). Under these waste classifications there is a number of sub groups including: asbestos, biosolids, compost, domestic waste, E-waste, green waste, hazardous waste, hexachloro-benzene (HCB) waste, inert waste, listed waste, liquid waste, medical waste, organochlorine pesticide (OCP) waste, polychlorinated biphenyl (PCB) waste, putrescible waste, quarantine waste, radioactive waste, scheduled waste, and used tyres.

There is no mention of hazardous waste in the Environmental Protection Act

Resources

There is no definition of resource or resources in the Environmental Protection Act, however,

(1) The objects of this Act are—

(a) to promote the following principles (principles of ecologically sustainable development):

(i) that the use, development and protection of the environment should be managed in a way, and at a rate, that will enable people and communities to provide for their economic, social and physical wellbeing and for their health and safety while sustaining the potential of natural and physical resources to meet the reasonably foreseeable needs of future generations.



Resource recovery

The Environment Protection (Waste to Resources) Policy 2010 under the Act defines resource recovery as:

- (a) reusing the waste; or*
- (b) recycling the waste; or*
- (c) recovering energy or other resources from the waste;*



9 Tasmania

9.1 Key legislation and responsible bodies

Tasmania's Environmental Management and Pollution Control Act 1994 is the principal legislation governing environment protection. It contains several provisions regarding waste management:

- Best practice environmental management
- Environmental Audit
- Transport of controlled waste
- The formation of environmental policies and regulations.

Amendments to this Act were made in 2007, represented by the Environmental Management and Pollution Control Amendment (Environment Protection Authority) Act 2007, which established the Environment Protection Authority.

The Act is supplemented by Environment Management and Pollution Control (Waste Management Regulations) (2000) which covers:

- Management and designation of 'controlled wastes' and fines for breaching regulations
- Management of general waste
- Permits for handling, production, receipt, storage, reuse, recycling, reprocessing, salvage, incineration, treatment, disposal or use for energy recovery of specified wastes or classes of waste.

The Department of Environment, Parks, Heritage and the Arts are the principal body that deals with waste and resource recovery.

The Tasmanian Waste and Resource recovery management strategy (2009), aims to facilitate:

- Improved partnerships, coordination and planning
- Waste avoidance and sustainable consumption
- Waste minimisation and resource recovery
- Improved regulation and management of residual wastes
- Improved data collection systems
- Reduction of greenhouse gas emissions

This strategy also establishes a new Waste Advisory Committee to implement and report on the success of the strategy.

There is also the Draft Controlled Waste Management Strategy Current and Future Controlled Waste Practices in Tasmania (Draft Report) 2008

9.2 Definitions and classifications

Waste and hazardous waste

The Tasmanian Act (1994) defines waste as any:

(a) discarded, rejected, unwanted, surplus or abandoned matter, whether of any value or not; or

(b) discarded, rejected, unwanted, surplus or abandoned matter, whether of any value or not, intended –

(i) for recycling, reprocessing, recovery, reuse or purification by a separate operation from that which produced the matter; or

(ii) for sale.

Solid wastes are classified broadly into municipal, commercial and industrial and construction and demolition wastes. Hazardous waste is referred to as a controlled waste.



Resources

There is no definition of resources in any key State documents.

Resource recovery

Resource recovery is not defined in key state documents.



10 Victoria

10.1 Key legislation and responsible bodies

The Environment Protection Act 1970 is Victoria's primary legislation for environmental protection, including the management of waste and resource recovery. The Environment Protection Authority Victoria (EPA Victoria) is responsible for administering the Act. The Act contains several tools for the management of waste in Victoria:

- Tradable emissions scheme (i.e. tradable pollution permits)
- Permits for the transport of prescribed waste
- Licensing of scheduled premises
- Resource efficiency plans for operators of scheduled premises (unless exempt)
- Works approval
- Penalty units applied for offences
- Sustainability Covenants
- Rebate for recycled waste removed from landfill
- Industrial waste reduction agreements with industry associations (EPAV or Victoria may require such an arrangement)

The Act allows the EPAV to develop industrial waste management policies (IWMP) to assist in the management of these wastes. IWMP administered by the EPAV include:

- Industrial Waste Management Policy (Movement of Controlled Waste between States and Territories)
- Industrial Waste Management Policy (National Pollutant Inventory)
- Industrial Waste Management Policy (Waste Acid Sulphate Soils)
- Waste Management Policy (Siting, Design and Management of Landfills)
- Waste Management Policy (Solid Fuel Heating)
- Waste Management Policy (Used Packaging Materials)

The Environment Protection (Industrial Waste Resource) Regulations 2009 came into effect on 1 July 2009. These new regulations establish a system of controls over the management of industrial and hazardous wastes (called prescribed industrial wastes in Victoria). The regulations classify certain wastes as 'prescribed wastes' and 'prescribed industrial wastes' for the purposes of the Act. The Regulations also establish requirements for the transport of prescribed waste, including a tracking system and a permit system for vehicles transporting prescribed waste. The Regulations ensure consistency with controls in related areas and for the cross-border movement of controlled hazardous wastes.

Sustainability Victoria is responsible for the strategic direction for waste management and resource recovery in Victoria under the Act. Victoria's Towards Zero Waste Strategy sets out priority materials and products for each waste sector and establishes targets focussed on waste avoidance and resource recovery to 2014. Sustainability Victoria is also responsible for producing a Solid Industrial Waste Management Plan (SIWMP) for Victoria. The Act requires that the generation and management of solid industrial waste in Victoria must comply with all elements of the plan, while the waste is in Victoria. The SIWMP also provides basis for the refusal of works approval or license by the EPA where a waste management facility is inconsistent with the SIWMP.

The Act also required the formation of Regional Waste Management Groups to facilitate the management of waste by region. There are 12 RWMGs in Victoria, as well as the Metropolitan Waste management Group. Functions of RWMGs are:

- To plan for the management of municipal waste in its region, working in partnership with the councils in its region; and
- To co-ordinate the activities of its members in its region to give effect in its region to State policies, strategies and programs relating to waste; and
- To facilitate and foster best practices in waste management.



RWMGs are required to produce waste management plans for their region that are in line with the state strategy. The Metropolitan Waste and Resource Recovery Strategic plan provides a long-term plan for the management of waste and resource recovery in Melbourne.

10.2 Definitions and classifications

Waste and hazardous waste

The Act defines waste as:

- Any matter whether solid, liquid, gaseous or radio-active which is discharged, emitted or deposited in the environment in such volume, constituency or manner as to cause an alteration in the environment;
- Any discarded, rejected, unwanted, surplus or abandoned matter;
- Any otherwise discarded, rejected, abandoned, unwanted or surplus matter intended for—
- Recycling, reprocessing, recovery or purification by a separate operation from that which produced the matter; or
- Sale; and
- Any matter prescribed to be waste.

There are 3 main waste classifications in Victoria; municipal, industrial and prescribed wastes.

Municipal waste refers to “any waste arising from municipal or residential activities, and includes waste collected by, or on behalf of, a municipal council, but does not include any industrial waste”.

Industrial waste refers to:

- a) any waste arising from commercial, industrial or trade activities or from laboratories; or*
- b) any waste containing substances or materials which are potentially harmful to human beings or equipment.*

Prescribed industrial waste means “any industrial waste or mixture containing industrial waste other than industrial waste or a mixture containing industrial waste that—

- a) is a Schedule 1 industrial waste; or*
- b) has a direct beneficial reuse and has been consigned for use; or*
- c) is exempt material; or*
- d) is not category A waste, category*

Resources

There is no definition of resources in any key State documents.

Resource Recovery

Resource recovery is not defined in any key state documents.



11 Western Australia

11.1 Key legislation and responsible bodies

The principal legislation governing *Waste and Resource Recovery* in Western Australia is The Waste Avoidance and Resource Recovery Act 2007, which is supported by The Waste Avoidance and Resource Recovery Regulations 2008.

The Waste Avoidance and Resource Recovery Act 2007 provides for:

- Waste avoidance and resource recovery
- Establishment of the Waste Authority
- Waste services by local governments
- Levies on waste
- Related and consequential matters.

The Act also establishes the Waste Authority and repeals the Environmental Protection (Landfill) Levy Act 1998. The Act has provisions for:

- Waste plans by local government, which are optional unless specifically requested by the WA Waste Authority
- The submission of product stewardship plans by producers
- Introducing EPR regulations. The Waste Authority must include in its annual business plan a statement priority statement with respect to any extended producer responsibility schemes the Waste Authority proposes to recommend for implementation and operation under the regulations

The Environmental Protection Authority has a role including the development of environmental protection policies and licensing of some waste treatment facilities. Relevant legislation, established under the Environment Protection Act 1986, which is administered by the EPA includes:

- Environmental Protection (Controlled Waste) Regulations 2004
- Environmental Protection (Rural Landfill) Regulations 2002

The Environment Protection (Landfill Levy) Act states that words defined in the principal Act have the same meanings in this Act as in that Act.

Other Authorities that have a role in waste management in WA and work with the Waste Authority to do this are local government, regional Councils and the Municipal Waste Advisory Council (a standing committee of the WALGA).

11.2 Definitions and classifications

Waste and hazardous waste

Waste is defined under the act as matter whether useful or useless, which is discharged into the environment; or matter which is prescribed by the regulations to be waste. There are 3 waste classification types in Western Australia: municipal solid waste, commercial and industrial waste and construction and demolition waste.

Controlled wastes

These are outlined in schedule 1 of Environmental Protection (Controlled Waste) Regulations 2004

Resources

There is no definition of resources in any key State documents, however, the Environment Protection Act 1986, states;



The users of goods and services should pay prices based on the full life cycle costs of providing goods and services, including the use of natural resources and assets and the ultimate disposal of any wastes.

The Waste Avoidance and Resource Recovery Act 2007 states;

(1) The primary objects of this Act are to contribute to sustainability, and the protection of human health and the environment, in Western Australia and the move towards a waste-free society by —

- (a) promoting the most efficient use of resources, including resource recovery and waste avoidance; and*
- (b) reducing environmental harm, including pollution through waste; and*
- (c) the consideration of resource management options against the following hierarchy —*
 - (i) avoidance of unnecessary resource consumption;*
 - (ii) resource recovery (including reuse, reprocessing, recycling and energy recovery);*
 - (iii) disposal.*

Resource Recovery

The Waste Avoidance and Resource Recovery Act 2007 lists resource recovery amongst its objectives as detailed above for resources. This objective also states inclusions to the term resource recovery as: *reuse, reprocessing, recycling and energy recovery.*